Career Progression Bottlenecks, Employee Motivation and Project-Team Performance: Evidence from the Nigeria Revenue Service

Cecilia Nkiru Ani[1], Inemi Erete Stephen[2]

[1,2] University of Port Harcourt Business School, Port Harcourt, Nigeria

[*]Corresponding Author

DOI: https://doi.org/10.47772/IJRISS.2026.101000759

Received: 06 November 2026; Accepted: 11 November 2026; Published: 17 November 2026

ABSTRACT

Public organisations increasingly deliver core mandates through projects, yet advancement in many bureaucracies remains gated by promotion examinations and subject to visible external hiring. This paper develops and empirically examines a framework in which promotion examination bottlenecks (PEB) and perceived external hiring (PEH) are associated with lower perceived internal career opportunity and organisational fairness (PICO-OF), a formative composite of channel credibility, which in turn is associated with employee motivation and, through it, individually perceived project-team performance. A cross-sectional survey of 113 current staff of the Port Harcourt office of the Nigeria Revenue Service, a single-station case study fielded in October 2026, provided provisional support for the opportunity-structure and indirect-transmission arguments: PEH was negatively associated with PICO-OF ($b = -0.296$, $p = 0.003$ in the joint model) and explained incremental variance beyond PEB; the bootstrapped indirect effect linked PEH to motivation through PICO-OF ($b = -0.115$, 95% CI [-0.221, -0.030]); and motivation was strongly associated with perceived team performance ($b = 0.525$, $p < 0.01$). Direct bottleneck-to-motivation paths were null; because indirect and direct paths carried opposite signs, we characterise the pattern as inconsistent mediation (suppression) rather than standard full mediation. A facet-specific test of public service motivation (PSM) found that civic commitment buffered the bottleneck association, whereas the self-sacrifice interaction was negative but driven by a positive slope at low self-sacrifice, so crowding-out receives only partial support. All empirical tests are at the individual perceptual level. The paper converts the theorised buffering mechanisms into an illustrative cost-benefit decision-analysis tool using incremental accounting and discusses implications for promotion-system reform in African revenue administrations.

Keywords: promotion examinations; perceived external hiring; career plateau; organisational justice; public service motivation; project teams; Nigeria

INTRODUCTION

Public organisations increasingly deliver their core mandates through time-bounded, cross-functional projects: digitalisation programmes, compliance initiatives and service reforms (Mergel et al., 2019; Pollitt & Bouckaert, 2017; Ukwandu & Ijere, 2020). In Nigerian revenue administration, modernisation is organised less as routine upgrading than as a portfolio of projects whose delivery depends on specialised, motivated human capital. Yet the same organisation typically allocates advancement through formal promotion examinations, seniority thresholds and vacancy-driven progression inherited from the Westminster tradition. This architecture creates a recurring tension: projects demand sustained discretionary effort, while the system that converts effort into advancement is gated, scheduled and only loosely coupled to demonstrated contribution.

Career research has long linked blocked mobility to reduced satisfaction and commitment, withdrawal of discretionary effort and elevated turnover intentions (Allen et al., 2010; Bardwick, 1986; Milliman, 1992). A systematic review of four decades of plateau research concludes that employees who perceive their careers as blocked report poorer satisfaction, weaker commitment, lower job performance and stronger turnover intentions than non-plateaued colleagues (Yang et al., 2019). In parallel, labour economics shows that the choice between

internal promotion and external hiring has behavioural consequences for incumbents even before any appointment is made: opening positions to outside candidates changes promotion prospects and work incentives (DeVaro & Waldman, 2012), and external hires into senior roles can depress the performance of internal incumbents relative to internally promoted peers (Bidwell, 2011). These strands rarely meet in scholarship on African public administration, where career systems remain under-theorised relative to OECD contexts, even as governments experiment with performance management reforms whose design and implementation problems are well documented (Onyango, 2021; Rasul et al., 2021; Williams & Yecalo-Tecle, 2019).

The Nigeria Revenue Service (NRS) offers a strategically instructive setting. The Nigeria Revenue Service (Establishment) Act 2025 created a statutory framework for a unified federal revenue institution and, continuing the statutory autonomy model of its predecessor (the Federal Inland Revenue Service), vests authority over staff appointment, promotion and discipline in the Service's Governing Board (Federal Republic of Nigeria, 2025). The Office of the Head of the Civil Service of the Federation (OHCSF) prescribes confirmation and promotion examinations across the federal service under the revised Public Service Rules (2021 Edition) and the Federal Civil Service Strategy and Implementation Plan 2021-2025 (FCSSIP25), whose Performance Management System formally replaced the legacy Annual Performance Evaluation Report (APER) with target-based key performance areas (KPAs) and key performance indicators (KPIs) linked to promotion eligibility (OHCSF, 2021a, 2021b). For an autonomous agency such as the NRS, these examination requirements bind not as a direct statutory compulsion on the Governing Board but through the board-approved Staff Regulations and Conditions of Service, which align the Service with service-wide rules by administrative convention and transitional arrangement; it is precisely this channel of applicability that gives the Service the latitude, argued in Section 8.2, to recalibrate its promotion criteria consistent with existing legal authority. The resulting dualism, an examination tradition operating alongside an enacted but unevenly implemented performance-management framework, is genuine, consequential and currently open to reform. Because modernisation in the Service is delivered through project teams, the motivational consequences of blocked ladders should register first where discretion matters most: in the willingness of officers to exert extra effort for their project teams. We emphasise at the outset that the empirical test reported here evaluates this chain at the individual perceptual level: all constructs are self-reported perceptions of individual respondents, and the multilevel team-climate aggregation developed in Section 2.7 is specified for future testing, not tested here. We emphasise further that the survey evidence is drawn from a single regional station: throughout, references to the Service describe the institutional setting, while every empirical assertion about the NRS should be read as a single-station case study and not generalised to the Service nationwide without the qualification stated in Sections 5.1 and 8.3.

This paper makes three moves. First, it integrates internal labour market and tournament perspectives with expectancy, equity, two-factor and organisational justice research into a single perceptual chain, and develops perceived external hiring (PEH) as a construct that is theoretically differentiated from adjacent constructs in the literature (selection procedural justice, relative deprivation, perceived career opportunity); empirically, the present design establishes discriminant validity among the focal constructs within the proposed model only, while discriminant validation against external adjacent constructs requires a dedicated measurement study (Section 8.4). Second, it formalises falsifiable propositions, including a facet-level test that pits two competing accounts of public service motivation (PSM) against each other: buffering versus motivation crowding-out (Frey & Jegen, 2001; Perry & Hondeghem, 2008). Third, it reports a first empirical examination of the framework using a cross-sectional survey of 113 current NRS staff, and converts the theorised buffering mechanisms into a cost-benefit decision-analysis tool with a worked numerical example at NRS scale, using incremental accounting relative to the status quo.

Three research questions organise the empirical work. RQ1 asks whether perceived promotion examination bottlenecks and perceived external hiring are associated with lower perceived internal career opportunity and fairness (PICO-OF). RQ2 asks whether these bottleneck perceptions are associated with lower employee motivation through PICO-OF and, through motivation, with lower individually perceived project-team performance. RQ3 asks whether PSM facets buffer or amplify these associations. The paper contributes a construct (PEH) whose incremental explanatory value survives a direct empirical test, a facet-specific and deliberately preliminary reading of the PSM moderation debate, and an evidence-informed reform agenda for examination-gated public organisations.

THEORETICAL FOUNDATIONS

Internal labour markets, tournaments and the promote-or-hire decision

Internal labour market (ILM) theory treats promotion systems as allocation mechanisms: organisations fix ports of entry at lower levels and fill higher positions primarily through internal movement, with wages attached to job ladders rather than to individuals (Doeringer & Piore, 1971). Tournament models rationalise this design: when output is hard to measure, rank-order competition for promotions elicits effort, provided the prize is credible and the rules are perceived as fair (Lazear & Rosen, 1981). Tournament mobility, however, cuts both ways: early losses in the tournament depress subsequent attachment (Rosenbaum, 1979), and the signalling value of promotion depends on promotion decisions tracking performance (DeVaro & Waldman, 2012). Behavioural work on hiring channels shows that incumbents respond to the perceived contestability of positions: expectations of displacement by external hires reduce the anticipated returns to internal effort, and firms that fill senior vacancies externally pay a productivity and integration cost relative to internal promotion (Bidwell, 2011). Internal and external channels interact, so the mix chosen by the employer reshapes the incentive environment for everyone already inside (Bidwell & Keller, 2014). The implication for an examination-gated public service is direct: the design of the promotion system is not a neutral administrative routine but a standing incentive contract with the entire incumbent workforce.

Career bottlenecks: structural and content plateaus

The career literature names the experienced form of a blocked ladder as the career plateau, the point at which the likelihood of additional hierarchical movement becomes low (Bardwick, 1986). Scholarship distinguishes structural plateaus, rooted in the limited number of senior positions, from content plateaus, rooted in the absence of growth in the work itself (Milliman, 1992; Tremblay et al., 2014). Meta-analytic and review evidence associates both forms with unfavourable affective and behavioural outcomes (Yang et al., 2019), and Nigerian evidence shows that plateaued government employees report lower satisfaction and commitment and stronger turnover intentions (Salami, 2010). We define career progression bottlenecks as the perceived procedural, structural or institutional conditions that delay or restrict advancement. The perceptual definition is deliberate: employees respond to their constructed reality of the opportunity structure rather than to administrative reality as documented, and perceptions of blockage predict attitudes and behaviour more consistently than objective constraints (Tremblay et al., 2014). Where formal career rules coexist with politicised discretion, the gap between rules and lived experience is itself a motivational stressor (Onyango, 2021; Pitcher, 2012; Robinson, 2019).

The content dimension matters for perceived external hiring. When employees believe that positions they could occupy will be filled from outside, two signals arrive together: the hierarchical path is congested (a structural message) and the experience accumulated in the current role is devalued relative to outside profiles (a content message). Perceived external displacement therefore plausibly feeds content plateau: the work loses part of its meaning as a route to advancement, because the organisation signals that insider accumulation is not the currency it rewards. This reasoning motivates treating PEH not merely as a rival of promotion exams but as an antecedent that couples the structural and content forms of blocked careers.

Motivation mechanisms: expectancy, equity and motivators

Expectancy theory gives the most direct account of how career-system design translates into effort. Motivation is a multiplicative function of the expectancy that effort produces performance, the instrumentality that performance produces outcomes, and the valence of those outcomes (Vroom, 1964). A promotion system in which advancement depends on examinations weakly related to the work lowers instrumentality; a system in which positions are visibly filled externally lowers instrumentality further, because the outcome is decoupled from internal performance altogether. Equity theory adds a comparative and moral dimension: employees evaluate fairness by comparing input-outcome ratios with relevant others, and perceived under-reward triggers distress and restoration attempts, including reduced effort (Adams, 1963, 1965). Two-factor theory locates advancement among the motivational content of work: achievement, recognition, responsibility and advancement are motivators whose absence leaves a motivationally flat employment relationship even when

hygiene conditions are met (Herzberg, 1966). Throughout this paper, employee motivation refers to the expectancy-based motivational state expressed in both in-role effort and extra-role willingness, following evidence that PSM and role perceptions translate into both kinds of behaviour (Van Loon et al., 2017).

Organisational justice and the PICO-OF channel-credibility composite

Organisational justice research demonstrates that how outcomes are distributed and how decisions are made have separable effects on attitudes and behaviour (Colquitt et al., 2001). Selection-focused studies show that fairness perceptions of appointment procedures influence commitment, performance and acceptance of decisions independent of outcomes (Bauer et al., 2001; Gilliland, 1993, 1994). The justice lens reframes the reform question: internal vacancy advertisement and published, performance-weighted criteria are not administrative conveniences but justice interventions that alter the perceived fairness of the mobility system for every affected employee, not only for applicants.

We do not claim that structural opportunity and procedural fairness are one construct. They are conceptually distinct and can vary independently: an organisation can apply promotion procedures transparently and consistently while still offering little realistic opportunity to advance because its hierarchy is flat or vacancies are frozen, and conversely a nominally open channel can be administered unfairly. What the perceptual chain requires is not a homogeneous latent trait but the employee's overall judgement of whether the internal advancement channel is credible. We therefore conceptualise perceived internal career opportunity and organisational fairness (PICO-OF) explicitly as a multidimensional formative composite of channel credibility, in which four distinguishable components (fairness of criteria, realistic advancement opportunity, vacancy transparency and appraisal accuracy) each contribute to the composite without being assumed interchangeable or internally correlated. This formative specification, stated in Sections 3.1 and 5.4, governs how the measure is validated: internal-consistency coefficients and reflective confirmatory models are reported for transparency but are not the appropriate validity standard for a formative composite, and the modest alpha observed in Section 6.1 is interpreted accordingly. The conceptual independence of the components is also what licenses the differentiation argument in Section 2.8: an employee may judge a procedure as fair yet still infer that the position will be filled externally, and conversely.

Public service motivation as buffer versus crowding-out: an independent proposition

A credible framework must confront its strongest competing explanation. Public service motivation (PSM), the orientation to deliver service to others through public institutions (Perry & Wise, 1990), predicts two opposing patterns in blocked career systems. On the buffer account, high-PSM employees derive meaning from public service itself, so blocked advancement should depress their motivation less; PSM functions as a psychological resource that absorbs the disappointment of blocked opportunity (Perry & Hondeghem, 2008; Ritz et al., 2016). On the crowding-out account, externally imposed bureaucratic obstacles that frustrate public-serving effort can erode intrinsic motivation, so high-PSM employees may react more strongly, not less, to blocked advancement (Frey & Jegen, 2001; Van Loon et al., 2017). A systematic review of PSM moderation studies documents exactly this inconsistency across settings (Potipiroon, 2026), and evidence from Pakistani public service organisations shows that PSM interacts with procedural fairness in shaping work outcomes (Quratulain et al., 2019). Nigerian evidence that PSM relates positively to job performance through satisfaction and person-organisation fit makes the stakes concrete for the setting studied here (Ukeje et al., 2024).

We argue that the two accounts are not mutually exclusive once the multidimensionality of PSM is taken seriously (Perry, 1996), and once the cross-national measurement literature is brought to bear: Kim et al. (2013) show that Perry's US-developed dimensions travel imperfectly across populations and refine the distinction between value-based commitment to public values and foundational self-sacrifice, a caution directly relevant to testing these facets in a Nigerian revenue administration. The commitment to public interest (civic commitment) facet is, in foundational PSM theory, a societal, norm-based obligation to serve the public good rather than identification with one's employing bureaucracy; precisely because it is not institution-centred, it should buffer career-advancement bottlenecks: an officer high in civic commitment can satisfy the societal service duty through the daily work of revenue modernisation on project teams, so a congested hierarchical ladder does not remove the source of meaning. The buffering mechanism is thus the decoupling of the service motive from the

advancement instrument, not loyalty to the organisation. The self-sacrifice facet reflects willingness to trade private goods, including rapid advancement, for public service. Superficially, one might expect such employees to be least sensitive to promotion delay, since their valence for advancement is lower. We argue the opposite through a reciprocity mechanism: employees who forgo private-sector rewards to serve still expect basic institutional reciprocity, meritocratic recognition and procedural fairness in return; when arbitrary examination gates and external bypass devalue their insider contributions, they experience a breach of the moral or psychological contract underlying their sacrifice, and crowding-out dominates (Frey & Jegen, 2001). We therefore state an independent proposition with two facet-specific predictions, elevating PSM from a background control to a theorised moderator whose internal structure carries the theoretical dispute.

Proposition 6 (P6a). The negative association between career progression bottlenecks and employee motivation is attenuated (buffered) among employees high in commitment to the public interest. Falsification condition: the interaction of the commitment facet with bottleneck perceptions is non-significant or negative after main effects are included.

Proposition 6 (P6b). The negative association between career progression bottlenecks and employee motivation is amplified (crowded out) among employees high in self-sacrifice. Falsification condition: the interaction is non-significant or positive for the self-sacrifice facet.

Why project teams: the case for the performance outcome

The framework treats project-team performance as the outcome rather than individual task performance, for three reasons grounded in team theory. First, discretion: project work in modernisation programmes is high on task discretion, so variation in willingness to exert effort has room to express itself in results, whereas in rule-bound routines motivation differences are absorbed by procedures (Hackman, 1987). Second, interdependence: where tasks are reciprocal, the motivational state of one member conditions the productivity of others, so individual motivation aggregates into team outcomes more strongly than under pooled interdependence (Kozlowski & Bell, 2013; Kozlowski & Ilgen, 2006). Third, measurement: project performance is multi-dimensional, spanning efficiency, effectiveness, stakeholder satisfaction and team development (Ika, 2009; Pinto & Slevin, 1988), which matches the way revenue modernisation is actually judged by leadership and stakeholders. Revenue administration is an especially favourable setting for this argument: audit, investigation, digital filing and analytics projects depend on specialised skill and sustained discretionary effort, exactly the inputs that a blocked ladder threatens to withdraw.

From individual perceptions to shared dissatisfied climates

Aggregation from individual perception to team-level performance is non-trivial. Composition theory distinguishes additive models, direct-consensus models and referent-shift consensus models (Chan, 1998; Kozlowski & Klein, 2000). We propose that PICO-OF and motivation aggregate to a team-level motivational climate through a direct-consensus composition process: because both constructs are conceptualised and measured with an individual self-referent (Sections 2.3, 2.4 and 3.1), the aggregate represents the shared level of individually experienced blockage, not a shifted perception of the team as an entity. Where many members individually perceive blocked opportunity, the perception acquires climate-like properties. A referent-shift model, in which items would be re-referenced to the team ("members of my project team..."), remains an option for future multilevel work but would require rewriting the item referents of PICO-OF and motivation; the present formulation is deliberately a direct-consensus model. Empirically, aggregation must be justified by within-team agreement indices, with rwg(j) at or above 0.70, ICC(1) at or above 0.12 and ICC(2) at or above 0.60 treated as conventional thresholds (Bliese, 2000).

The dynamics of such climates deserve explicit theoretical attention, because shared dissatisfaction is not merely the sum of private dissatisfaction. Emotional contagion transmits affect between members and can create group-level affective tones that shape interaction quality and cooperation (Barsade, 2002; George, 1990; Hatfield et al., 1994). Where a team shares the perception that effort cannot convert into advancement, complaints become social currency, cynicism becomes normative and the contagion of negative affect can accelerate the withdrawal of discretionary effort beyond what individual perceptions alone would predict. Two implications follow.

Theoretically, the chain from motivation to team performance is conditional on shared climate: where within-team variance in PICO-OF is high, the motivational signal weakens and team-level effects should attenuate. Practically, reform that addresses one influential member's perceived opportunity may produce social benefits beyond that individual. Because the survey reported here did not record team identifiers, these multilevel claims are specified for testing rather than tested, and the present analysis is conducted entirely at the individual level of perception.

The perceived external hiring construct

A central charge levelled at adjacent constructs is that they overlap and so fail to add explanatory value. We therefore define perceived external hiring as an incumbent employee's subjective inference that positions he or she could plausibly occupy are, or will be, filled from the external labour market rather than through internal advancement. The definition is deliberately restricted to the cognitive inference of external displacement; the transparency or fairness of the contest is a separate property, captured by the procedural-fairness components of PICO-OF, so that the antecedent and the mediator are not tautological by construction. Three features sharpen the construct. PEH is perceptual: it captures what employees believe about displacement, not the objective volume of external hiring. It is positional: it concerns positions the employee regards as within reach, not all external hires indiscriminately. It is forward-looking: it encompasses anticipated external appointments, not only those already observed.

PEH is distinct from procedural justice of selection, which evaluates the fairness of decision procedures themselves (Bauer et al., 2001; Gilliland, 1993): an employee may judge a procedure as fair yet still infer that the position will be filled externally, and conversely. PEH is distinct from relative deprivation, which concerns the affective comparison of one's outcomes against a referent (Crosby, 1976): PEH is a cognitive inference about displacement that may or may not generate deprivation, depending on the valence attached to the lost opportunity. PEH is also distinct from perceived career opportunity (PCO; Kraimer et al., 2011), the established psychometric construct capturing forward-looking beliefs that positions matching one's skills and goals exist within the organisation: low PCO describes the absence of internal openings, whereas PEH describes the active displacement of internal candidates by external action, and two employees with equally low PCO may differ sharply in whether they attribute the blockage to external hiring. Finally, PEH is distinct from classical structural ILM openness (Doeringer & Piore, 1971; Rosenbaum, 1979), which is about internal access; PEH is about the inferred displacement of internal opportunity by external action. The nomological network positions PEH as an antecedent of PICO-OF, downstream of examination bottlenecks and external-hiring practice, and upstream of motivation. Empirically establishing discriminant validity of PEH against validated PCO scales, the Selection Procedural Justice Scale (Bauer et al., 2001) and relative deprivation measures requires a dedicated measurement study, which we specify in Section 8.4; the present survey validates distinctiveness only among the five focal constructs in the proposed path model.

FRAMEWORK AND PROPOSITIONS

Constructs and scope conditions

The framework comprises five constructs. Promotion examination bottlenecks (PEB) denote employees' perceptions that examination-centred requirements and associated processing delays restrict or delay advancement independently of demonstrated contribution. Perceived external hiring (PEH) is defined in Section 2.8. Perceived internal career opportunity and organisational fairness (PICO-OF) is a formative composite of channel credibility combining four distinct components (fairness of criteria, realistic advancement opportunity, vacancy transparency and appraisal accuracy), as specified in Section 2.4. Employee motivation is the expectancy-instrumentality-valence state expressed in in-role and extra-role effort willingness. Project-team performance is the individually perceived delivery of team milestones and output quality, treated at the team level as an emergent consequence of shared motivational climate rather than a simple aggregate (Ika, 2009; Pinto & Slevin, 1988); in the present data it is an individual-level perception. The scope conditions are examination-gated career systems with observable external hiring channels, project-based delivery units and internal labour markets governed by service-wide rules. The boundary conditions formalised in Figure 1 include task interdependence (Kozlowski & Bell, 2013), external labour-market alternatives that convert blockage into

turnover rather than reduced in-role effort (Bertelli, 2007), HRM system strength (Bowen & Ostroff, 2004) and the PSM moderation formalised as Proposition 6.

Propositions P1 to P6

We distinguish explicitly between the propositions tested with the present individual-level data (P1, P2, P3 and P6) and those reserved for future multilevel or quasi-experimental designs (P4 in its climate-conditional form, and P5). Proposition 6, with its two facet-specific predictions P6a and P6b, is stated with the PSM theory in Section 2.5. A note on integration: because P3 proposes that bottlenecks reach motivation through PICO-OF rather than directly, P6's moderation of the direct bottleneck-to-motivation association is compatible with full indirect transmission if the conditional direct slopes across PSM facets are opposite in sign and approximately cancel at the sample mean, which is the pattern the data in fact show (Section 6.5); whether PSM also moderates the PICO-OF-mediated stages is a question for a moderated-mediation design.

P1. Career progression bottlenecks (PEB and PEH) are negatively associated with employee motivation. (A preliminary moderation clause, that the association is stronger where examination content is perceived as weakly related to actual job performance, is not tested here: job-relatedness is embedded in the PEB items themselves rather than measured as a separate moderator, and we flag it for future designs.) Falsification condition: in models including PSM, the association between validated bottleneck and motivation scales is statistically indistinguishable from zero or significant in the opposite (positive) direction.

P2. PEH into positions that internal employees regard as contestable is negatively associated with PICO-OF, and PEB is similarly negatively associated with PICO-OF; PEH explains incremental variance in PICO-OF beyond PEB. Falsification condition: PEH fails to explain incremental variance in PICO-OF beyond PEB, or its partial association is non-negative. (Contestability is a constitutive property of PEH as defined in Section 2.8, not an external control; it therefore does not enter the falsification condition.) If PEB fails to retain a negative partial association once entered jointly with PEH, the additive form of P2 is refined to a proximal-carrier form in which PEH carries the shared variance.

P3. PICO-OF mediates the negative relationship between career progression bottlenecks and employee motivation, such that bottlenecks depress motivation primarily through their erosion of perceived opportunity and fairness. Falsification condition: the bootstrapped indirect effect through PICO-OF is not significantly different from zero, or is significant in the opposite direction, regardless of whether the direct path is significant.

P4 (reserved for multilevel testing). Employee motivation is positively associated with project-team performance, conditional on shared motivational climate. Falsification condition: after justified aggregation, the team-level motivation-performance association is non-positive, or positive only where within-team agreement is low, contradicting the climate mechanism. The present data contain no team identifiers, so only the individual-level association is tested here (Section 6.4); the climate condition is unevaluable with this design.

P5 (reserved for quasi-experimental or multi-system designs). The negative relationships in P1 to P3 are attenuated where mobility channels are perceived as procedurally just, specifically where suitable vacancies are transparently advertised internally, where demonstrated performance carries substantive weight in promotion decisions, and where a documented build-before-buy talent review precedes external recruitment; the attenuation is stronger where HRM system strength is high (Bowen & Ostroff, 2004). Falsification condition: the buffering mechanisms interact with bottleneck perceptions in the opposite direction, or HRM strength fails to moderate the attenuation. The present design measures neither exposure to the three mechanisms nor HRM system strength, so P5 is untested here and is reported as such in Table 7.

Figure 1 summarises the framework. Both bottleneck forms feed the chain through two routes: a perceptual route in which PEB and PEH reduce PICO-OF, and a motivational route in which reduced PICO-OF lowers expectancy and equity perceptions and depresses motivation, which then enters team outcomes as an emergent shared state. The top band lists the boundary conditions, including the PSM moderation that Proposition 6 formalises; the bottom band lists the buffering mechanisms that Proposition 5 attaches to the downstream paths.

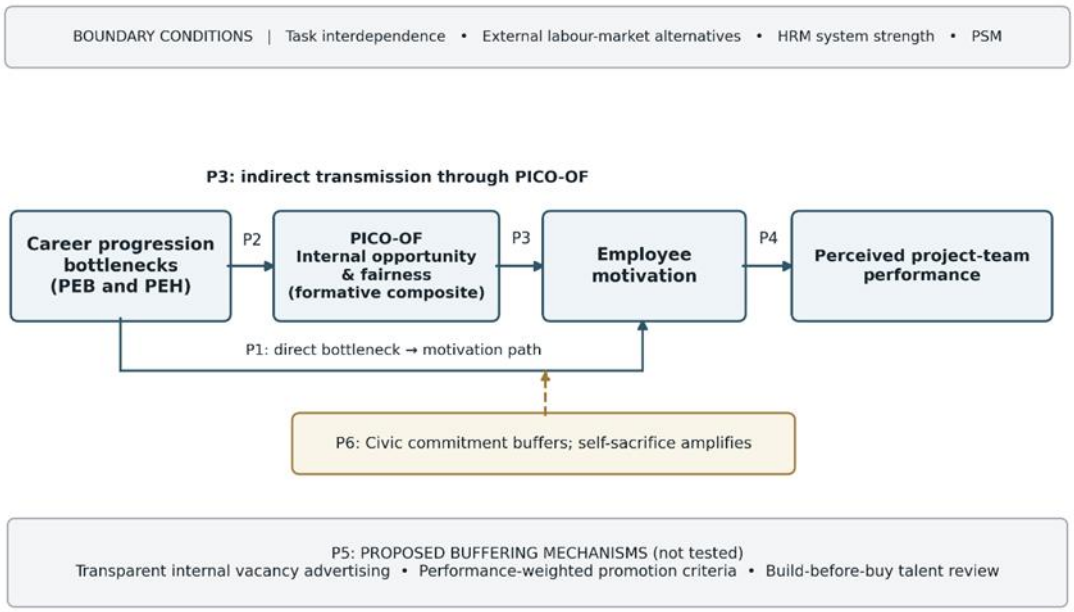


Figure 1. Conceptual framework linking promotion examination bottlenecks, perceived external hiring, PICO-OF (a formative channel-credibility composite), employee motivation and project-team performance, with boundary conditions and buffering mechanisms. P3 denotes the full indirect transmission through PICO-OF; the dashed P6 arrow targets the direct bottleneck-to-motivation path (P1).

Institutional setting: the NRS between examination and performance

The NRS operates in a policy domain where organisational effectiveness is unusually dependent on specialised human capital: tax audit, compliance investigation, digital filing and data analytics require skills that take years to develop. Career progression is embedded in the internal labour market of the Nigerian federal public service, which allocates most positions above entry level through internal mechanisms governed by service-wide rules. The Nigeria Revenue Service (Establishment) Act 2025 created a statutory framework for a unified federal revenue institution responsible for the assessment, collection and accounting of federal revenues, and vests authority over human-resource management in the Service's Governing Board, continuing the statutory autonomy model of the Federal Inland Revenue Service (Federal Republic of Nigeria, 2025). OHCSF confirmation and promotion examinations therefore apply to the NRS not as direct statutory compulsion but through the board-approved Staff Regulations and Conditions of Service, which align the Service with service-wide examination rules by administrative convention; this channel matters for reform, because what binds by board adoption can be recalibrated by board decision within the limits of the Establishment Act.

Three institutional facts make the setting analytically useful. First, the dualism is codified in specific instruments rather than merely cultural: the revised Public Service Rules (2021 Edition, Chapter 5) and the FCSSIP25 Performance Management System direct that promotion of deserving officers rely on demonstrated performance captured in target-based KPAs and KPIs, formally replacing the legacy APER system and linking appraisal results to promotion eligibility, in addition to applicable examination requirements (OHCSF, 2021a, 2021b). The core administrative challenge in Nigeria is therefore not the initial conceptual introduction of performance-based appraisal, which is already enacted, but the credible calibration and implementation of the existing PMS framework alongside statutory examinations. Second, the Service and predecessor bodies periodically advertise senior positions externally, which makes external hiring observable to incumbents and therefore perceptually salient, the necessary condition for PEH. Third, modernisation is delivered through projects, so individual motivational states have a direct channel into organisational results; the present empirical test evaluates that channel at the individual perceptual level only. Comparable African reform experience shows that performance-management reforms succeed or fail on implementation credibility rather than formal adoption (Rasul et al., 2021; Williams & Yecalo-Tecle, 2019), which frames the buffering mechanisms developed in Section 7.

METHOD

Design and procedure

We conducted a cross-sectional survey of NRS staff using an anonymised online questionnaire. The instrument was open for 9 days, from 19 to 27 October 2026, and the survey was conducted in the Service's Port Harcourt office, which employs approximately 200 of the roughly 5,250 staff the NRS has nationwide (official records, late 2026); the 117 raw responses therefore imply an approximate response rate of 59 percent within that office. The sample is thus office-based rather than Service-wide, and representativeness across the full workforce is a stated limitation. Regional stations differ in administrative leadership, local labour-market conditions and taxpayer compliance environments, any of which may systematically colour perceptions of examination barriers and external hiring, so all findings reported below are those of this single station. The instrument included an embedded screening item confirming current NRS employment, which served as the only eligibility control; no tracking cookies or identifying metadata were retained, so duplicate submissions cannot be excluded by design and are addressed through the screening and straight-lining checks reported in Section 5.2. Participation was voluntary; the first items recorded informed consent and current NRS employment. No demographic items (tenure, grade, gender, directorate or location) or project-team identifiers were collected, a design choice that trades descriptive richness and control variables for complete anonymity in a sensitive internal topic; the resulting exposure to omitted-variable bias (notably by grade and tenure) is addressed in Sections 5.4 and 8.3. Respondents rated all substantive items on five-point Likert scales from 1 (strongly disagree) to 5 (strongly agree).

Sample

A total of 117 responses were recorded. Four respondents indicated they were not current NRS staff and were removed. The remaining 113 cases had complete data on all substantive items, and no case showed zero variance across items (straight-lining), so the analytic sample comprises 113 current staff members. This exceeds common rules of thumb for the regression models estimated (at least 10 cases per predictor) but remains a modest sample for latent-variable modelling: the deduplicated 15-indicator five-factor confirmatory model estimates 40 free parameters, a sample-to-parameter ratio of about 2.8 to 1, below standard minimum recommendations for maximum-likelihood estimation; this limitation is discussed in Section 8.3.

Measures

Table 1 reports the item mapping and descriptive statistics. Promotion examination bottlenecks (PEB) were administered with six item instances, of which Items 1, 2, 5 and 6 shared an identical stem (all four reading "Advancement delayed by exam requirements unrelated to daily tasks"; the duplication arose during survey build: the stem was inadvertently pasted into Items 1 and 2, and a later editing pass repeated it at Items 5 and 6; the error was detected only after fielding closed), leaving only three uniquely worded statements: the examination-delay stem, Item 3 (processing delays for examination results) and Item 4 (observed blockage of competent colleagues). Because four near-duplicate administrations of one stem violate local independence, overweight one content facet and mechanically inflate Cronbach's alpha, we use the fully deduplicated three-stem core scale as the primary PEB measure throughout, averaging the four repeated instances into a single stem score before any composite scale scores were computed, and only then compositing that stem with Items 3 and 4 (alpha = 0.71 for the three-stem core); the six-item administered version (alpha = 0.88) is reported only as a sensitivity note in Section 6.6. PEH was measured with four items capturing positional and forward-looking external displacement. PICO-OF was measured with four items covering the four formative components of channel credibility (fairness of criteria, realistic advancement opportunity, vacancy transparency and appraisal accuracy); consistent with the formative specification in Sections 2.4 and 3.1, we do not treat internal consistency as the validity standard for this composite, and we test the two components most exposed to wording overlap (vacancy transparency and realistic opportunity) in sensitivity analyses. Employee motivation used two items: willingness to exert extra effort for the project team (extra-role) and the expectancy that current effort leads to desired career outcomes (in-role); because the two items differ in referent and content, we report a disaggregated sensitivity check in Section 6.3. PSM was measured with two items that map onto distinct facets of the construct (Perry, 1996; Kim et al., 2013): civic commitment (commitment to serving the Nigerian public through effective

tax administration) and self-sacrifice (meaningful public service valued above rapid promotion); both are single ad-hoc items, and we treat all PSM results as preliminary for that reason. Project-team performance used two items capturing milestone delivery and output quality as perceived by the respondent (an individual-level perception of team outcomes).

Analytic strategy

Analyses proceeded in five steps. First, scale reliability (Cronbach's alpha) and corrected item-total correlations were computed, and a five-factor confirmatory factor model (PEB core, PEH, PICO-OF, motivation, team performance; 15 indicators after PEB deduplication) was estimated; we note that the CFA treats the formative PICO-OF composite reflectively, which we report for transparency while relying on composite scores as the primary measurement basis; for the formative PICO-OF composite we additionally apply formative validation criteria, examining indicator collinearity through variance inflation factors, formative weights from a redundancy analysis against the theorised downstream outcome, and indicator-level external validity paths. Second, discriminant validity among the five focal constructs was examined with the heterotrait-monotrait ratio of correlations (HTMT), using 0.85 as the conservative threshold. Third, the proposition chain was tested with ordinary least squares regressions: PICO-OF on PEB and PEH (P2); motivation on the bottlenecks and PICO-OF (P1 and P3); and perceived team performance on motivation with and without controls (individual-level P4). All OLS estimates assume independence of observations; because team identifiers were not collected, standard errors cannot be clustered by team and may be biased downward if within-team residuals correlate, and because grade and tenure were not collected, the models cannot rule out seniority-strata confounding; both qualifications are carried into the interpretation, and all OLS outputs in Sections 6 to 8 are reported as conditional associations given the measured covariates, not as isolated structural parameters; the specification-error discussion in Section 8.3 models the likely direction of the omitted-variable bias. Fourth, indirect effects were tested with 5,000 bootstrap resamples (percentile confidence intervals) in standalone three-variable mediation models for PEB and PEH through PICO-OF to motivation, and for PICO-OF through motivation to perceived team performance; we distinguish these standalone models from the joint multiple regressions throughout, and we interpret opposite-signed indirect and direct paths as inconsistent mediation (suppression), not full mediation. Fifth, the PSM moderation (P6) was tested with mean-centred interaction terms separately for each facet (the composite being unreliable), with simple slopes probed at values that remain within the [1, 5] scale bounds: for the ceiling-affected civic commitment facet, at the 16th percentile and the scale maximum; for self-sacrifice, at plus and minus one standard deviation, which remain in bounds. Robustness checks included Spearman rank correlations, heteroskedasticity-consistent (HC3) standard errors, the six-item administered PEB version and a three-item PICO-OF variant dropping the vacancy-transparency item. Analyses used Python (pandas, statsmodels and semopy); two-tailed alpha was set at 0.05, with effects between 0.05 and 0.10 flagged as marginal.

RESULTS

Measurement quality and preliminary analyses

Table 1 reports item statistics and scale reliabilities. Using the primary deduplicated core scales, internal consistency was acceptable for PEB (alpha = 0.71 for the three-stem core), PEH (0.80), motivation (0.81) and perceived team performance (0.82). PICO-OF showed modest reliability (0.66); under the formative specification of Section 2.4 this coefficient is not the appropriate validity standard, since the four components need not covary, but we report it for transparency and carry the attenuation it implies through the interpretation. The two PSM items did not form a reliable composite (alpha = 0.17; inter-item r = 0.10, p = 0.294), which is itself informative: the civic commitment item (M = 4.65) and the self-sacrifice item (M = 3.06) behave as distinct facets in this sample, consistent with the multidimensional structure of the construct (Perry, 1996; Kim et al., 2013). We therefore analysed PSM at the facet level and report composite-based results only as a sensitivity note. The civic commitment item also exhibits a severe ceiling effect (M = 4.65, SD = 0.89 on a scale capped at 5), which constrains moderation probing and is handled with percentile-based simple slopes in Section 6.5.

The 18-indicator five-factor confirmatory model that included all four duplicate PEB stems as conditionally independent indicators fitted poorly by conventional benchmarks (chi-square(125) = 331.3, CFI = 0.82, TLI = 0.78, RMSEA = 0.121), falling below the Hu and Bentler (1999) and Kline (2016) thresholds (CFI/TLI at or

above 0.90, RMSEA at or below 0.08) and indicating unmodeled residual covariances among the repeated stems. Re-estimating the model on the deduplicated 15-indicator set improved fit materially but not fully into the acceptable range, chi-square(80) = 141.4, CFI = 0.90, TLI = 0.87, RMSEA = 0.083 (90% CI [0.060, 0.105]), with all standardised loadings significant (0.46 to 0.90); residual misfit is plausibly attributable to the low sample-to-parameter ratio and the two-indicator factors; we note explicitly that TLI = 0.87 remains below the conventional 0.90 acceptability threshold, a shortfall consistent with the sample-to-parameter ratio of 2.8 to 1. Given the modest sample and short scales, we treat composite scores with reliability and HTMT evidence as the primary measurement basis and flag fit as a limitation. Table 2 reports means, standard deviations and intercorrelations, including the two PSM facet items that serve as the focal moderators. Respondents perceived moderately strong bottlenecks (PEB M = 3.65) and external hiring (PEH M = 3.67), moderately weak PICO-OF (M = 3.32), and relatively high motivation (M = 4.20) and perceived team performance (M = 4.21). PEB and PEH correlated substantially ($r = 0.59$, $p < 0.01$) but remained empirically distinguishable, HTMT = 0.78. HTMT values for all remaining pairs of substantive constructs were below 0.85 (Table 3), supporting distinctness among the five focal constructs; HTMT values involving the PSM composite are not interpretable given its unreliability and were excluded. A Harman single-factor test on the 20 administered items (including all six PEB instances) accounted for 27.9% of variance; recomputed on the deduplicated 17-indicator set, the first factor accounted for 25.7%, both below the 40 to 50 percent range that would raise substantive common-method concern.

For PICO-OF, specified as a formative composite of channel credibility (Sections 2.4 and 3.1), reflective fit indices are not the appropriate validity standard, so we supplement them with formative validation. Inter-indicator correlations are low to moderate ($r = 0.26$ to 0.46) and variance inflation factors range from 1.15 to 1.37, far below conventional concern thresholds, so collinearity does not distort the composite. A redundancy analysis regressing employee motivation, the theorised downstream outcome, on the four components returns positive weights throughout, with realistic advancement opportunity the strongest component ($b = 0.360$, $p < 0.001$) and appraisal accuracy also significant ($b = 0.136$, $p = 0.049$), and the composite itself correlates with motivation at $r = 0.30$ ($p < 0.01$). Each component thus contributes to the composite's external validity, and we treat PICO-OF strictly as a composite index, reporting its reflective CFA behaviour for transparency only.

Table 1. Measures, descriptive statistics and reliability (N = 113). Primary scales use the deduplicated PEB core.

Construct / item	M	SD	r-it	alpha
PEB: Promotion examination bottleneck (3-stem core)				0.71
1. Advancement delayed by exam requirements unrelated to daily tasks (four administered instances averaged: Items 1, 2, 5, 6)	3.51	1.21	0.65	
2. Processing delays for exam results artificially restrict career progression	3.52	1.43	0.55	
3. Seen highly competent colleagues blocked by the examination gate	3.92	1.42	0.40	
PEH: Perceived external hiring				0.80
1. Positions I am qualified for tend to be filled from outside, even when I could compete	4.06	1.20	0.63	

2. Anticipate upcoming senior vacancies in my unit will be given to external hires	3.18	1.47	0.52	
3. The NRS often bypasses internal staff to bring in outsiders for roles I could perform	3.75	1.40	0.60	
4. External hiring happens before internal staff are given a transparent chance to apply	3.68	1.34	0.74	
PICO-OF: Internal career opportunity and fairness (formative composite)				0.66
1. Promotion criteria are applied fairly and consistently	2.92	1.37	0.49	
2. I have a realistic opportunity to advance in this organisation	3.96	1.18	0.35	
3. Vacancies are advertised transparently to internal staff	2.94	1.41	0.50	
4. Appraisals accurately reflect my contribution to promotion decisions	3.46	1.40	0.40	
MOT: Employee motivation				0.81
1. Willing to exert extra effort for my project team (extra-role)	4.30	1.06	0.69	
2. Current effort will lead to desired career outcomes (expectancy, in-role)	4.11	1.18	0.69	
PSM: Public service motivation (facet items, analysed separately)				0.17
1. Civic commitment: deeply committed to serving the Nigerian public	4.65	0.89	0.10	
2. Self-sacrifice: meaningful public service above rapid promotion	3.06	1.36	0.10	
TP: Perceived project-team performance				0.82
1. Team consistently meets its modernisation milestones	4.04	0.99	0.70	

2. Quality of team output meets stakeholder expectations	4.38	0.86	0.70	

Note. r-it = corrected item-total correlation; alpha = Cronbach's alpha. The six-item administered PEB version (including all four duplicate instances of the examination-delay stem) yields alpha = 0.88; that inflation violates local independence, so the deduplicated three-stem core (alpha = 0.71) is the primary measure and the administered version appears only in the Section 6.6 sensitivity note. PICO-OF is specified as a formative composite, so alpha is reported for transparency rather than as a validity standard. PSM facet items do not form a reliable composite (r = 0.10, n.s.) and are analysed separately.

Table 2. Scale means, standard deviations and intercorrelations (N = 113).

Scale	M	SD	1	2	3	4	5	6	7
1. PEB (core)	3.65	1.08							
2. PEH	3.67	1.07	0.59**						
3. PICO-OF	3.32	0.94	-0.20*	-0.34**					
4. Motivation	4.20	1.03	0.12	0.04	0.30**				
5. Civic commitment (facet)	4.65	0.89	0.16	0.24*	0.01	0.70**			
6. Self-sacrifice (facet)	3.06	1.36	-0.05	-0.13	0.31**	0.13	0.10		
7. Team performance	4.21	0.85	0.17	0.15	0.03	0.64**	0.70**	0.05	

*Note. ** p < 0.01; * p < 0.05; two-tailed tests. The unreliable PSM composite is no longer reported; the two facet items (rows 5 and 6) are the focal moderators of Proposition 6. Small discrepancies between regression coefficients implied by this two-decimal matrix and those in Table 4 reflect rounding.*

Table 3. HTMT discriminant validity ratios (focal constructs).

	PEB	PEH	PICO-OF	MOT	TP
PEB	1.00				
PEH	0.78	1.00			
PICO-OF	0.30	0.47	1.00		
MOT	0.23	0.19	0.44	1.00	

TP	0.23	0.19	0.24	0.78	1.00

Note. HTMT entries are absolute values computed from the deduplicated item-level correlation matrix; values below 0.85 support discriminant validity among the five focal constructs. PSM is excluded because its composite is unreliable (Table 1). Discriminant validity against external constructs (perceived career opportunity, selection procedural justice, relative deprivation) requires separate validated scales and is deferred to the measurement study in Section 8.4.

The opportunity structure: PEB, PEH and PICO-OF (P2)

Table 4 (panel A) reports the opportunity-structure models. In the bivariate models, PEB was negatively associated with PICO-OF (b = -0.170, p = 0.039) and PEH more strongly so (b = -0.295, p < 0.001, R-squared = 0.113). When entered jointly, PEH retained its coefficient (b = -0.296, p = 0.003) while PEB dropped to zero (b = 0.003, n.s.); PEH explained incremental variance beyond PEB (change in explained variance, delta R-squared = 0.075; F-change(1, 110) = 9.25, p = 0.003). The pattern indicates that PEB and PEH are entangled perceptions of one blocked opportunity structure (r = 0.58), with PEH acting as the more proximal carrier of the association with perceived opportunity and fairness. Substantively, officers who perceive external displacement of contestable positions experience the internal channel as less open and less fair, which supports the incremental core of P2, with the refinement anticipated in Section 3.2: the exam-bottleneck association is absorbed by, rather than additive to, PEH. Because grade and tenure were not measured, we cannot rule out that part of PEH's incremental association reflects unmeasured seniority differences in exposure to external hiring; this is carried as a limitation.

Motivation and the mediating role of PICO-OF (P1 and P3)

Table 4 (panel B) shows that the bottleneck-to-motivation paths were null both in the joint model without the mediator (PEB b = 0.144, n.s.; PEH b = -0.046, n.s.; Model 4) and when PICO-OF was added (Model 5), whereas PICO-OF was positively associated with motivation (b = 0.389, p < 0.001). The true bivariate (zero-order) slopes are the positive totals reported in Table 5 (PEB b = 0.117; PEH b = 0.039), consistent with the positive zero-order correlations in Table 2; Model 4 is a joint two-predictor regression, not a pair of bivariate regressions. The standalone bootstrap mediation models (Table 5) clarify the association pattern, and simultaneously reveal a suppression pattern: for PEH, the indirect effect through PICO-OF was significant and negative (b = -0.115, 95% CI [-0.221, -0.030]) while the direct path was non-significant and positive (b = 0.154, 95% CI [-0.022, 0.350]). Because the indirect and direct paths carry opposite signs and cancel to a near-zero total, this is inconsistent mediation (mutual suppression), not standard full mediation; we interpret it as evidence that bottleneck perceptions carry two countervailing signals, a demotivating signal associated with eroded channel credibility and a residual positive signal that remains once credibility is held constant. Three readings of this positive residual are available, and the present design cannot adjudicate among them. On a challenge-stressor account, examinations perceived as unrelated to the work may be appraised by some officers as hurdles to be overcome rather than threats, mobilising compensatory effort among those who still expect to clear them. On a coping or sense-making account, officers who remain despite the bottleneck may reconstruct it as a rite of passage that validates eventual advancement, reducing dissonance at the cost of motivating persistence. On a statistical account, the residual path is conditional on channel credibility: once PICO-OF is held constant, the remaining bottleneck variance is weighted toward respondents who perceive the rules as fair yet binding, and conditioning on a common consequence of correlated predictors can itself induce sign reversals of this kind. We flag all three readings and note that only longitudinal or experimental designs can separate them. The PEB indirect effect in the standalone model was marginal (b = -0.063, 95% CI [-0.147, 0.002]), and its standalone direct path was significantly positive (b = 0.181, 95% CI [0.027, 0.347]), which sharpens rather than softens the suppression reading. In a joint mediation specification controlling for PEH, the PEB indirect effect is identically zero, because PEB's association with PICO-OF is absorbed by PEH (Model 3). Under the falsification rule stated in Section 3.2, P3 is supported for PEH (the indirect CI excludes zero) and not supported for PEB in the joint specification. The direct version of P1 is disconfirmed under its own falsification rule (the association is indistinguishable from zero), while its indirect form is supported for PEH through P3. This is theoretically meaningful: it localises the association of blocked ladders with motivation in the credibility of the internal

channel rather than in the gated procedure per se. A disaggregated sensitivity check separating the two motivation items showed the chain holds for both, though asymmetrically: PICO-OF predicts the career-expectancy item more strongly (b = 0.487, p < 0.001) than the team-effort item (b = 0.291, p = 0.008), while in the second leg the team-effort item predicts perceived team performance slightly more strongly (b = 0.541, p < 0.001) than the expectancy item (b = 0.414, p < 0.001), controlling for PICO-OF, PEB and PEH; a heterogeneity we note for future multi-item measurement rather than interpret further here.

Table 4. OLS regression models (N = 113).

Panel / predictor	b	SE	t	p	R-squared
Panel A. DV: PICO-OF					
Model 1: PEB (bivariate)	-0.170	0.081	-2.09	0.039	0.038
Model 2: PEH (bivariate)	-0.295	0.079	-3.75	< 0.001	0.113
Model 3: PEB (joint)	0.003	0.097	0.03	0.977	0.113
Model 3: PEH (joint)	-0.296	0.097	-3.04	0.003	
Panel B. DV: Motivation					
Model 4: PEB (joint)	0.144	0.112	1.29	0.199	0.017
Model 4: PEH (joint)	-0.046	0.112	-0.41	0.681	
Model 5: PEB	0.143	0.106	1.36	0.177	0.129
Model 5: PEH	0.069	0.110	0.63	0.533	
Model 5: PICO-OF	0.389	0.104	3.75	< 0.001	
Panel C. DV: Team performance (perceived)					
Model 6: Motivation (bivariate)	0.525	0.060	8.69	< 0.001	0.405
Model 7: Motivation	0.557	0.064	8.74	< 0.001	0.438
Model 7: PICO-OF	-0.133	0.073	-1.82	0.072	
Model 7: PEB	0.022	0.071	0.31	0.756	
Model 7: PEH	0.046	0.074	0.63	0.533	

Note. All coefficients are unstandardised, consistent with the values quoted in the narrative text and in Figure 3. Bivariate and joint models are labelled explicitly; Model 4 is a joint two-predictor regression, so its PEH coefficient need not match the positive zero-order correlation in Table 2. Model 6 showed heteroskedasticity (Breusch-Pagan p < 0.001); with HC3 robust errors the motivation coefficient remains b = 0.525 (SE = 0.100, t = 5.25, p < 0.001). Variance inflation factors were below 1.7 in all models. Durbin-Watson statistics were between 1.79 and 1.96. Estimates assume independence of observations; team-level clustering cannot be modelled without team identifiers (Section 5.4).

Table 5. Bootstrapped indirect effects in standalone three-variable mediation models (5,000 resamples, percentile CIs).

Path	Indirect b	95% CI	Direct b	95% CI	Total b
PEB to PICO-OF to motivation	-0.063	[-0.147, 0.002]	0.181*	[0.027, 0.347]	0.117
PEH to PICO-OF to motivation	-0.115*	[-0.221, -0.030]	0.154	[-0.022, 0.350]	0.039
PICO-OF to motivation to team performance	0.188*	[0.058, 0.304]	-0.160	[-0.322, 0.016]	0.028

*Note. * indicates a confidence interval excluding zero. Each row is a standalone three-variable model; direct effects therefore differ from the joint regressions in Table 4. In all three rows the indirect and direct paths carry opposite signs, an inconsistent-mediation (suppression) pattern, not full mediation. In a joint mediation model controlling for PEH, the PEB indirect effect is identically zero because PEB's association with PICO-OF is absorbed (Table 4, Model 3).*

Team performance (P4, individual level)

Table 4 (panel C) shows a strong positive association between motivation and perceived project-team performance (b = 0.525, p < 0.001, R-squared = 0.405), robust to HC3 heteroskedasticity-consistent standard errors and to the inclusion of PICO-OF, PEB and PEH (b = 0.557, p < 0.001). The bootstrap test of the second leg again showed an inconsistent pattern: PICO-OF relates to perceived team performance positively through motivation (indirect b = 0.188, 95% CI [0.058, 0.304]) while its direct path trends negative (b = -0.160, 95% CI [-0.322, 0.016]; marginal at p = 0.072 in Model 7). We read the negative direct tendency cautiously: holding motivation constant, employees who rate the channel as credible but their team as underperforming may be registering unmet expectations, but the estimate is non-significant and the design cannot adjudicate. The chain therefore hangs together at the individual level of perception: perceived opportunity and fairness are associated with reported team outcomes only insofar as they are associated with the willingness to exert effort. Because the survey did not record team membership, the climate-conditional version of P4 (Section 2.7) remains untested and is carried to the research agenda.

PSM as moderator: buffering versus crowding-out (P6)

Table 6 reports the facet-level moderation tests and Figure 2 visualises the interactions using within-bounds probe values. For the civic commitment facet, the interaction was positive (b = +0.246, p = 0.010; delta R-squared = 0.030): the slope of PEB on motivation was negative and marginally significant at low commitment (the 16th percentile, a score of 4.0; b = -0.190, p = 0.062) and indistinguishable from zero at the mean (b = -0.031, n.s.) and at the scale maximum of 5.0 (b = +0.056, n.s.), the buffering pattern predicted by P6a, though the constitutive low-end slope reaches only marginal significance. Because this facet exhibits a severe ceiling effect (M = 4.65, SD = 0.89), conventional plus-one-SD probing would fall outside the scale bounds and would be leveraged by a small left tail; we therefore probe at the 16th percentile and the scale maximum, and we treat the result as preliminary given the single-item measure. The ceiling truncation also limits statistical power precisely where the buffering mechanism should operate, at the upper tail of the commitment distribution, so the flat high-end slope is weak evidence in either direction and the interaction itself is exploratory and hypothesis-generating. For the self-sacrifice facet, the interaction was negative (b = -0.154, p = 0.009; delta R-squared = 0.059): the slope was significantly positive at low self-sacrifice (b = +0.365, p = 0.004 at minus one SD, which remains within scale bounds), marginal at the mean (b = +0.154, p = 0.082) and negative but non-significant at high self-sacrifice (b = -0.056, n.s. at plus one SD; probing at plus two SD would exceed the scale maximum and is not reported).

Two features of this pattern require candour. First, the significant negative self-sacrifice interaction is driven by a statistically significant positive association between bottlenecks and motivation among low-self-sacrifice employees, a crossover that neither expectancy theory nor crowding-out theory predicts; the high-self-sacrifice slope itself never differs significantly from zero. We therefore classify P6b as partially supported: the interaction sign matches the crowding-out prediction, but the constitutive slope at high self-sacrifice does not, and the positive low-end slope may reflect anything from challenge responses to floor effects among disengaged respondents. Second, the composite interaction (b = -0.271, p = 0.002) is an average of two uncorrelated facet items (r = 0.10) and is arithmetically dominated by the higher-variance self-sacrifice facet; we report it only as a sensitivity note and do not interpret it substantively. The self-sacrifice interaction did not generalise to perceived external hiring (PEH x self-sacrifice b = -0.077, p = 0.241), so the crossover pattern should not yet be read as channel-general. Overall, the evidence supports P6a in preliminary form, offers partial support for P6b, and illustrates rather than resolves the analytic point that composite moderation tests can mask opposing facet mechanisms; all PSM conclusions are hypothesis-generating pending validation with the full multidimensional international PSM instrument (Kim et al., 2013).

Table 6. PSM facet moderation of the PEB-to-motivation association (N = 113).

Moderator	Interaction b	p	delta R2	Low slope	Slope at M	High slope
Civic commitment facet	+0.246	0.010	0.030	-0.190 (16th pct = 4.0, p = 0.062)	-0.031	+0.056 (scale max = 5.0, n.s.)
Self-sacrifice facet	-0.154	0.009	0.059	+0.365** (-1 SD = 1.70)	+0.154 (p = 0.082)	-0.056 (+1 SD = 4.42, n.s.)

*Note. All models include the main effects of the centred moderator and of centred PEB (deduplicated core). Slopes are unstandardised simple slopes of PEB on motivation; * p < 0.05. Probe values are restricted to the [1, 5] scale bounds: the ceiling-affected civic commitment facet is probed at the 16th percentile and the scale maximum rather than at plus one SD (which would exceed the scale), and the self-sacrifice facet is probed at plus and minus one SD (plus two SD would exceed the scale). The unreliable composite interaction (b = -0.271, p = 0.002) is retained only as a sensitivity note in the text. The main effect of civic commitment on motivation is substantial (b = 0.978, p < 0.001), consistent with its zero-order correlation.*

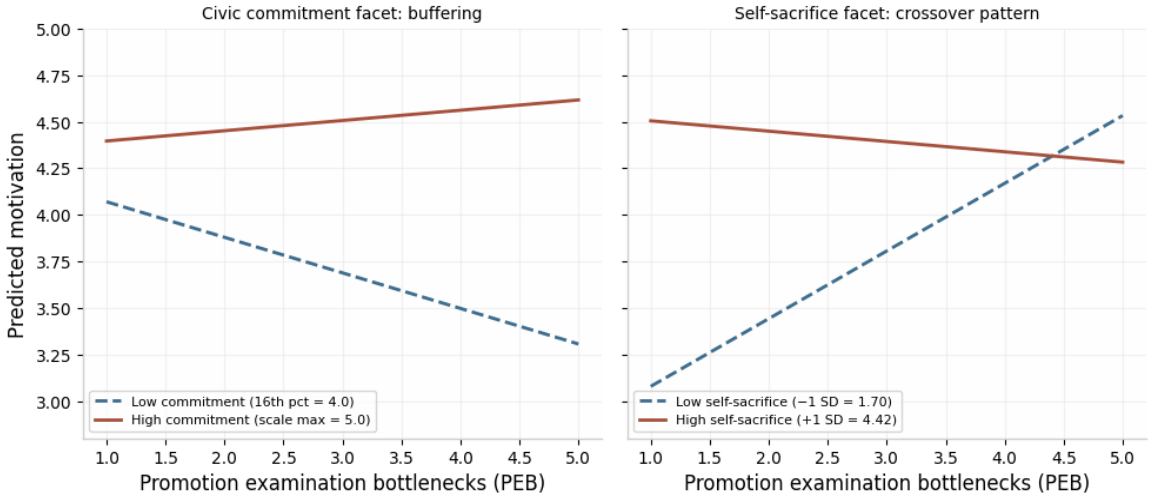


Figure 2. Predicted motivation as a function of PEB at low (dashed) and high (solid) values of each PSM facet, computed from the Table 6 parameters at within-bounds probe values (civic commitment: 16th percentile and scale maximum; self-sacrifice: plus and minus one SD). The left panel shows the buffering pattern for civic commitment; the right panel shows the crossover pattern for self-sacrifice, in which the negative interaction is driven by a positive slope at low self-sacrifice.

Robustness and summary of proposition verdicts

Figure 3 summarises the estimated path model. Four checks supported the robustness of these conclusions. Spearman rank correlations reproduced every substantive association (for example, PEH with PICO-OF rho = -0.281, p = 0.003; motivation with team performance rho = 0.550, p < 0.001). HC3 standard errors left all significant coefficients significant. Substituting the six-item administered PEB version for the deduplicated core did not change any conclusion (joint model: PEH b = -0.295, p = 0.003; PEB b = 0.000, n.s.; facet interactions +0.218 and -0.143, both p < 0.02), which is expected given that the duplicates overweight but do not change the content of the examination-delay stem. Dropping the vacancy-transparency component of PICO-OF, whose wording most closely parallels PEH Item 4, left the opportunity-structure results unchanged (PEH b = -0.269, p = 0.008), mitigating the tautology concern at the measurement level. Table 7 summarises the verdicts: P2 is supported in its proximal-carrier refinement; P3 is supported for PEH and not supported for PEB once PEH is controlled, under an inconsistent-mediation pattern; the direct version of P1 is disconfirmed while its indirect form is supported for PEH; the individual-level association in P4 is supported with the climate condition reserved; P5 is untested with the present design, since neither mechanism exposure nor HRM system strength was measured; and P6 receives preliminary support for the buffering facet (P6a) and partial support for the crowding-out facet (P6b).

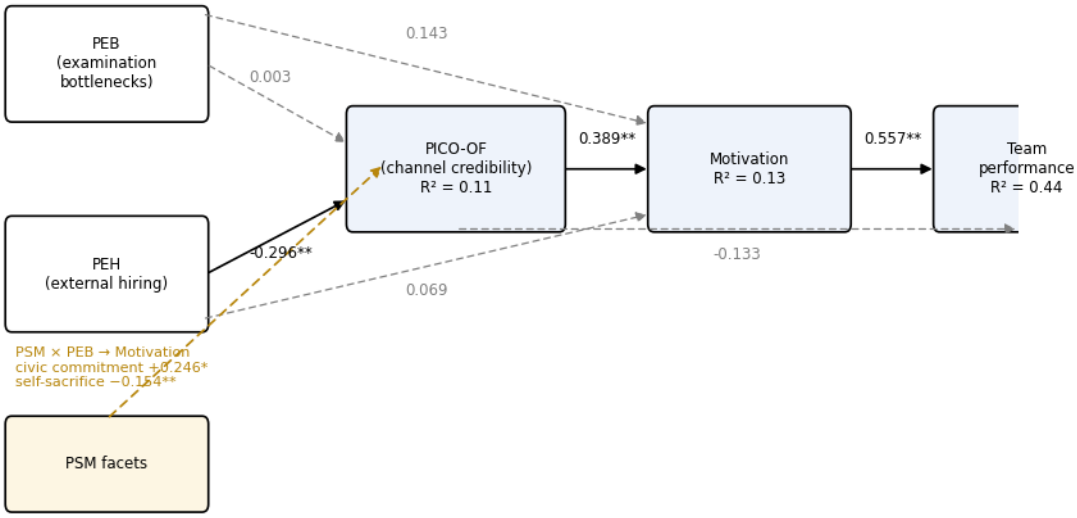


Figure 3. Estimated path model with unstandardised coefficients (deduplicated PEB core; N = 113). Solid arrows denote paths significant at p < 0.01; dashed grey arrows denote non-significant paths. The dashed gold arrow denotes the PSM facet moderation of the direct bottleneck-to-motivation path; facet-specific interaction coefficients are reported in the annotation, and R-squared values for the three endogenous variables (PICO-OF, motivation and team performance) are displayed inside their node boxes.

Table 7. Proposition-by-proposition summary of evidence.

Proposition	Core claim	Evidence	Verdict
P1	Bottlenecks reduce motivation directly	Bivariate and joint direct paths null (totals b = 0.117 / 0.039, n.s.)	Disconfirmed as direct; indirect form supported for PEH (P3)

P2	PEB and PEH reduce PICO-OF; PEH incremental	Bivariate b = -0.170* / -0.295**; joint PEH -0.296**, PEB 0.003 n.s.; delta R2 = 0.075**	Supported in proximal-carrier form; PEH carries the shared variance
P3	PICO-OF mediates bottleneck to motivation	Indirect PEH -0.115* (CI excludes zero); PEB indirect marginal standalone, zero jointly; direct paths opposite-signed	Supported for PEH under inconsistent mediation (suppression); not supported for PEB
P4	Motivation relates to team performance, conditional on climate	Individual-level b = 0.525**; indirect PICO-OF to TP 0.188*	Supported at individual level; climate condition untested (no team identifiers)
P5	Procedurally just channels buffer the chain	No measure of mechanism exposure or HRM system strength collected	Untested (formal moderation test pending)
P6	PSM facets moderate: buffer versus crowding-out	Civic commitment +0.246* (buffering); self-sacrifice -0.154** interaction driven by positive low-end slope; single-item moderators	Preliminary support for P6a; partial support for P6b; hypothesis-generating

*Note. ** $p < 0.01$; * $p < 0.05$; n.s. = not significant. delta R2 = increment in explained variance.*

Translating buffering theory into administrative design

From theoretical buffer to administrative reality

Proposition 5 names the mechanisms that should attenuate the chain, but a mechanism does not buffer merely by being announced; it buffers when it changes the perceptions the chain runs on. The survey results localise the operative perceptions precisely: PICO-OF, the perceived credibility of the internal channel, is the construct through which bottleneck perceptions are associated with motivation and, through motivation, with reported team outcomes. Reform design must therefore be judged by its capacity to move PICO-OF, not by its formal adoption. This point has immediate institutional content in the Nigerian setting: target-based KPA/KPI appraisal linked to promotion eligibility is already enacted under the revised Public Service Rules (2021 Edition, Chapter 5) and the FCSSIP25 Performance Management System (OHCSF, 2021a, 2021b), so the reform problem is not introducing performance-based appraisal but making the enacted framework credible in operation, a distinction consistent with the implementation-failure evidence from Ghana and Zambia (Williams & Yecalo-Tecle, 2019) and Ghana's civil service (Rasul et al., 2021). Three mechanisms follow from the justice evidence, and each has known failure modes that must be engineered against (Bowen & Ostroff, 2004; Gilliland, 1993).

The first mechanism is transparent internal vacancy advertisement: a suitable vacancy arises, is advertised internally with published requirements, eligible employees are screened, shortlisted candidates undergo competitive assessment, and the decision and its rationale are documented. Fairness perceptions attach to the existence and visibility of the channel itself, independent of individual outcomes. Failure modes are token advertisement after an implicit favourite has been chosen, manipulated eligibility criteria, and assessment procedures no internal candidate can pass; design integrity therefore requires advertisement before selection and calibrated assessment.

The second mechanism is the credible operation of performance-informed promotion criteria. Role-specific KPAs and KPIs connect demonstrated work to advancement: for auditors, the quality and completion of assigned cases; for ICT specialists, system availability and milestone delivery; for taxpayer-service staff, resolution time

and satisfaction. Credibility is the binding constraint: appraisals that are subjective, uncalibrated or manipulable will worsen cynicism rather than repair it, an expectation consistent with the design failures documented in African performance-management reform (Rasul et al., 2021; Williams & Yecalo-Tecle, 2019). The design requires measurable targets agreed in advance, documented evidence, periodic calibration across raters and an appeal mechanism, precisely the implementation infrastructure the FCSSIP25 PMS prescribes but leaves to agencies to build. The third mechanism is a build-before-buy talent review: before any external recruitment above entry level, a documented internal review establishes whether suitable expertise exists within the Service; where it does, the position is advertised internally; where it does not, external recruitment proceeds with a justification communicable to incumbents. The rule disciplines external hiring rather than prohibiting it, protecting the Service against insularity while removing the unexplained displacement signal that PEH captures.

A cost-benefit decision-analysis tool

To compare promotion-system designs on a common ledger, we structure three stylised models. Model A, examination-centred progression, relies substantially on formal examination requirements and existing administrative procedures; it is the implicit status quo and the reference baseline. Model B, balanced internal-external progression, adds credible operation of the enacted PMS alongside transparent internal advertisement and build-before-buy review. Model C, performance-only progression, dispenses with examinations as a gating condition and advances officers on appraisals alone. Four cost families apply across models: direct costs (examination administration, advertising, panels), administrative costs (processing, documentation, appeals), opportunity costs (work disrupted by preparation and panel sittings) and external-hiring costs (advertising, vetting, relocation, premium pay).

Table 8 evaluates the models in strictly incremental terms relative to the Model A status quo, avoiding the mixing of absolute operating budgets with incremental benefits. Scale parameters are consistent with NRS scale (approximately 5,250 staff nationwide, 5,200 to 5,255 in official records as of late 2026; approximately 500 annual advancements; an average mid-level salary of about 3 million naira per year; and a replacement cost of about 1.5 million naira per voluntary departure); we emphasise that Table 8 is a hypothetical policy simulation built on institutional cost structures and illustrative parameters, not a statistical projection from the survey dataset: the staffing baseline and the absolute operating-cost estimates behind the increments are drawn from official NRS records for the existing examination and recruitment apparatus, while the cost shifts and the avoided-departure counts under Models B and C are illustrative stylised assumptions, since the survey measured neither turnover intentions nor exit behaviour. Under these assumptions, Model B reduces annual operating costs by 20.5 million naira relative to Model A (52.5 versus 73.0 million) and avoids 40 departures (60 million naira), an incremental annual net benefit of 80.5 million naira; Model C reduces operating costs by 38.5 million naira and avoids 60 departures (90 million naira), an incremental annual net benefit of 128.5 million naira. Discounted over five years at 10 percent (annuity factor 3.7908), the incremental net present values are approximately 305 million naira for Model B and 487 million naira for Model C. Because incremental operating costs are negative for both reform models, a benefit-cost ratio is not meaningful in incremental form; we rank the models by incremental net present value instead. The illustration also exposes the sensitivity of the decision to assumptions: if Model B avoided only 30 departures (45 million naira), its incremental net benefit would remain positive at 65.5 million naira once the operating-cost saving is counted, whereas an absolute-cost ledger would misleadingly show a net loss.

Table 8. Incremental annual cost-benefit comparison at NRS scale, relative to the Model A status quo (million naira).

Component (incremental vs Model A)	Model A: Examination-centred	Model B: Balanced	Model C: Performance-only
Total operating cost (TC, absolute, for reference)	73.0 (baseline)	52.5	34.5

Incremental operating cost (delta TC)	0.0 (reference)	-20.5	-38.5
Avoided turnover benefit (delta TB)	0.0 (reference)	60.0 (40 departures)	90.0 (60 departures)
Incremental annual net benefit (delta TB - delta TC)	--	+80.5	+128.5
Five-year incremental NPV at 10% (annuity factor 3.7908)	--	+305.2	+487.1

Note. Scale parameters (staff numbers of 5,200 to 5,255 nationwide as of late 2026, advancement volumes, salary and replacement cost) are drawn from official NRS records; the cost shifts and avoided-departure counts for Models B and C are illustrative stylised assumptions for decision analysis, not estimates derived from the survey, which measured neither turnover intentions nor exits. All benefit and cost rows are incremental to the Model A baseline, so no absolute operating budget is subtracted from incremental savings. Because incremental operating costs are negative, benefit-cost ratios are not meaningful and models are ranked by incremental NPV. Intangible benefits (perceived fairness, commitment, professional-development incentives, institutional memory) are reported separately rather than monetised.

Three decision rules follow. First, even under conservative assumptions, both reform models dominate the examination-centred status quo on incremental net benefit once turnover effects and operating-cost reductions are counted together. Second, the choice between Models B and C depends on the credibility of performance appraisal: where appraisal is weak, Model C's apparent cost advantage is illusory because promotion decisions become discretionary and the justice gains on which the survey evidence rests evaporate, a risk pattern documented in comparable reforms (Rasul et al., 2021; Williams & Yecalo-Tecle, 2019). Third, sequencing matters: transparent internal advertisement can be implemented quickly and creates the procedural-justice precondition for the heavier build-out of credible performance-informed criteria. Sensitivity analysis should focus on the valuation of avoided turnover, which dominates benefits, and on the opportunity-cost rate, which most differentiates the models.

DISCUSSION

Theoretical contributions

The study makes four contributions, each bounded by the limitations in Section 8.3. First, it integrates the labour economics of internal labour markets and hiring channels with the organisational psychology of motivation and justice into a single perceptual chain, and shows with survey evidence that the chain coheres at the individual level: bottleneck perceptions correlate with eroded channel-credibility perceptions, channel credibility correlates with motivation, and motivation correlates strongly with individually perceived team outcomes. Second, it demonstrates the incremental empirical value of PEH as a construct: perceived external hiring carries the association between the blocked opportunity structure and perceived channel credibility, doing so incrementally over examination bottlenecks, with HTMT-based discriminant validity among the focal constructs intact. The fuller claim, discriminant validity against validated external scales for perceived career opportunity (Kraimer et al., 2011), selection procedural justice (Bauer et al., 2001) and relative deprivation (Crosby, 1976), remains to be established by the measurement study specified in Section 8.4, and we do not claim it here.

Third, the study offers a facet-specific and deliberately preliminary reading of the PSM buffer-versus-crowding-out debate. The competing predictions are usually posed at the construct level, which forces a false choice; once the two available facets are separated, the buffering mechanism appears for civic commitment, while the self-sacrifice interaction is negative but driven by a positive bottleneck slope among low-self-sacrifice

employees rather than a significant negative slope among the highly self-sacrificing. The data therefore illustrate, rather than resolve, the analytic point that composite moderation tests can mislead when facets are uncorrelated and differently variable: in these data the composite interaction (b = -0.271) shows crowding-out only because the higher-variance facet dominates the average of two essentially unrelated items. Because both facets are single ad-hoc items and one is severely ceiling-restricted, we frame these patterns as hypothesis-generating, pending replication with the full multidimensional international PSM instrument (Kim et al., 2013) and the facet-level designs recommended by the moderation literature (Potipiroon, 2026; Quratulain et al., 2019). The theoretical lesson generalises beyond this setting: moderators with internal structure should be tested at the level of the structure that carries the mechanism.

Fourth, the study contributes an African revenue-administration evidence base to debates that have been dominated by OECD settings (Bidwell, 2011; DeVaro & Waldman, 2012), responding to calls for empirically grounded analysis of human-resource management in African bureaucracies (Onyango, 2021; Rasul et al., 2021; Williams & Yecalo-Tecle, 2019). The Nigerian evidence that plateaued government employees show depressed attitudes (Salami, 2010) and that PSM relates to performance (Ukeje et al., 2024) is thereby connected to a specific institutional mechanism: the examination-gated, externally permeable ladder.

Implications for practice

For the NRS and comparable revenue authorities, the evidence suggests a sequenced reform agenda consistent with existing legal authority: because OHCSF examination rules bind the Service through board-approved Staff Regulations rather than direct statutory compulsion, the Governing Board has the latitude to recalibrate promotion criteria within the Establishment Act. In the near term, the Service can establish transparent internal vacancy advertisement and published criteria, the fastest lever on PICO-OF because fairness perceptions attach to the channel's existence. In the medium term, performance-informed criteria require the credibility infrastructure the FCSSIP25 PMS prescribes (calibrated appraisal, documented evidence and appeal routes); the survey's finding that appraisal accuracy is among the weaker PICO-OF components (M = 3.46) identifies this as the binding constraint, consistent with the implementation-first reading of Nigerian reform. Build-before-buy review then disciplines the external channel that incumbents already perceive, addressing the construct with the highest mean endorsement in the data (PEH M = 3.67, with the strongest single item at M = 4.06). Communication should be treated as part of the design: because the negative interaction is concentrated on the self-sacrifice facet, reform messaging that honours the service rationale of such staff, rather than defending gatekeeping, is likely to matter as much as the mechanical changes, though this inference rests on single-item measurement and should be treated as provisional.

Counterarguments and limitations

Seven limitations bound the conclusions and invite the counterarguments that any causal reading must face. First, causality: the design is cross-sectional, so reversed paths are conceivable; officers with low motivation may project blocked opportunity onto the system rather than the reverse. The theoretical ordering rests on the panel of theory assembled in Section 2 and on the null direct paths, which are hard to explain under a pure projection account, but longitudinal or quasi-experimental designs are required for confirmation, and the inconsistent-mediation pattern means even the indirect reading should be held loosely. Second, common method: all constructs are self-reported from a single instrument. The Harman tests (27.9 percent on the 20 administered items; 25.7 percent on the deduplicated 17-indicator set), the modest correlations among several pairs (PICO-OF with team performance r = 0.03) and the differential pattern of the facet interactions argue against a dominant method factor, but they do not eliminate the concern, and objective indicators (promotion throughput, exit records, project delivery data) are needed.

Third, sample and power: 113 complete cases support the detected effects but give limited power for small interactions, the sample-to-parameter ratio for the CFA is about 2.8 to 1, and the facet interaction estimates rest on single-item moderators, one of which (civic commitment) is severely ceiling-restricted; the PSM conclusions should therefore be read as hypothesis-generating until replicated with validated multidimensional scales. Fourth, measurement: PICO-OF is a formative composite whose modest alpha (0.66) attenuates its associations and makes the reported coefficients conservative; the confirmatory model falls short of conventional fit

thresholds even after deduplication; the two-item motivation and team-performance scales bound attainable reliability and attenuate every association they touch, so the coefficients involving them are conservative; the motivation scale additionally mixes an extra-role team-level referent with an in-role individual expectancy referent, a mismatch that leaves the composite content-heterogeneous, and the disaggregated check in Section 6.3 shows the two items carry the mediation legs asymmetrically; and team performance is individually perceived rather than objective or team-referenced. Fifth, confounding: no demographic controls (grade, tenure, directorate) were collected, so seniority-strata differences in exposure to examinations and external hiring remain an omitted-variable threat to the P2 models. Sixth, aggregation and clustering: without team identifiers, rwg and ICC diagnostics cannot be computed, standard errors cannot be team-clustered, and the climate-conditional portion of P4 and the contagion dynamics of Section 2.7 remain untested rather than disproven. Seventh, generalisability: although the response rate within the surveyed office is high (approximately 59 percent), the sample covers a single regional office (Port Harcourt, about 200 of roughly 5,250 nationwide staff) during a reform window, so it may not represent the Service nationally, let alone examination-gated systems elsewhere; and the anonymity-first design forgoes demographic moderators that later work should restore.

A research agenda

Five studies would convert these provisional findings into a defensible evidence base. First, a measurement study should validate the five constructs with full multi-item scales, replace the single-item PSM facets with the international multidimensional instrument (Kim et al., 2013), and establish discriminant validity of PEH against validated scales for perceived career opportunity (Kraimer et al., 2011), selection procedural justice (Bauer et al., 2001) and relative deprivation with multi-wave data. Second, a team-level study should record team identifiers and test the aggregation model: within-team agreement (rwg(j), ICC(1), ICC(2)), the direct-consensus composition of PICO-OF and motivation (or a referent-shift variant with team-referenced items), and the climate-conditional motivation-performance link. Third, a longitudinal or staggered-reform design should exploit the phased rollout of internal advertisement to estimate causal effects on PICO-OF and motivation, ideally with objective promotion throughput as the outcome. Fourth, an experimental or vignette study should manipulate advertisement transparency and build-before-buy justification to isolate the justice mechanism from information effects. Fifth, a qualitative process study should trace how shared dissatisfaction forms and spreads within teams, testing the contagion account of Section 2.7 directly through observation and social-network measurement.

CONCLUSION

Employees evaluate their employment not only by present conditions but by the credibility of their future. In examination-gated public bureaucracies that credibility is manufactured, or destroyed, by the design of promotion systems. This paper integrated internal labour market, justice and motivation theory into a perceptual chain, formalised falsifiable propositions including a facet-specific test of the public-service-motivation debate, and reported a first survey test in the Nigeria Revenue Service. Within the limits of a modest, single-source, cross-sectional sample, the evidence associates blocked ladders with eroded perceived internal opportunity and fairness, associates that perception with motivation, and associates motivation with individually reported team outcomes; it also suggests, provisionally, that the most service-oriented staff are not uniformly protected, because the self-sacrifice facet carries a negative interaction with bottleneck perceptions even though the high-end slope does not reach significance. The administrative translation is concrete and sits within the Service's existing legal authority: advertise internally before hiring externally, make the already-enacted performance-management system credible before making it decisive, and review internal talent before opening the external channel. For a service whose modernisation depends on discretionary effort, the career ladder is not a peripheral welfare issue; it is infrastructure.

REFERENCES

1. Adams, J. S. (1963). Towards an understanding of inequity. Journal of Abnormal and Social Psychology, 67(5), 422-436. https://doi.org/10.1037/h0040968

2. Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2, pp. 267-299). Academic Press. https://doi.org/10.1016/S0065-2601(08)60108-2
3. Allen, D. G., Bryant, P. C., & Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. Academy of Management Perspectives, 24(2), 48-64. https://doi.org/10.5465/amp.24.2.48
4. Bardwick, J. M. (1986). The plateauing trap: How to avoid it in your career. AMACOM.
5. Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. Administrative Science Quarterly, 47(4), 644-675. https://doi.org/10.2307/3094912
6. Bauer, T. N., Truxillo, D. M., Sanchez, R. J., Craig, J. M., Ferrara, P., & Campion, M. A. (2001). Applicant reactions to selection: Development of the Selection Procedural Justice Scale (SPJS). Personnel Psychology, 54(1), 119-170. https://doi.org/10.1111/j.1744-6570.2001.tb00097.x
7. Bertelli, A. M. (2007). Determinants of bureaucratic turnover intention: Evidence from the Department of the Treasury. Journal of Public Administration Research and Theory, 17(2), 171-191. https://doi.org/10.1093/jopart/mul003
8. Bidwell, M. (2011). Paying more to get less: The effects of external hiring versus internal mobility. Administrative Science Quarterly, 56(3), 369-407. https://doi.org/10.1177/0001839211433562
9. Bidwell, M., & Keller, J. R. (2014). Within or without? How firms combine internal and external labor markets to fill jobs. Academy of Management Journal, 57(4), 1035-1056. https://doi.org/10.5465/amj.2012.0119
10. Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), Multilevel theory, research, and methods in organizations (pp. 349-381). Jossey-Bass. https://psycnet.apa.org/record/2000-16936-008
11. Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the "strength" of the HRM system. Academy of Management Review, 29(2), 203-221. https://doi.org/10.5465/amr.2004.12736076
12. Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. Journal of Applied Psychology, 83(2), 234-246. https://doi.org/10.1037/0021-9010.83.2.234
13. Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. Journal of Applied Psychology, 86(3), 425-445. https://doi.org/10.1037/0021-9010.86.3.425
14. Crosby, F. (1976). A model of egoistical relative deprivation. Psychological Review, 83(2), 85-113. https://doi.org/10.1037/0033-295X.83.2.85
15. DeVaro, J., & Waldman, M. (2012). The signaling role of promotions: Further theory and empirical evidence. Journal of Labor Economics, 30(1), 91-147. https://doi.org/10.1086/662072
16. Doeringer, P. B., & Piore, M. J. (1971). Internal labor markets and manpower analysis. D. C. Heath.
17. Federal Republic of Nigeria. (2025). Nigeria Revenue Service (Establishment) Act 2025. Federal Government Printer.
18. Frey, B. S., & Jegen, R. (2001). Motivation crowding theory. Journal of Economic Surveys, 15(5), 589-611. https://doi.org/10.1111/1467-6419.00150
19. George, J. M. (1990). Personality, affect, and behavior in groups. Journal of Applied Psychology, 75(2), 107-116. https://doi.org/10.1037/0021-9010.75.2.107
20. Gilliland, S. W. (1993). The perceived fairness of selection systems: An organizational justice perspective. Academy of Management Review, 18(4), 694-734. https://doi.org/10.5465/amr.1993.9402210155
21. Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. Journal of Applied Psychology, 79(6), 884-897. https://doi.org/10.1037/0021-9010.79.5.691
22. Hackman, J. R. (1987). The design of work teams. In J. W. Lorsch (Ed.), Handbook of organizational behavior (pp. 315-342). Prentice-Hall.
23. Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). Emotional contagion. Cambridge University Press.
24. Herzberg, F. (1966). Work and the nature of man. World Publishing.
25. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6(1), 1-55. https://doi.org/10.1080/10705519909540118

26. Ika, L. A. (2009). Project success as a topic in project management journals. Project Management Journal, 40(4), 6-19. https://doi.org/10.1002/pmj.20137
27. Kim, S., Vandenabeele, W., Wright, B. E., Andersen, L. B., Cerase, F. P., Christensen, R. K., Desmarais, C., Koumenta, M., Leisink, P., Liu, B., Palidauskaite, J., Pedersen, L. H., Perry, J. L., Ritz, A., Taylor, J., & De Vivo, P. (2013). Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and addressing issues of measurement invariance. Journal of Public Administration Research and Theory, 23(1), 79-102. https://doi.org/10.1093/jopart/mus027
28. Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). Guilford Press.
29. Kozlowski, S. W. J., & Bell, B. S. (2013). Work groups and teams in organizations. In N. Schmitt & S. Highhouse (Eds.), Handbook of psychology: Vol. 12. Industrial and organizational psychology (2nd ed., pp. 413-470). Wiley.
30. Kozlowski, S. W. J., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. Psychological Science in the Public Interest, 7(3), 77-124. https://doi.org/10.1111/j.1529-1006.2006.00030.x
31. Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations. In K. J. Klein & S. W. J. Kozlowski (Eds.), Multilevel theory, research, and methods in organizations (pp. 3-90). Jossey-Bass.
32. Kraimer, M. L., Seibert, S. E., Wayne, S. J., & Liden, R. C. (2011). Antecedents and outcomes of organizational support for development: The critical role of career opportunities. Journal of Applied Psychology, 96(3), 485-500. https://doi.org/10.1037/a0021452
33. Lazear, E. P., & Rosen, S. (1981). Rank-order tournaments as optimum labor contracts. Journal of Political Economy, 89(5), 841-864. https://doi.org/10.1086/261010
34. Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. Government Information Quarterly, 36(4), 101385. https://doi.org/10.1016/j.giq.2019.06.002
35. Milliman, J. F. (1992). Causes, consequences and moderating factors of career plateauing [Doctoral dissertation, University of Southern California].
36. Office of the Head of the Civil Service of the Federation. (2021a). Public Service Rules (2021 Edition), Chapter 5: Performance Management System. Federal Republic of Nigeria.
37. Office of the Head of the Civil Service of the Federation. (2021b). Federal Civil Service Strategy and Implementation Plan 2021-2025 (FCSSIP25): Performance Management System policy. Federal Republic of Nigeria.
38. Onyango, G. (Ed.). (2021). Routledge handbook of public policy in Africa. Routledge. https://doi.org/10.4324/9781003143840
39. Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. Journal of Public Administration Research and Theory, 6(2), 181-197. https://doi.org/10.1093/oxfordjournals.jpart.a024303
40. Perry, J. L., & Hondeghem, A. (Eds.). (2008). Motivation in public management: The call of public service. Oxford University Press.
41. Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. Public Administration Review, 50(3), 367-373.
42. Pinto, J. K., & Slevin, D. P. (1988). Project success: Definitions and measurement techniques. Project Management Journal, 19(1), 67-72. https://www.pmi.org/learning/library/project-success-definitions-measurement-techniques-5460
43. Pitcher, A. (2012). Party politics and economic reform in Africa's democracies. Cambridge University Press.
44. Pollitt, C., & Bouckaert, G. (2017). Public management reform: A comparative analysis. Into the age of austerity (4th ed.). Oxford University Press.
45. Potipiroon, W. (2026). The interactive (moderating) effects of public service motivation: a systematic review. *Asia Pacific Journal of Public Administration*, 1-35.
46. Quratulain, S., Khan, A. K., & Sabharwal, M. (2019). Procedural fairness, public service motives, and employee work outcomes: Evidence from Pakistani public service organizations. *Review of Public Personnel Administration*, *39*(2), 276-299. https://doi.org/10.1177/0734371X17718029

47. Rasul, I., Rogger, D., & Williams, M. J. (2021). Management, organizational performance, and task clarity: Evidence from Ghana's civil service. *Journal of Public Administration Research and Theory, 31*(2), 259-277. https://doi.org/10.1093/jopart/muaa034
48. Ritz, A., Brewer, G. A., & Neumann, O. (2016). Public service motivation: A systematic literature review and outlook. *Public Administration Review, 76*(3), 414-426. https://doi.org/10.1111/puar.12505
49. Robinson, M. (2019). The political economy of public administration reform in Sub-Saharan Africa. Public Administration and Development, 39(4-5), 165-178.
50. Rosenbaum, J. E. (1979). Tournament mobility: Career patterns in a corporation. *Administrative Science Quarterly, 24*(2), 220-241. https://doi.org/10.2307/2392495
51. Salami, S. O. (2010). Career plateauing and work attitudes: Moderating effects of mentoring others with Nigerian employees. *Europe's Journal of Psychology, 6*(4). https://ejop.psychopen.eu/index.php/ejop/article/view/224
52. Tremblay, M., Roger, A., & Price, A. D. (2014). Career plateauing: A review and agenda for future research. Human Resource Management Review, 24(4), 276-290.
53. Ukeje, I., Ojogbane, R., Igwe, C., Nwigwe, C., Atukpa, E., Egba, V., & Owo, H. (2024). Exploring public service motivation among local public sector workers in Nigeria. *Nigerian Journal of Social Psychology, 7*(2). https://www.nigerianjsp.com/index.php/NJSP/article/view/183
54. Ukwandu, D. C., & Ijere, E. S. (2020). Public sector reforms and national development: A situational analysis of post-independent Nigeria. *Africa's Public Service Delivery and Performance Review*, *8*(1), 1-7. https://apsdpr.org/index.php/apsdpr/article/view/354
55. Van Loon, N. M., Vandenabeele, W., & Leisink, P. (2017). Clarifying the relationship between public service motivation and in-role and extra-role behaviors: The relative contributions of person-job and person-organization fit. *The American Review of Public Administration*, *47*(6), 699-713. https://doi.org/10.1177/0275074015617547
56. Vroom, V. H. (1964). Work and motivation. Wiley.
57. Williams, M. J., & Yecalo-Tecle, L. (2019). Civil service reform and performance management in Ghana and Zambia [Working paper]. https://martinjwilliams.com/wp-content/uploads/2019/12/williams-yecalo-tecle-dec-2019-civil-service-reform-and-performance-management-in-ghana-and-zambia.pdf
58. Yang, W.-N., Niven, K., & Johnson, S. (2019). Career plateau: A review of 40 years of research. Journal of Vocational Behavior, 110, 102-113. https://doi.org/10.1016/j.jvb.2018.11.005