

The Influence of Competence and Work Environment on Employee Performance at the Office of Industry and Trade of South Tangerang City

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ABSTRACT

This study aims to analyze the effect of competence and work environment on employee performance at the Office of Industry and Trade of South Tangerang City using a quantitative approach. Data were collected through questionnaires distributed to 60 employees and analyzed using multiple linear regression with SPSS. The results show that competence has a positive and significant effect on employee performance, as indicated by a t-value of 7.434 with a significance level below 0.05, suggesting that employees' knowledge, skills, and work attitudes contribute to improved performance. The work environment also has a positive and significant influence on employee performance, with a t-value of 6.001 and a significance level below 0.05, indicating that a conducive work environment enhances employee productivity. Simultaneously, competence and work environment have a positive and significant effect on employee performance, as evidenced by an F-value of 89.966 with a significance level below 0.05, implying that optimal employee performance is achieved through both individual competence and a supportive work environment.

Keywords : *Competence, Work Environment, Employee Performance.*

INTRODUCTION

Because they are essential to the mobilization and optimization of other organizational resources, human resources (HR) are an essential part of an organization's success. Because their time, creativity, energy, and abilities have a major impact on the accomplishment of corporate objectives, employees are regarded as the most precious assets. Therefore, in order to guarantee sustainability and development in changing contexts, firms need top-notch human resources (Armstrong et al., 2023). In order to promote professionalism, discipline, and accountability, it is crucial to continuously enhance the quality of human resources via training, competence development, and objective performance assessment methods. This will allow workers to adjust to change and provide the best possible contributions to organizational goals.

Maintaining employee performance and accomplishing corporate objectives depend heavily on effective human resource management. This also holds true for South Tangerang City's Department of Industry and Trade, a local government agency in charge of fostering trade and industry growth as well as raising corporate competitiveness. The organization has worked to enhance worker performance in recent years in order to facilitate the successful execution of important government initiatives. Performance encompasses both quantitative and qualitative elements of work and refers to the outcomes attained by people or groups in completing

assigned tasks in compliance with set responsibilities and performance criteria (Dessler, 2023).

According to preliminary findings, staff performance at South Tangerang City's Department of Industry and Trade declined between 2022 and 2025. According to official performance criteria, all performance dimensions work quantity, quality, cooperation, and initiative remain in the "poor" range. This decrease points to the need of thorough assessment and development initiatives. According to earlier study by Tyas et al. (2026), a supportive work environment has a substantial impact on employee performance, which is a crucial factor in determining organizational success.

Inadequate employee competence is seen to be directly linked to low employee performance. Competence includes the attitudes, abilities, and knowledge needed to do tasks successfully. High-competence workers often cooperate well, work professionally, and have a strong sense of accountability and integrity. Preliminary observations, however, show that staff competency in the organization is still comparatively low, especially when it comes to technical knowledge and abilities. This result is consistent with that of Patintingan et al. (2025), who verified that competence significantly improves worker performance.

Apart from skill, the workplace has a substantial impact on how well employees perform. Employee comfort and productivity may be negatively impacted by an undesirable work environment that is marked by inadequate facilities, poor sanitation, excessive noise, poor air circulation, lax enforcement of work standards, and subpar interpersonal connections. According to observations made at South Tangerang City's Department of Industry and Trade, a number of environmental problems continue to impede ideal performance. Idarata and Atidira (2025) observed that a pleasant, safe, and favorable work atmosphere greatly improves employee performance, which lends credence to this idea.

Performance may also be impacted by other elements including job motivation and leadership style. Clear direction, performance reviews, and employee participation in decision-making all depend on effective leadership (Robbins et al., 2024). Employees are encouraged to work ethically and joyfully by motivation, which is an internal desire to meet demands and accomplish objectives. However, preliminary findings indicate that the institution's personnel motivation and leadership practices have not yet reached ideal levels, which may be restricting overall output.

In light of these circumstances, the purpose of this research is to examine how employee performance in the South Tangerang City Department of Industry and Trade is impacted by competence and the workplace. It is anticipated that the results will provide empirical support for long-term gains in worker performance and organizational efficacy as well as useful suggestions.

RESEARCH METHOD

The research design used in this study was quantitative. By using statistical analysis and numerical measurement to investigate the connections between variables, quantitative research is utilized to evaluate objective hypotheses (Creswell, 2023). This method makes it possible to gather quantifiable and organized data, which allows the results to be evaluated objectively and empirically using statistical techniques.

This study falls under the category of associative (causal) research, which seeks to determine the causal impacts and correlations between two or more variables (Sekaran & Bougie, 2020). Consequently, the research looked at how Employee Performance (Y), the dependent variable, was impacted by Competence (X1) and Work Environment (X2), the independent factors. The study was carried out in the South Tangerang City Department of Industry and Trade, which is situated at Jl. Maruga Raya No. 1, Building 1, First Floor, Serua, Ciputat, South Tangerang, Banten 15414. Over the course of six months, from August 2025 to January 2026, data was gathered on proposal creation, questionnaire distribution, data processing, statistical analysis, and conclusion drafting.

Primary and secondary data made up the data sources. Field observations and a structured questionnaire given to staff members were the two methods used to collect primary data. A five-point Likert scale was used in this research to gauge respondents' attitudes, views, and perceptions on the phenomena under study, in accordance with Sugiyono (2019), who states that primary data are gathered directly from original sources. In order to bolster and supplement the main results, secondary data was gathered indirectly via documentation, archival documents, and institutional reports (Sugiyono, 2019).

Sixty workers made up the study's population, and every employee was included in the sample. The study employed a saturation sampling approach (census) under non-probability sampling, using the whole population as the research sample since the population size was less than 100 (Sugiyono, 2019). To investigate the extent and direction of the effects of the independent variables on the dependent variable, data analysis was carried out using SPSS, which included multiple linear regression analysis, instrument testing (validity and reliability), and traditional assumption tests (normality, heteroscedasticity, and multicollinearity) (Ghozali, 2021). Inferential statistical techniques, such as t-tests (partial effects) and F-tests (simultaneous effects) at a 5% substantial level, were used to guarantee objective inferences from the sample data via hypothesis testing (Field, 2024; Ghozali, 2021). The coefficient of determination (R² and Adjusted R²) was used to evaluate the regression model's explanatory ability (Ghozali, 2021).

RESULT AND DISCUSSION

The validity test determines if the study variables are correctly measured by the questionnaire items. If its correlation coefficient (r_{count}) is more than the table value or if its substance value is less than 0.05. Items with r_{count} values

greater than 0.254 are considered genuine and appropriate for analysis since the r-table value with 60 respondents and 58 degrees of freedom is 0.254.

Table 1 Validity Test

Variables	Item Code	r Count	r Table	Information
Employee Performance (Y)	Y.1	0,860	0,254	Valid
	Y.2	0,865		
	Y.3	0,837		
	Y.4	0,879		
	Y.5	0,828		
	Y.6	0,831		
	Y.7	0,878		
	Y.8	0,926		
	Y.9	0,896		
Competence (X1)	X1.1	0,824		
	X1.2	0,833		
	X1.3	0,835		
	X1.4	0,819		
	X1.5	0,856		
	X1.6	0,869		
Work Environment (X2)	X2.1	0,862		
	X2.2	0,840		
	X2.3	0,847		
	X2.4	0,797		
	X2.5	0,878		
	X2.6	0,837		
	X2.7	0,822		
	X2.8	0,842		
	X2.9	0,874		
	X2.10	0,809		

Source: Processed data, 2026

Based on the findings of the validity test, every questionnaire item for every variable is considered valid. This assertion is supported by each item's r count values, which are higher than the r table value of 0.254. Because they are thought to measure their respective variables reliably, all indicators are thus deemed appropriate for further statistical investigation.

The purpose of the reliability test is to evaluate the research instrument's consistency. In this examination, an instrument is considered reliable if its Cronbach's Alpha value is more than 0.70. If the instrument's Cronbach's Alpha value is less than 0.70, it is deemed unreliable and unfit for further investigation.

Table 2 Reliability Test

Variables	Cronbach's Alpha	Condition	Information
Employee Performance (Y)	0,958	≥ 0,70	Reliabel
Competence (X1)	0,916	≥ 0,70	
Work Environment (X2)	0,954	≥ 0,70	

Source: Processed data, 2026

The reliability test's results demonstrate that every study variable satisfies the dependability standards. Since every instrument's Cronbach's Alpha value is more than the reliability threshold of 0.70, it may be utilized for further data analysis. How effectively a regression model can describe the dependent variable in terms of proportion is shown by the R Square (R^2) value. While residual variance is impacted by external variables, higher R^2 values indicate that the model can explain more (Ghozali, 2021).

Table 3 Coefficient of Determination Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871 ^a	.759	.751	2.356
a. Predictors: (Constant), Work Environment (X2), Competence (X1)				
b. Dependent Variable: Employee Performance (Y)				

Source: Processed data, 2026

According to the Model Summary findings, competence (X1) and work environment (X2) explain 75.9% of the variation in employee performance (Y), with other factors outside the study model accounting for the remaining 24.1%. This is shown by the R Square value of 0.759. The regression model's good explanatory power is confirmed by its Adjusted R Square of 0.751. To evaluate the hypotheses and ascertain the direction and strength of the independent variables' impact on the dependent variable, multiple linear regression analysis is used (Field, 2024).

Table 4 Multiple Linear Regression Test

Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	8.285	2.207	
	Competence (X1)	.709	.095	.556
	Work Environment	.346	.058	.449

	(X2)			
a. Dependent Variable: Employee Performance (Y)				

Source: Processed data, 2026

The multiple linear regression equation is $Y = 8.285 + 0.709X1 + 0.346X2$, according to the SPSS Coefficients data. When competence and work environment are taken for granted, the baseline level of employee performance is represented by the constant value of 8.285. According to the regression coefficient for competence (X1), employee performance rises by 0.709 units for every unit increase in competence and by 0.346 units for every unit improvement in the workplace (X2). The standardized beta values also demonstrate that skill, rather than the workplace, has a greater impact on worker performance. A hypothesis is accepted at the 0.05 statistical threshold if the substancevalue is less than 0.05 and the t-value is more than 2.002 (Field, 2024).

Table 5 t-test

Coefficients ^a			
Model		t	Sig.
1	(Constant)	3.754	<,001
	Competence (X1)	7.434	<,001
	Work Environment (X2)	6.001	<,001
a. Dependent Variable: Employee Performance (Y)			

Source: Processed data, 2026

The results of the t-test show that competence (X1) has a positive and statisticallysubstantialimpact on employee performance, with a t-value of 7.434 at a substance level of < 0.001, above the key t-table value of 2.002. Similarly, the work environment (X2) confirms a positive and substantial effect on employee performance with a t-value of 6.001 with a substancethreshold of < 0.001, which is also bigger than the t-table value. These results support Hypothesis 1 and Hypothesis 2 at the 5% substance level by showing that competency and work environment both significantly affect employee performance. When the F-value is more than 3.16 and the statistical threshold is less than 0.05, the hypothesis is accepted concurrently, suggesting that all independent factors have a substantialimpact on employee performance.

Table 6 F test

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	998.530	2	499.265	89.966	<,001 ^b
	Residual	316.320	57	5.549		
	Total	1314.85	59			

		0				
a. Dependent Variable: Employee Performance (Y)						
b. Predictors: (Constant), Work Environment (X2), Competence (X1)						

Source: Processed data, 2026

With a substancevalue of less than 0.001, the F-test produces an F-value of 89.966 based on the ANOVA findings, which is much higher than the crucial F-table value of 3.16 at a 5% substance level ($df_1 = 2$; $df_2 = 57$). These findings show that employee performance (Y) is positively and statistically significantly impacted by both competence (X1) and work environment (X2) at the same time. As a result, the alternative hypothesis (H_a) is supported and the null hypothesis (H_0) is rejected, demonstrating that competence and a positive work environment have a substantial impact on employee performance.

Discussion

With a t-value of 7.434 and a substance level below 0.001, the study's findings show that competence has a favorable and statisticallysubstantialimpact on worker performance. This study implies that workers with professional work attitudes, pertinent skills, and sufficient knowledge are better equipped to carry out their responsibilities and provide results of a higher caliber. Competent workers often make better judgments, comprehend work processes more fully, and adjust to changing job requirements, all of which improve the amount and quality of their output. This conclusion aligns with the results of Rini et al. (2026), Pramudianto et al. (2025), and Sarumaha, W. (2022), who highlighted the importance of competence in enhancing employee performance by empowering people to operate effectively and in compliance with corporate norms.

According to the research, a t-value of 6.001 with a substance level below 0.001 indicates that the work environment has a positive and substantial impact on employee performance. An atmosphere that fosters employee comfort, focus, and motivation is one that is marked by positive interpersonal interactions, reasonable noise levels, unambiguous work rules, sufficient air circulation, and a feeling of security. Workers who work in a positive atmosphere are more likely to stay focused, show greater excitement for their jobs, and finish projects as best they can. This result is consistent with other study by Lempoy et al. (2025), Tyas et al. (2026), and Estiana et al. (2023), which found that a pleasant and well-managed workplace greatly improves worker performance and productivity.

Furthermore, as shown by an F-value of 89.966 with a substance level below 0.001, the findings of the simultaneous testing reveal that competence and the work environment together have a considerable impact on employee performance. This research shows that organizational circumstances and individual talents combine to create improvements in employee performance rather than being solely driven by one aspect. Strong competences enable individuals to perform at their best when they are supported by a pleasant work environment, and enough competence maximizes the advantages of a happy work environment. Studies by Idarata and

Atidira (2025), Patintingan et al. (2025), and Liansari et al. (2022) who discovered that the interaction between competence and work environment is crucial in maintaining high levels of employee performance provide credence to this synergy.

CONCLUSION

It is advised that the South Tangerang City Department of Industry and Trade provide systematic competence development for its staff more attention in light of the study's results. Continuous training programs, capacity-building projects, and skill development in line with employment demands and technology breakthroughs may help accomplish this. It is anticipated that equitable learning and professional development opportunities will enhance workers' technical proficiency, problem-solving ability, and knowledge, which may result in more productive and efficient job performance.

The organization should also give top priority to initiatives aimed at enhancing the working environment by making it cozier, safer, and more encouraging. Upgrading workspace layout, improving internal communication, improving work amenities, and making sure workplace rules are applied consistently are a few examples of improvements. A well-run workplace may promote long-term gains in worker performance and help the company reach its objectives by encouraging staff motivation, teamwork, and concentration.

The Department of Industry and Trade of South Tangerang City should concentrate on enhancing work quality, work quantity, collaboration, and employee initiative in order to increase employee performance, according to the study's conclusions. To improve accuracy and commitment to job standards, regular performance reviews with constructive criticism are advised. Optimal productivity may also be supported by setting attainable performance goals and distributing the task fairly. Proactive behavior and more efficient job completion may also be fostered by promoting collaborative work practices and giving staff members the chance to work autonomously and with initiative.

Furthermore, maintaining performance improvement requires ongoing staff competency development and workplace enhancements. Opportunities to increase knowledge and technical skills pertinent to work needs, job mentorship, and focused training programs may all help to foster competency development. Stronger interpersonal ties, fewer workplace disruptions, constant enforcement of work rules, better air circulation, and increased workplace safety are all necessary to create a supportive work environment. It is anticipated that a well-maintained, safe, and pleasant workplace would boost worker enthusiasm, concentration, and output, thereby aiding in the long-term accomplishment of corporate goals.

REFERENCE

Armstrong, M. and Taylor, S. (2023) *Armstrong's Handbook of Human Resource Management Practice: A Guide to the Theory and Practice of People Management*. Kogan Page Publishers.

- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications Ltd.
- Dessler, G. (2023). *Human resource management* (17th ed.). Pearson Education.
- Estiana, R., Karomah, N. G., & Saimima, Y. A. (2023). Pengaruh lingkungan kerja dan disiplin kerja terhadap kinerja karyawan. *Jurnal Riset Laboratorium*, 12, 339–358. <https://doi.org/10.34127/jrlab.v12i2.771>
- Field, A. (2024). *Discovering statistics using IBM SPSS statistics*. Sage Publications Limited.
- Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26* (10th ed.). Badan Penerbit Universitas Diponegoro.
- Idarata, M. G. P., & Atidira, R. (2025). Pengaruh kompetensi kerja dan lingkungan kerja terhadap kinerja pegawai ASN pada Dinas Perhubungan Kabupaten Buleleng. *Bisma: Jurnal Manajemen*, 11(2), 912–920.
- Lempoy, C., Pio, R. J., & Rogahang, J. J. (2025). Pengaruh gaya kepemimpinan transformasional dan lingkungan kerja terhadap kinerja pegawai PT Bank Tabungan Negara Kantor Cabang Manado. *Jurnal Administrasi Bisnis (JAB)*, 15(1), 42–53.
- Lianasari, M., & Ahmadi, S. (2022). Pengaruh kompetensi dan lingkungan kerja terhadap kinerja dengan motivasi kerja sebagai variabel intervening. *Fokus Bisnis Media Pengkajian Manajemen dan Akuntansi*, 21(1), 43-59.
- Patintingan, E., Baharuddin, B., & Lambe, K. H. (2025). Analisis kompetensi dan lingkungan kerja terhadap kualitas kinerja pegawai di Dinas Pertanian Kabupaten Nabire. *Cakrawala Repositori IMWI*, 8(2), 1524–1537.
- Pramudianto, W., Sedyastuti, K., Graha, A. N., & Suharso, A. A. P. (2025). Pengaruh keterampilan, kompetensi, dan kedisiplinan terhadap kinerja karyawan Perumdam Among Tirto Kota Batu. *Jurnal Ilmiah Ecobuss*, 13(2), 193–202.
- Rini, I. P., Sekarini, R. A., Wiwin, W., Farhani, H., & Dirgantara, M. A. (2026). Pengaruh beban kerja, budaya organisasi, dan kompetensi terhadap kinerja pegawai Mahkamah Agung. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(4), 3787–3796.
- Robbins, Stephen P, Judge, Timothy A. (2024). *Organizational Behavior*, 19th Ed. (19th Ed.). USA: Pearson.
- Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (5th ed.). Wiley.
- Sarumaha, W. (2022). Pengaruh budaya organisasi dan kompetensi terhadap kinerja pegawai. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, 1(1), 28-36.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Tyas, E. W., Ruminta, D., & Akbar, D. D. (2026). Pengaruh motivasi kerja dan lingkungan kerja terhadap kinerja pegawai Biro Pembangunan dan Lingkungan Hidup Provinsi DKI Jakarta. *Jurnal Manajemen Ekonomi dan Akuntansi*, 2(2), 490–496.