

Training, Transformational Leadership, Organizational Culture, and Work Environment on Civil Servant Performance through Work Motivation

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Abstract.

Civil servant performance is a key determinant of successful public service delivery, yet empirical evidence on how training, transformational leadership, organizational culture, and work environment shape employee performance remains inconsistent, and these factors have rarely been examined together through the mediating role of work motivation. This study analyses the effects of these four factors on civil servant performance, with work motivation as an intervening variable, at the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency, Indonesia. A quantitative approach with an explanatory research design was applied to all 172 employees of the department as a saturated sample. Data were collected through an online questionnaire of 31 items measured on a five-point Likert scale and analysed using Structural Equation Modelling–Partial Least Squares (SEM-PLS) with SmartPLS 4.0. All seven hypotheses were supported. Training, transformational leadership, organizational culture, and work environment had significant positive effects on work motivation, while work motivation, training, and work environment had significant positive effects on employee performance. The model explained 78.8% of the variance in work motivation and 79.2% of the variance in employee performance. Work motivation mediated the relationships between all four factors and performance: the effects of transformational leadership and organizational culture were channelled entirely indirectly through work motivation, whereas the relationships involving training and work environment showed partial mediation. The findings position work motivation as the strategic link between human-resource and organizational factors and civil servant performance. Strengthening the clarity of leadership vision and fostering an organizational culture that is open to new ideas are recommended as policy priorities, and longitudinal research designs are suggested for future studies.

Keywords: Training; Transformational Leadership; Organizational Culture; Work Motivation and Civil Servant Performance

I. INTRODUCTION

The performance of civil servants (Aparatur Sipil Negara, ASN) is a critical determinant of the effectiveness of local government administration. Successful public service delivery depends largely on the availability of competent and responsive employees who can perform their duties in line with organizational targets and public demands [1]. Employee performance can be understood as the individual work outcome reflected in the quality and quantity of work, timeliness, responsibility, and contribution to organizational goals [2].

Training is a systematic process designed to improve employees' knowledge, skills, and abilities [3], so that employees become better prepared, more confident, and more motivated in carrying out their duties [2]. Training that matches task requirements has been shown to increase work motivation [2, 4, 5] and to improve employee performance directly through higher productivity and work readiness [6, 7]. Accordingly, the following hypotheses are proposed:

H1. Training has a positive effect on work motivation.

H6. Training has a positive effect on employee performance.

Transformational leadership emphasizes the development of subordinates through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration [8], and is regarded as the leadership style best suited to modern organizations seeking to enhance both employee satisfaction and performance [9]. Transformational leaders raise work motivation because employees feel valued, guided, and involved in achieving organizational goals [10]. This pattern is also confirmed by Bastari et al. [11], who found that transformational leadership improves employee performance through the mediation of work motivation. Therefore, the following hypothesis is proposed:

H2. Transformational leadership has a positive effect on work motivation.

Organizational culture reflects the shared values, norms, and beliefs that guide the work behaviour of organizational members [12], and a strong culture fosters greater loyalty and performance among employees [13]. Huda et al. [14] found that organizational culture has a significant positive effect on work motivation, a finding reinforced by Laras et al. [15], who showed that a supportive work culture strengthens employees' drive to achieve optimal outcomes. Therefore, the following hypothesis is proposed:

H3. Organizational culture has a positive effect on work motivation.

Work environment refers to the physical and psychological conditions under which employees perform their duties [16], encompassing work systems, job design, and the treatment employees receive from supervisors and colleagues [1]. A comfortable and supportive work environment has been shown to increase work motivation [1, 17] and to improve employee performance by strengthening commitment and achievement orientation [18]. Accordingly, the following hypotheses are proposed:

H4. Work environment has a positive effect on work motivation.

H7. Work environment has a positive effect on employee performance.

In this study, work motivation is positioned as an intervening variable because it captures both the internal and external drives that link organizational factors to employee performance; highly motivated employees tend to exert stronger effort toward achieving organizational goals [2]. Nursaid et al. [1] demonstrated that work motivation has a significant effect on employee performance in a local government agency, and Gumasing et al. [17] confirmed that work motivation is a strong predictor of performance because motivated employees exhibit greater energy and work engagement. Therefore, the following hypothesis is proposed:

H5. Work motivation has a positive effect on employee performance.

Prior studies have generally examined these relationships partially. Haryono et al. [2] focused on training and job promotion, Udin et al. [10] on transformational leadership through intrinsic work motivation, Huda et al. [14] on organizational culture in an educational context, and Nursaid et al. [1] on the work environment within a local government agency. The novelty of this study lies in integrating a human-resource development factor (training) with organizational factors (transformational leadership, organizational culture, and work environment) into a single comprehensive model that explains civil servant performance through work motivation as an intervening variable.

Based on the foregoing, this study aims to analyse the effects of training, transformational leadership, organizational culture, and work environment on employee performance, with work motivation as an intervening variable, at the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency. The study is expected to contribute to the development of knowledge on public-sector human resource management and to provide a practical basis for local governments in designing more targeted strategies to improve civil servant performance.

II. METHODS

Research Design, Population, and Sample

This study applied a quantitative approach using a survey method with an explanatory research design to test the relationships among training, transformational leadership, organizational culture, work environment, work motivation, and employee performance. Data were collected by distributing an electronic questionnaire to respondents via Google Forms. Within the Structural Equation Modelling–Partial Least Squares (SEM-PLS) framework, this approach allows direct effects, indirect effects, and the role of the intervening variable to be tested within the developed model [19].

The population comprised all employees of the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency who were actively performing operational duties, totalling 172 people. Total sampling (a saturated sample) was applied, so the sample size equalled the population size of 172 respondents. Sample adequacy was assessed against the SEM-PLS rule of thumb of 5–10 times the number of indicators; with 31 questionnaire items, the minimum required sample was 155 respondents, which the 172 respondents obtained exceed.

Measurement

The measurement instruments were adopted and adapted from relevant prior studies: training (5 items) from Haryono et al. [2]; transformational leadership (4 items) from Udin et al. [10]; organizational culture (5 items) from Huda et al. [14]; work environment (7 items, covering both physical and social aspects) from Nursaid et al. [1]; and work motivation and employee performance (5 items each) from Nursaid et al. [1], with the employee performance instrument also referring to Udin et al. [10]. The questionnaire therefore contained 31 items, all measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Data Analysis

Data were analysed using SEM-PLS with SmartPLS 4.0 software. Before distribution to the full population, the instrument was pretested on 30 respondents with characteristics similar to the study population to assess initial validity (corrected item-total correlation) and reliability (Cronbach's Alpha ≥ 0.60) [19]; all items were found to be valid and reliable. The main analysis evaluated the measurement model (outer model) through outer loadings, Average Variance Extracted (AVE), Cronbach's Alpha, Composite Reliability, and discriminant validity, and the structural model (inner model) through path coefficients, R-Square, and effect size (f-Square). Hypotheses were tested using bootstrapping with 5,000 subsamples, with a significance criterion of t-statistic > 1.96 and p-value < 0.05 , while the role of work motivation as an intervening variable was assessed through the specific indirect effect values.

III. RESULT AND DISCUSSION

Results

Data were collected through an online questionnaire distributed to all ASN employees of the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency using a total sampling technique. All 172 responses were valid and complete for analysis (a valid response rate of 100%). Respondent characteristics are presented in Table 1.

Table 1. Respondent characteristics

No	Characteristic	Category	Number (Percentage)
1	Gender	Male	90 (52.3%)
		Female	82 (47.7%)
2	Age Range	≤ 25 years	24 (14.0%)
		26–35 years	54 (31.4%)
		36–45 years	50 (29.1%)
		46–55 years	34 (19.8%)
		> 55 years	10 (5.8%)
		Senior High School	8 (4.7%)
3	Highest Education	Diploma (D3/D4)	29 (16.9%)
		Bachelor's Degree (S1)	93 (54.1%)
		Postgraduate (S2/S3)	42 (24.4%)
4	Length of Service	1–5 years	57 (33.1%)
		6–10 years	47 (27.3%)
		More than 10 years	68 (39.5%)
		Total	172 (100%)

Source: Author's Data Processing Results (2026)

Descriptive statistical analysis shows that all research variables fall within the high category (mean 3.945–4.031 on a 1–5 scale), with work motivation obtaining the highest score and transformational leadership the lowest. This indicates that respondents generally hold a positive perception of all six research variables.

The measurement model (outer model) met all required criteria. All 31 indicators had outer loadings > 0.70 (ranging from 0.805 to 0.905), and every construct had an AVE > 0.50 (0.732–0.787), confirming convergent validity. Construct reliability was also satisfied, with Cronbach's Alpha of 0.891–0.939 and Composite Reliability of 0.925–0.950 (Table 2). Discriminant validity was confirmed through the Fornell-Larcker criterion (Table 14) and HTMT values (Table 15), which ranged from 0.441 to 0.901; the highest value, for the MK-KP pair, was marginally above the conventional 0.90 threshold but was considered

acceptable given the theoretical proximity of the two constructs. Indicator VIF values (2.055–3.592) confirm the absence of multicollinearity.

Table 2. Convergent validity and reliability test results

Variable	Indicator	Outer Loading	Cronbach's Alpha	CR	AVE
Training	PL1	0.859	0.912	0.934	0.740
	PL2	0.842			
	PL3	0.871			
	PL4	0.871			
	PL5	0.857			
Transformational Leadership	TL1	0.848	0.891	0.925	0.754
	TL2	0.904			
	TL3	0.849			
	TL4	0.872			
Organizational Culture	BO1	0.896	0.932	0.949	0.787
	BO2	0.862			
	BO3	0.895			
	BO4	0.876			
	BO5	0.905			
Work Environment	LK1	0.877	0.939	0.950	0.733
	LK2	0.821			
	LK3	0.860			
	LK4	0.843			
	LK5	0.848			
	LK6	0.892			
	LK7	0.849			
Work Motivation	MK1	0.866	0.909	0.932	0.734
	MK2	0.861			
	MK3	0.842			
	MK4	0.835			
Employee Performance	MK5	0.877	0.908	0.932	0.732
	KP1	0.805			
	KP2	0.867			
	KP3	0.849			
	KP4	0.892			
	KP5	0.862			

Source: Author's Data Processing Results (2026)

The structural model explains 78.8% of the variance in work motivation ($R^2 = 0.788$) and 79.2% of the variance in employee performance ($R^2 = 0.792$), both of which are classified as strong (Table 3). All paths show effect sizes in the moderate to near-large category (Table 4). Structural VIF values (1.358–2.663) are below the threshold of 5.0, indicating no collinearity issues, and model fit is satisfied with SRMR = 0.048 and NFI = 0.852.

Table 3. Coefficient of determination (R-Square and Adjusted R-Square)

Endogenous Construct	R-Square	Adjusted R-Square	Category
Work Motivation (MK)	0.788	0.783	Strong
Employee Performance (KP)	0.792	0.788	Strong

Source: Author's Data Processing Results (2026)

Table 4. Effect size (f-Square) test results

Path	f-Square	Category
Training → Work Motivation	0.163	Moderate
Transformational Leadership → Work Motivation	0.300	Moderate
Organizational Culture → Work Motivation	0.285	Moderate
Work Environment → Work Motivation	0.253	Moderate
Work Motivation → Employee Performance	0.269	Moderate
Training → Employee Performance	0.337	Moderate (near large)
Work Environment → Employee Performance	0.232	Moderate

Source: Author's Data Processing Results (2026)

Hypothesis testing was conducted using the bootstrapping procedure with 5,000 subsamples in SmartPLS 4.0. Following Hair et al. [19], a hypothesis is considered supported if the direction of the path

coefficient (β) matches the hypothesis, the t-statistic > 1.96 , and the p-value < 0.05 . Based on the direct-effect results, all seven hypotheses were supported (Table 5).

Table 5. Hypothesis testing results: direct effects

Hyp.	Path	β	t-Stat	p-Value	95% CI	Note
H1	Training $\rightarrow$ Work Motivation	0.245	4.533	<0.001	[0.140; 0.354]	Supported
H2	Transformational Leadership $\rightarrow$ Work Motivation	0.302	5.684	<0.001	[0.194; 0.406]	Supported
H3	Organizational Culture $\rightarrow$ Work Motivation	0.328	5.648	<0.001	[0.215; 0.441]	Supported
H4	Work Environment $\rightarrow$ Work Motivation	0.270	5.775	<0.001	[0.176; 0.360]	Supported
H5	Work Motivation $\rightarrow$ Employee Performance	0.386	5.984	<0.001	[0.262; 0.512]	Supported
H6	Training $\rightarrow$ Employee Performance	0.368	6.227	<0.001	[0.251; 0.478]	Supported
H7	Work Environment $\rightarrow$ Employee Performance	0.285	4.862	<0.001	[0.171; 0.402]	Supported

Source: Author's Data Processing Results (2026)

At the indicator level, the effect of training on work motivation and employee performance is primarily reflected in the alignment of training with job requirements (PL3) and the improvement of knowledge and skills (PL4), which have the highest outer loadings. The effect of transformational leadership on work motivation is most strongly represented by clarity in conveying the organizational vision (TL2, loading 0.904). For organizational culture, a culture that encourages employees to perform better (BO5, loading 0.905) and clarity of work values and norms (BO1) are the strongest representations. The effect of work environment is primarily reflected in psychological comfort and interpersonal relationships (LK6, loading 0.892), confirming that the social dimension is as important as the physical dimension. The effect of work motivation on employee performance is most strongly reflected in the drive to contribute to organizational goals (MK5, loading 0.877), which culminates in the timeliness and quality of work output (KP4, loading 0.892).

The role of work motivation as an intervening variable was confirmed through the specific indirect effect test (Table 6). All four indirect paths through work motivation were significant (t-statistic > 1.96 ; $p < 0.05$; 95% CI excluding zero). The largest indirect effect was found for organizational culture ($\beta = 0.127$), followed by transformational leadership ($\beta = 0.117$), work environment ($\beta = 0.104$), and training ($\beta = 0.095$). For the training and work environment paths, both the direct and indirect effects were significant, so work motivation acts as a partial mediator on these two paths, whereas the effects of transformational leadership and organizational culture on employee performance are channelled entirely indirectly through work motivation. The structural model output, including path coefficients and outer loadings, is presented in Fig. 1.

Table 6. Specific indirect effect test results (mediating role of work motivation)

Indirect Path	β	t-Stat	p-Value	95% CI	Note
Training $\rightarrow$ Work Motivation $\rightarrow$ Employee Performance	0.095	3.386	0.001	[0.047; 0.157]	Significant (partial mediation)
Transformational Leadership $\rightarrow$ Work Motivation $\rightarrow$ Employee Performance	0.117	4.148	0.000	[0.065; 0.176]	Significant (indirect-only mediation)
Organizational Culture $\rightarrow$ Work Motivation $\rightarrow$ Employee Performance	0.127	4.245	0.000	[0.074; 0.190]	Significant (indirect-only mediation)
Work Environment $\rightarrow$ Work Motivation $\rightarrow$ Employee Performance	0.104	4.141	0.000	[0.060; 0.159]	Significant (partial mediation)

Source: Author's Data Processing Results (2026)

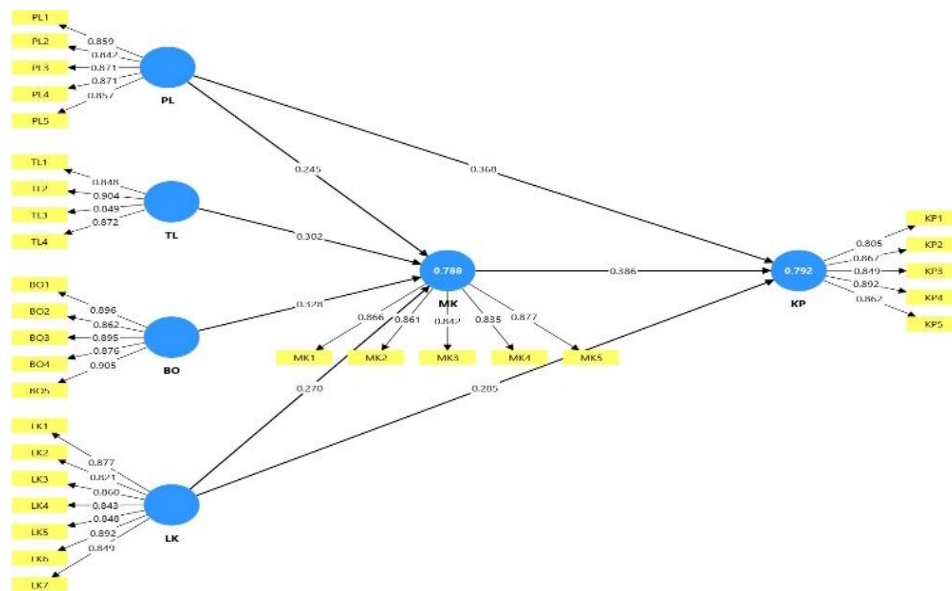


Fig. 1. Structural model output (path coefficients and outer loadings), SmartPLS 4.0

Discussion

Linking the seven hypothesis tests and the mediating role of work motivation to the theoretical foundation and prior empirical evidence shows that the model has strong explanatory power for both work motivation and employee performance. Since all hypotheses were supported, the following discussion assesses the extent to which the findings align with or differ from previous studies, together with their theoretical explanations.

The first hypothesis (H1), that training has a positive effect on work motivation, was supported. This finding is consistent with Sugiarti [5] and Haryono et al. [2], who found that structured training increases employee motivation through a better understanding of job tasks. Theoretically, the result is grounded in Human Capital Theory [20] and Self-Determination Theory [21]: training strengthens competence, and fulfilment of the need for competence fosters intrinsic motivation. Among civil servants at the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency, technical and substantive training relevant to core duties proved more effective in driving employee motivation than general training.

The second hypothesis (H2), that transformational leadership has a positive effect on work motivation, was supported. This result is consistent with Udin et al. [10] and Suong [8], who found that inspirational transformational leaders increase employees' work drive. Theoretically, the finding refers to Transformational Leadership Theory [22], in which the individualized-consideration dimension also fulfils the need for relatedness described in Self-Determination Theory. In the hierarchical civil-service environment, leaders who can translate the public-service vision into a compelling purpose prove to be an effective source of employee motivation.

The third hypothesis (H3), that organizational culture has a positive effect on work motivation, was supported. This result reinforces the findings of Huda et al. [14] and Laras et al. [15], who showed organizational culture to be a driver of motivation across contexts, including the public sector. Theoretically, the pattern is grounded in the organizational-culture framework [23] and Social Exchange Theory [24]: a positive culture gives meaning to work and also functions as organizational support, which employees reciprocate with greater engagement.

The fourth hypothesis (H4), that work environment has a positive effect on work motivation, was supported. This result is consistent with Nursaid et al. [1] and Hariyasasti [25], who found that a comfortable physical and non-physical work environment increases motivation among government employees. Theoretically, Herzberg's Two-Factor Theory [26] positions working conditions as a factor that, when adequately met, supports the emergence of motivation by reducing unnecessary cognitive burden.

The fifth hypothesis (H5), that work motivation has a positive effect on employee performance, was supported, with work motivation emerging as the strongest determinant in the model. This finding reinforces

Rahim and Jam'an [27], who reported a significant positive impact of motivation on performance. Theoretically, Expectancy Theory [28] and Self-Determination Theory [21] explain motivation as the energy that directs and sustains goal-oriented behaviour, thereby converting capacity into actual performance.

The sixth hypothesis (H6), that training has a direct effect on employee performance, was supported, consistent with Candana et al. [6] and Yimam [7]. Human Capital Theory [20] explains that effective training improves knowledge, skills, and abilities while reducing person-job mismatch. At the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency, substantive training was shown to improve the accuracy and completion of employees' tasks.

The seventh hypothesis (H7), that work environment has a direct effect on employee performance, was supported, consistent with Zhenjing et al. [18]. The Job Demands-Resources Model [29] views an adequate work environment as a job resource that reduces workload and stress while facilitating task accuracy.

The specific indirect effect results show that work motivation mediates the influence of all four organizational factors on performance in two distinct patterns: partial mediation on the training and work environment paths, which also have significant direct effects, and full channelling of the effects of transformational leadership and organizational culture through work motivation. The Ability-Motivation-Opportunity framework [30] explains that training builds ability, culture and environment create opportunity, and leadership stimulates both, yet this capacity translates into performance only when it is supported by strong motivation. For bureaucratic organizations, this finding underscores that leadership development and workplace-culture programmes for civil servants should be evaluated not merely by their administrative output, but by their ability to foster employee motivation as the strategic link to improved performance.

IV. CONCLUSION

All seven proposed hypotheses were supported by the data. Training, transformational leadership, organizational culture, and work environment have significant positive effects on the work motivation of civil servants at the Department of Housing, Settlement Areas, and Cemetery Affairs of Tangerang Regency, and work motivation, training, and work environment have significant positive effects on employee performance. The model explains 78.8% of the variance in work motivation and 79.2% of the variance in employee performance. The study further confirms work motivation as a significant intervening variable: transformational leadership and organizational culture affect employee performance entirely indirectly through work motivation, whereas training and work environment affect performance through both direct and indirect (partial mediation) pathways. Theoretically, these findings imply that work motivation is a strategic link connecting human-resource development factors and organizational factors to civil servant performance.

From a managerial standpoint, agency leaders are advised to prioritise a training needs analysis based on job-competency gaps; strengthen the clarity of leadership vision together with structured coaching and mentoring practices; internalise values of integrity and openness to new ideas within the organizational culture; improve both the physical and social aspects of the work environment; and build a fair and transparent performance-based recognition and reward system to further strengthen employee work motivation.

This study has several limitations. Its scope is limited to civil servants in a single local government agency, so the results may not be generalisable to other agencies; its cross-sectional design does not capture long-term behavioural change; and it excludes potential moderating variables such as workload, organizational commitment, or remuneration systems. Future research is recommended to extend the scope to other local government agencies, to consider longitudinal or mixed-methods approaches, and to incorporate organizational commitment or job satisfaction as additional moderating or mediating variables.

V. ACKNOWLEDGMENTS

The authors thank the Master of Management Study Program, Faculty of Economics and Business, Universitas Esa Unggul, for its academic support in completing this study; the thesis supervisor for guidance and direction throughout the research process; and all employees of the Department of Housing, Settlement

Areas, and Cemetery Affairs of Tangerang Regency for their willingness to participate as respondents. The authors declare no conflict of interest.

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