

**WORK MOTIVATION AS MEDIATOR ; THE DIFFERENTIAL
IMPACT OF EMPLOYEE COMPETENCE AND WORK FACILITIES
ON EMPLOYEE PERFORMANCE AT KSOP CLASS III TANJUNG
PAKIS**

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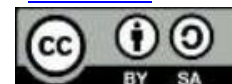
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ABSTRACT

Public sector maritime bureaucracies face persistent performance gaps despite substantial infrastructure investments, yet the relative effectiveness of human versus physical resources remains contested. This study examines the differential effects of employee competence and work facilities on employee performance through the mediating mechanism of work motivation at KSOP Class III Tanjung Pakis, Indonesia. Using cross-sectional survey data from all employees and Partial Least Squares Structural Equation Modeling with SmartPLS, the analysis reveals asymmetric pathways: competence significantly influences both work motivation and performance, while work facilities demonstrate non-significant effects on both motivation and performance. Work motivation significantly predicts performance and partially mediates the competence-performance relationship, yet completely fails to mediate the facilities-performance pathway. These findings support a hierarchical resource model wherein personal resources activate motivational processes and directly enhance task execution, whereas contextual resources function merely as baseline hygiene conditions. The study extends Self-Determination Theory and Job Demands-Resources Theory by demonstrating that resource type determines psychological mechanism activation in specialized bureaucratic contexts. Practically, results redirect resource allocation priorities toward competence development over infrastructure expansion, offering empirically grounded guidance for public sector human resource management in developing economies.

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INTRODUCTION

Public sector maritime bureaucracies face persistent performance gaps despite substantial infrastructure investments, necessitating deeper understanding of how organizational resources translate into employee outcomes (M. Damanik et al., 2023). The KSOP Class III Tanjung Pakis, responsible for navigation safety and port supervision under Indonesia's Ministry of Transportation, exemplifies this challenge where employee output frequently falls below organizational targets. While work facilities and employee competence are commonly assumed to enhance performance, empirical evidence regarding their relative effectiveness and underlying mechanisms remains inconclusive, particularly in developing economy contexts (Wonggor & Rehaded, 2024).

Prior studies yield contradictory findings on the motivation-performance nexus. Work facilities equipment, infrastructure, and social amenities demonstrate inconsistent effects, functioning merely as hygiene factors in some contexts while enhancing efficiency in others (Asteria & Muchsin, 2023; Rachmawati et al., 2022). Conversely, employee competence consistently predicts both motivation and performance across sectors (Hendri et al., 2023; Hutapea & Thoha, 2008; Manafe et al., 2024). The mediating role of work motivation has been confirmed predominantly in non-maritime settings, leaving a critical gap regarding whether competence and facilities operate through equivalent psychological pathways in maritime public agencies (Rosayu et al., 2023). No prior research has examined their differential effects within Indonesian port authorities.

Drawing upon Self-Determination Theory and the Job Demands-Resources framework, this study argues that competence satisfies intrinsic needs for mastery and self-efficacy, thereby fostering autonomous motivation and performance, whereas facilities as extrinsic resources facilitate task execution without necessarily activating motivational processes (Bakker & Demerouti, 2007; Deci et al., 2017; Utami et al., 2023). We hypothesize that: (H1) competence positively affects work motivation; (H2) work facilities do not significantly affect work motivation; (H3) competence positively affects employee performance; (H4) work facilities do not significantly affect performance; (H5) work motivation positively affects performance; and (H6) work motivation mediates the competence-performance relationship but not the facilities-performance relationship.

This study employs cross-sectional survey data from all 65 employees of KSOP Class III Tanjung Pakis, measuring four latent constructs through 5-point Likert scales. Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0 was utilized for its suitability with small samples and complex mediation models (Hair & Alamer, 2022). By examining these asymmetric pathways, this research contributes novel evidence on why human capital development may outperform infrastructure investment in enhancing public sector performance.

RESEARCH METHODOLOGY

This study employed a quantitative explanatory design with cross-sectional survey approach, targeting all 65 employees of KSOP Class III Tanjung Pakis (59 PNS, 2 PPPK, 4 part-time PPPK) using census sampling. Data were collected through structured questionnaires

comprising 24 reflective indicators measured on 5-point Likert scales: work facilities (6 items, $\alpha = 0.928$), employee competence (6 items, $\alpha = 0.903$), work motivation (6 items, $\alpha = 0.910$), and employee performance (6 items, $\alpha = 0.914$), adapted from established instruments by (Gomes, 2023; Hutapea & Thoha, 2008; Robbins & Judge, 2023).

Data were analyzed using SmartPLS 4.0, selected for its robustness in small-sample mediation analysis. The two-stage analytical procedure encompassed: (1) measurement model evaluation through outer loadings, AVE, cross-loadings, and Cronbach's Alpha; and (2) structural model assessment via R^2 , bootstrapped path coefficients (5,000 subsamples, $t > 1.96$, $p < 0.05$), effect sizes (f^2), and mediation testing following (Baron & Kenny, 1986) criteria full mediation (indirect significant, direct non-significant), partial mediation (both significant), or no mediation (indirect non-significant).

RESULTS AND DISCUSSION

Measurement Model Validity and Reliability

The reflective measurement model demonstrated satisfactory psychometric properties. Convergent validity was established as all outer loadings exceeded the 0.70 threshold, ranging from 0.765 (Y.1) to 0.901 (X1.1), with an average of 0.835 (Table 1). Discriminant validity was confirmed through cross-loadings where every indicator loaded highest on its assigned construct; for instance, X1.1 loaded 0.901 on Work Facilities versus 0.395 on Employee Performance, 0.310 on Competence, and 0.222 on Work Motivation. Construct reliability was satisfactory with Cronbach's Alpha values of 0.928 (Work Facilities), 0.903 (Competence), 0.910 (Work Motivation), and 0.914 (Employee Performance), all exceeding the 0.70 criterion. Model fit indices further supported adequacy: SRMR = 0.093 (<0.10), d-ULS = 2.614 (>0.05), d-G = 1.171 (>0.05), and Chi-Square = 357.416 (≥ 35.172) (Table 2). These results align with PLS-SEM applications in small-sample public sector research (Hair & Alamer, 2022; M. Damanik et al., 2023).

Table 1. Outer Loadings and Cross-Loadings

Indicator	Work Facilities	Competence	Work Motivation	Employee Performance
X1.1	0.901	0.310	0.222	0.395
X1.2	0.855	0.494	0.140	0.333
X1.3	0.794	0.402	0.123	0.234
X1.4	0.829	0.287	0.067	0.181
X1.5	0.860	0.490	0.245	0.359
X1.6	0.890	0.489	0.252	0.350
X2.1	0.393	0.823	0.321	0.350
X2.2	0.453	0.830	0.280	0.427
X2.3	0.411	0.820	0.416	0.536
X2.4	0.478	0.812	0.375	0.378
X2.5	0.302	0.786	0.165	0.268
X2.6	0.324	0.843	0.332	0.318
Y.1	0.087	0.212	0.765	0.197
Y.2	0.272	0.221	0.814	0.340

Y.3	0.280	0.520	0.862	0.438
Y.4	0.154	0.298	0.868	0.359
Y.5	0.109	0.221	0.800	0.397
Y.6	0.149	0.391	0.860	0.366
Z.1	0.246	0.358	0.281	0.772
Z.2	0.481	0.498	0.387	0.861
Z.3	0.327	0.361	0.371	0.899
Z.4	0.295	0.137	0.199	0.765
Z.5	0.243	0.460	0.317	0.823
Z.6	0.283	0.470	0.527	0.884

Source: processed data, 2026

Note: Bold values indicate target loadings on assigned constructs.

Table 2. Model Fit and Reliability Indices

Parameter	Rule of Thumb	Value	Status
SRMR	<0.10	0.093	Fit
d-ULS	>0.05	2.614	Fit
d-G	>0.05	1.171	Fit
Chi-Square	≥35.172	357.416	Fit
NFI	~1	0.734	Fit
Cronbach's Alpha (Work Facilities)	>0.70	0.928	Reliable
Cronbach's Alpha (Competence)	>0.70	0.903	Reliable
Cronbach's Alpha (Work Motivation)	>0.70	0.910	Reliable
Cronbach's Alpha (Performance)	>0.70	0.914	Reliable

Source: processed data, 2026

Asymmetric Direct Effects: Competence Dominates, Facilities Inert

The structural model explained 32.9% of performance variance ($R^2 = 0.329$) and 16.3% of motivation variance ($R^2 = 0.163$). Path analysis revealed striking asymmetry: employee competence significantly influenced both work motivation ($\beta = 0.386$, $t = 3.301$, $p = 0.001$, $f^2 = 0.135$) and performance ($\beta = 0.281$, $t = 2.510$, $p = 0.012$, $f^2 = 0.079$), while work facilities showed non-significant effects on both (motivation: $\beta = 0.034$, $t = 0.288$, $p = 0.773$, $f^2 = 0.001$; performance: $\beta = 0.180$, $t = 1.660$, $p = 0.097$, $f^2 = 0.037$). Work motivation itself significantly predicted performance ($\beta = 0.284$, $t = 2.626$, $p = 0.009$, $f^2 = 0.101$) (Table 3).

Table 3. Path Coefficients and Hypothesis Testing

Path	β	t-Statistic	p-Value	f^2	Decision
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Competence → Work Motivation	0.386	3.301	0.001	0.135	H1: Supported
Work Facilities → Work Motivation	0.034	0.288	0.773	0.001	H2: Supported
Competence → Employee Performance	0.281	2.510	0.012	0.079	H3: Supported
Work Facilities → Employee Performance	0.180	1.660	0.097	0.037	H4: Supported
Work Motivation → Employee Performance	0.284	2.626	0.009	0.101	H5: Supported
Competence → Motivation → Performance	0.110	2.068	0.039	-	H6a: Partial mediation
Facilities → Motivation → Performance	0.010	0.261	0.794	-	H6b: No mediation

Source: processed data, 2026

The competence-motivation effect ($f^2 = 0.135$) approached medium threshold, indicating substantive practical significance. This supports Self-Determination Theory (Ryan & Deci, 2017): employees with higher knowledge, skills, and analytical capabilities experience enhanced self-efficacy and intrinsic satisfaction, driving autonomous motivation. The negligible facilities-motivation effect ($f^2 = 0.001$) challenges conventional HRM assumptions and aligns with Herzberg's (1959) hygiene proposition physical resources prevent dissatisfaction without actively motivating. In public maritime bureaucracy, where job security is high and tasks are procedurally standardized, facilities may be perceived as baseline entitlements rather than discretionary investments (Rachmawati et al., 2022).

Cross-study comparison illuminates contextual boundaries. (Adefrida et al., 2024) reported significant facilities effects ($\beta = 0.28$) in Indonesian research agencies where laboratory equipment directly enables core tasks, while (Asteria & Muchsin, 2023) found moderate effects ($\beta = 0.19$) in private manufacturing with productivity-linked incentives. The present null finding suggests that task-technology fit (Goodhue & Thompson, 1995) moderates resource-performance relationships: port authority employees' regulatory oversight tasks rely more on procedural expertise than physical infrastructure, rendering facilities motivationally peripheral. This aligns with public service motivation theory (Perry & Wise, 1990), which posits that mission commitment and public interest rather than extrinsic conditions drive public sector employees.

Differential Mediation: Motivation as Competence Amplifier, Not Facility Conduit

Mediation analysis confirmed work motivation's differential mediating capacity. For competence, motivation served as a significant partial mediator: the indirect effect ($\beta = 0.110$, $t = 2.068$, $p = 0.039$) complemented the direct effect ($\beta = 0.281$), yielding a total effect of 0.391. The mediation proportion (28.1%) indicates that competence enhances performance primarily through direct skill deployment (71.9%), with motivation capturing a meaningful secondary share. This dual pathway supports JD-R Theory (Bakker & Demerouti, 2007), where personal resources activate motivational processes that amplify job performance.

For facilities, motivation completely failed as mediator: the indirect effect was negligible ($\beta = 0.010$, $t = 0.261$, $p = 0.794$). Since facilities neither influenced motivation (a-path) nor showed significant direct performance effects (c'-path), the mediation mechanism is entirely inert. This demonstrates that mediation is not universal but depends on the antecedent's capacity to activate the mediator. Facilities, as contextual resources, lack this activating potential in specialized bureaucratic contexts.

The partial mediation for competence contrasts with (Adefrida et al., 2024), who reported full mediation in research agencies. This divergence suggests that in high-specialization maritime contexts, competence retains substantial direct performance effects through technical expertise independent of motivational states. The contrast supports a hierarchical resource model where human resources constitute primary drivers and contextual resources function as necessary but insufficient baseline conditions.

Contextual Analysis: Maritime Bureaucracy Specificity

The null facilities effect merits deeper contextual interpretation. KSOP employees operate in a high-risk regulatory environment where navigation safety is paramount, yet they adaptively reframe facility limitations as external constraints, directing energy toward competence-based problem-solving. This aligns with conservation of resources theory (Hobfoll, 1989): when contextual resources are unstable, employees invest in personal resources to maintain performance.

The institutional context of Indonesian civil service reinforces this pattern. PNS employees enjoy permanent status with standardized compensation, reducing motivational salience of variable working conditions. The psychological contract emphasizes job security and public service mission rather than facility quality (Rousseau, 1995). Competence development signals organizational investment in long-term career viability, fostering reciprocity-based motivation, while facilities are perceived as contractual minima.

Procedural standardization at KSOP executing nationally standardized protocols rather than local innovation further reduces facility-performance linkage. Employees follow identical inspection procedures regardless of office amenities, while competence variance directly determines regulatory judgment quality. The competence effect ($\beta = 0.386$) thus captures procedural mastery and regulatory interpretation accuracy, capabilities that transcend heterogeneous facility conditions.

Practical Implications for Maritime HR Policy

The asymmetric findings carry direct budgetary implications. The effect size ratio (competence-motivation $f^2 = 0.135$ versus facilities-motivation $f^2 = 0.001$) implies training investments yield approximately 135 times greater motivational returns per unit expenditure than facility upgrades. Recommended actions include: (a) IMO-aligned maritime safety certification; (b) risk assessment analytical workshops; (c) cross-functional rotation programs; and (d) mentorship systems transferring tacit regulatory knowledge.

Facility investments should be reframed as hygiene maintenance ensuring minimum functional thresholds without expecting performance dividends. This prevents dissatisfaction while freeing resources for competence initiatives. The weak R^2 values (motivation 16.3%; performance 32.9%) indicate substantial unmeasured influences; diagnostic assessments should identify complementary drivers such as transformational leadership or performance-based promotion pathways.

Table 4. Resource Allocation Framework

Resource Category	Evidence-Based Reframing	Priority Action
Competence Development	Primary driver; dual pathway (direct + mediated)	Expand training; integrate motivational design
Work Facilities	Hygiene factor; necessary but inert	Maintain minima; reallocate excess budget
Work Motivation	Requires competence activation	Add recognition systems; leadership development

The partial mediation pattern further suggests integrating competence and motivation initiatives. Since competence enhances performance through both pathways, training programs should incorporate goal-setting, feedback mechanisms, and mastery recognition to maximize returns. Maritime safety certification with progressive competency badges could activate capability development and motivational engagement simultaneously, leveraging the dual pathway identified in this study.

CONCLUSIONS

This study examined the differential effects of employee competence and work facilities on performance through work motivation mediation at KSOP Class III Tanjung Pakis, achieving its objectives through PLS-SEM analysis of 65 employees. The findings establish the asymmetric dominance of human capital over physical infrastructure in public sector maritime bureaucracy: competence significantly predicted both motivation and performance, while facilities demonstrated negligible effects on all pathways. Work motivation partially mediated the competence-performance relationship but completely failed to mediate facilities-performance, supporting a hierarchical resource model where personal resources activate motivational processes and directly enhance execution, whereas contextual resources function merely as baseline hygiene conditions. This extends Self-Determination Theory and Job Demands-Resources Theory by demonstrating that resource type determines psychological

mechanism activation, with competence satisfying intrinsic mastery needs those facilities cannot replicate in procedurally standardized, mission-driven bureaucratic settings.

Practically, these results redirect resource allocation priorities for maritime authorities and comparable public sector organizations, emphasizing that training investments yield substantially greater performance returns than infrastructure expansion. Facility maintenance should be reframed as operational hygiene ensuring functional adequacy without diverting resources from human capital development. The dual-pathway nature of competence enhancing performance directly through capability deployment and indirectly through motivational activation provides a clear leverage point for integrated HR interventions. Limitations include the cross-sectional design, small census sample, and weak explanatory power indicating substantial unmeasured influences such as leadership or career systems that future longitudinal, multi-site research should incorporate. Nevertheless, the findings offer empirically grounded guidance for public sector managers navigating resource constraints, confirming that human capital development constitutes the most efficient pathway to performance improvement in knowledge-intensive bureaucratic settings.

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