

The Influence of Physical and Non-Physical Work Environment on Employee Performance at Hilton Bali Resort

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ABSTRACT

This research investigates how the physical work environment (X1) and the non-physical work environment (X2) relate to employee performance (Y) at Hilton Bali Resort. A quantitative causal-associative design was applied, with data obtained from a digital questionnaire completed by all 30 employees in the study population through saturation sampling. Instrument testing showed that every item was valid ($r\text{-value} > r\text{-table} = 0.361$) and that each variable had strong internal consistency (Cronbach's Alpha: $X1 = 0.965$, $X2 = 0.946$, $Y = 0.948$). After the data met the assumptions of normality, absence of multicollinearity, and homoscedasticity, multiple linear regression was performed using IBM SPSS Statistics version 26. The resulting model was $Y = 1.938 + 0.132X1 + 0.532X2$. Partial testing indicated a significant contribution from the physical work environment ($t\text{-count} = 2.201 > t\text{-table} = 2.052$; sig. = 0.036) and from the non-physical work environment ($t\text{-count} = 4.668 > t\text{-table} = 2.052$; sig. = 0.000). Simultaneous testing also confirmed that both predictors jointly affected performance ($F\text{-count} = 35.814 > F\text{-table} = 3.34$; sig. = 0.000), explaining 72.6% of the variance in employee performance. The standardized coefficients further show that the non-physical environment ($\beta = 0.627$) contributes more strongly than the physical environment ($\beta = 0.296$), emphasizing the importance of interpersonal and psychological conditions in supporting employee performance in a five-star hotel setting.

INTRODUCTION

Bali's hospitality sector has a central position in sustaining tourism, which is one of the region's principal economic drivers. Data from the Central Statistics Agency (Badan Pusat Statistik/BPS) show that Bali had 593 star-rated hotels in 2024 across its regencies and cities. The greatest concentration was in Badung Regency, particularly among four- and five-star properties. This competitive environment places strong pressure on hotels to maintain high service standards, and the ability to do so depends substantially on the performance of their employees.

Employee performance is shaped by a range of organizational factors, including the conditions in which employees carry out their work. When the workplace is supportive and comfortable, employees are more likely to perform effectively; in contrast, poor working conditions may reduce comfort and weaken work motivation (Hikmah, 2024). For analytical purposes, this study separates the work environment into two dimensions: physical and non-physical.

The physical dimension concerns tangible conditions in and around the workplace that can influence employees directly or indirectly, such as illumination, temperature, humidity, air movement, noise, and occupational safety (Cintia & Gilang, 2021). The non-physical dimension, by comparison, concerns the social quality of the workplace, including interactions between supervisors and subordinates and among coworkers, as reflected in communication, respect, and cooperation (Mila Setiawati Lase et al., 2025).

Hilton Bali Resort is a five-star property in Nusa Dua whose human-resource management must respond to complex operational demands. Preliminary observations suggested that several aspects of the existing work setting had not fully matched ideal operating conditions. These included technical issues with temperature-control facilities in some departments, noise originating from meeting areas, and communication difficulties associated with a pronounced seniority culture. If left unaddressed, such conditions may interfere with work effectiveness and ultimately affect the standard of service delivered to guests.

Earlier research has often assessed physical and non-physical work environments separately, while many studies have been situated in public institutions or educational organizations whose work characteristics differ from those of hotels. Empirical evidence that evaluates both dimensions together in relation to employee performance within the five-star hospitality sector is still limited. This research therefore examines their individual as well as combined effects on employee performance at Hilton Bali Resort, with the aim of generating a more context-specific basis for human-resource management in the hospitality industry.

THEORETICAL REVIEW

The theoretical foundation combines Human Resource Management (HRM) as the grand theory with Organizational Behavior as the middle-range theory. HRM views people as strategic organizational resources that must be managed effectively and efficiently so that organizational, employee, and societal

objectives can be achieved (Hasibuan, 2020). Organizational Behavior complements this perspective by examining how individuals and groups interact within organizations and how those patterns of interaction contribute to the attainment of organizational goals (Muhtarom et al., 2023).

A physical work environment consists of the tangible conditions surrounding employees while they perform their duties and may influence them either immediately or indirectly. The Decree of the Minister of Health of the Republic of Indonesia Number 1405/Menkes/SK/XI/2002 specifies several relevant workplace standards, including a maximum noise exposure of 85 dBA, an acceptable temperature range of 18°C–28°C, and lighting of at least 100 lux. Consistent with Cintia and Gilang (2021), this study assesses lighting, temperature, humidity, air circulation, noise, and workplace safety.

The non-physical work environment concerns the social and relational climate experienced by employees within an organization. A supportive climate is characterized by constructive relationships between managers and employees and among coworkers, supported by clear communication, reciprocal understanding, and collaboration (Mila Setiawati Lase et al., 2025). Accordingly, this research measures the non-physical environment through supervisor-subordinate relationships and relationships among employees.

Employee performance can be understood as the extent to which employees produce work of the required quality and quantity while fulfilling the duties entrusted to them. It also reflects how effectively and efficiently organizational resources are converted into work outputs (Cintia & Gilang, 2021). In this study, performance is represented by three indicators: work quality, work quantity, and responsibility for work.

Drawing on the theoretical discussion and previous empirical evidence, three propositions are tested: (H1) a better Physical Work Environment is positively and significantly associated with Employee Performance; (H2) a better Non-Physical Work Environment is positively and significantly associated with Employee Performance; and (H3) both dimensions of the Work Environment, when considered together, have a positive and significant relationship with Employee Performance at Hilton Bali Resort.

HYPOTHESIS FRAMEWORK

The conceptual model is designed to test the separate contribution of each work-environment dimension as well as their combined contribution to employee performance, thereby providing an empirical representation of the relationships among the study variables.

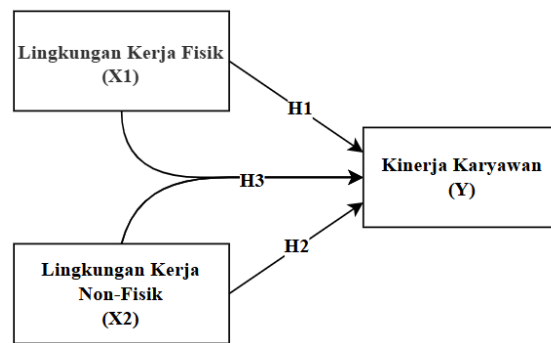


Figure 1 Conceptual Framework

HYPOTHESES

With reference to organizational-behavior theory and prior findings in hospitality and related settings, the study tests the following hypotheses:

H1: Employee Performance at Hilton Bali Resort is influenced by the Physical Work Environment.

H2: Employee Performance at Hilton Bali Resort is influenced by the Non-Physical Work Environment.

H3: Employee Performance at Hilton Bali Resort is jointly influenced by the Physical and Non-Physical Work Environments.

RESEARCH METHOD

The research took place at Hilton Bali Resort in Nusa Dua, Badung Regency, Bali, a five-star resort within the Hilton Worldwide network. A quantitative causal-associative design was used to assess whether changes in the two independent variables – the physical and non-physical work environments – are associated with changes in the dependent variable, employee performance.

The target population comprised Hilton Bali Resort employees who were actively employed during the study period. Because the population was relatively small, a saturation or census sampling strategy was used so that every population member was included. In total, 30 employees from a range of hotel operational departments participated as respondents.

Primary data were gathered through an online questionnaire containing 28 structured items rated on a five-point Likert scale, from 1 (Strongly Disagree) to 5 (Strongly Agree). The Physical Work Environment (X1) was represented by 15 items addressing lighting, temperature, humidity, air circulation, noise, and safety. The Non-Physical Work Environment (X2) was measured with 7 items covering supervisor-subordinate relations and coworker relations. Employee Performance (Y) was assessed with 6 items concerning work quality, work quantity, and work responsibility.

Statistical processing was carried out with IBM SPSS Statistics version 26. The analytical procedure began with item validity testing using the Pearson Product-Moment correlation and reliability assessment with Cronbach's Alpha. Classical-assumption diagnostics included the Kolmogorov-Smirnov normality test, multicollinearity assessment through the Variance Inflation Factor (VIF), and inspection of a scatterplot for heteroscedasticity.

The hypotheses were then examined using multiple linear regression, partial t-tests, a simultaneous F-test, and the coefficient of determination (R^2).

RESULTS AND DISCUSSION

Respondent Characteristics

All 30 questionnaires were returned in usable condition, producing a response rate of 100%. Men represented 57% of the respondents and women 43%. The most common age category was 36–44 years (37%), followed by employees older than 45 years (23%); the 18–25 and 26–35 groups each represented 20%. Regarding tenure, 57% had been employed for more than five years, whereas 27% had worked for less than one year. The profile therefore suggests that the sample was largely composed of experienced employees who were familiar with the working conditions at Hilton Bali Resort.

Research Instrument Testing

Item validity was evaluated with the Pearson Product-Moment correlation using an r-table benchmark of 0.361 ($df = 28$, $\alpha = 5\%$). Each of the 28 questionnaire statements for X1, X2, and Y produced an r-value above this benchmark and a significance value of 0.000. On this basis, every item satisfied the validity requirement.

Table 1. Reliability Test Results

Variable	Cronbach's Alpha	Threshold Value	Description
Physical Work Environment (X1)	0.965	0.60	Reliable
Non-Physical Work Environment (X2)	0.946	0.60	Reliable
Employee Performance (Y)	0.948	0.60	Reliable

Source: Primary data processed (2026)

As reported in Table 1, Cronbach's Alpha for every variable was above the minimum criterion of 0.60. The Physical Work Environment recorded the largest coefficient, at 0.965. These results indicate that the measures for all three variables possess adequate internal consistency and can be considered reliable for data collection.

Classical Assumption Tests

Table 2. Normality Test

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance
1	Constant	1.938	2.718	—	0.713	0.482
	Physical Work Environment	0.132	0.060	0.296	2.201	0.036

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Non-Physical Work Environment	0.532	0.114	0.627	4.668	0.000

Source: Primary data processed (2026)

The One-Sample Kolmogorov-Smirnov test returned an Asymp. Sig. (2-tailed) of 0.200, which exceeds 0.05; the P-P Plot also showed residual points lying close to the diagonal reference line. These results support the assumption of normal residual distribution. For multicollinearity, each independent variable had a VIF of 1.780, below 10, and a Tolerance of 0.562, above 0.1, indicating that the predictors were not affected by multicollinearity. The scatterplot used to assess heteroscedasticity displayed points dispersed irregularly on both sides of zero on the Y-axis without a recognizable pattern. Thus, heteroscedasticity was not indicated. Taken together, the diagnostic results show that the regression model met the required classical assumptions and could proceed to hypothesis testing.

Descriptive Analysis of Variables

The descriptive results for the Physical Work Environment (X1) show that workplace safety achieved the highest mean across the physical-environment indicators (mean = 11.77), suggesting strong attention by Hilton Bali Resort to occupational safety standards. Air circulation, however, had the lowest mean (7.03). Within this indicator, the statement "air circulation works properly" received a mean of 3.43, pointing to ventilation constraints in several areas. Temperature also produced a mean of 7.03, and the item concerning comfort with room temperature had a mean of 3.37. This pattern corresponds with the temperature-control problems noted during the preliminary observation.

Within the Non-Physical Work Environment (X2), supervisor-subordinate relations produced the highest indicator mean (15.67). The statement "supervisors respect employees' opinions" received the highest item score (4.00), suggesting that communication is relatively participatory. By contrast, "supervisors provide clear instructions" scored 3.87, indicating room for improvement in the clarity of directions. For coworker relations, the statement "I have a good working relationship with my colleagues" had the lowest mean (3.53). This result may relate to the communication barriers previously observed in connection with the hotel's seniority culture.

For Employee Performance (Y), work quantity generated the highest indicator mean (7.90), and the statement "I can complete tasks productively" obtained a score of 4.00. The result indicates that employees generally perceive themselves as able to meet established work targets. Work responsibility had the lowest mean (7.23); specifically, "I am willing to correct my mistakes" recorded a mean of 3.73. One possible interpretation is that hierarchical workplace norms may make some employees less comfortable acknowledging errors in front of supervisors.

Multiple Linear Regression Analysis

Table 2. Results of Multiple Linear Regression Analysis

Model	B	Std. Error	Beta (β)	t-value	Sig.
Constant	1.938	2.718	–	0.713	0.482
Physical Work Environment (X1)	0.132	0.060	0.296	2.201	0.036
Non-Physical Work Environment (X2)	0.532	0.114	0.627	4.668	0.000

Source: Primary data processed (2026)

Table 2 yields the regression model $Y = 1.938 + 0.132X_1 + 0.532X_2$. The intercept of 1.938 represents the estimated employee-performance score when X_1 and X_2 are both zero. Holding the other predictor constant, a one-unit rise in the Physical Work Environment score is associated with a 0.132-unit increase in Employee Performance. A one-unit rise in the Non-Physical Work Environment score is associated with a larger increase of 0.532 units. The larger X_2 coefficient indicates that the non-physical dimension has the stronger estimated contribution to performance in this model.

Hypothesis Testing Results

Table 3. Results of Partial t-Test and Simultaneous F-Test

Variable	Calculated Value	Table Value	Sig.	α	Conclusion
Physical Work Environment (X1) → t-test	2.201	2.052	0.036	0.05	H1 Accepted
Non-Physical Work Environment (X2) → t-test	4.668	2.052	0.000	0.05	H2 Accepted
X1 & X2 Simultaneously → F-test	35.814	3.34	0.000	0.05	H3 Accepted
R Square (Coefficient of Determination)	0.726	–	–	–	72.6%

Source: Primary data processed (2026)

Effect of the Physical Work Environment on Employee Performance

Partial hypothesis testing indicates that the Physical Work Environment (X_1) contributes positively and significantly to Employee Performance (Y) at Hilton Bali Resort. The calculated t-value of 2.201 is greater than the t-table value of 2.052, while the significance level of 0.036 is below 0.05; consequently, H1 is supported. Its standardized coefficient ($\beta = 0.296$) further suggests that improvements in physical workplace conditions are associated with better employee-performance outcomes.

The result is compatible with Mustafa Kemal Pasha's (2024) view that supportive workplace conditions enhance employees' sense of security and help them perform at their best. Comparable empirical evidence was reported by Cintia and Gilang (2021) at KPPN Bandung I, Noorainy (2017) at the Regional Secretariat of Pangandaran Regency, and Rosdiana et al. (2024), who likewise identified a positive and significant link between physical workplace conditions and employee performance. In five-star hotels, physical facilities are also

governed by demanding operational standards, making deficiencies or improvements in the work setting more likely to translate directly into employees' ability to perform their tasks.

A contrasting result was reported by Samsul Arifin (2025), who found no significant relationship between the physical work environment and job satisfaction. The difference is plausible because that study examined job satisfaction rather than performance as its outcome variable. The present research measures performance through work quality, work quantity, and responsibility – dimensions that may respond more immediately to concrete physical conditions in the workplace.

Effect of the Non-Physical Work Environment on Employee Performance

The partial test for the Non-Physical Work Environment (X2) also produced a positive and statistically significant result. Its t-value was 4.668, exceeding the critical value of 2.052, and the significance level was 0.000, below 0.05; H2 is therefore supported. In addition, the unstandardized coefficient for X2 (0.532) is substantially larger than that for X1 (0.132). This comparison indicates that, in this hotel setting, the quality of supervisor-subordinate and coworker relationships makes a stronger estimated contribution to employee performance than the physical workplace alone.

This finding aligns with Mila Setiawati Lase et al. (2025), who describe a favorable non-physical work environment as one that supports comfort and harmony and, in turn, better performance. Puspita (2023) similarly emphasizes that mutual respect and effective communication between leaders and subordinates strengthen organizational cooperation. Ariati et al. (2023) add that a healthy social climate and constructive interpersonal relations can increase work motivation, which can subsequently improve employee performance.

Helmi Dharmawan et al. (2023), however, reported that the non-physical work environment did not significantly affect job satisfaction. The apparent inconsistency may stem from the different outcomes examined. Job satisfaction is strongly subjective and can be shaped by many personal factors, whereas employee performance can be assessed through more observable work outcomes. This distinction is especially relevant in hospitality, where day-to-day service depends on rapid coordination and direct interdepartmental interaction; consequently, the social environment may be reflected more immediately in the service employees provide.

Simultaneous Effect of the Physical and Non-Physical Work Environments on Employee Performance

The simultaneous F-test confirms that the Physical Work Environment (X1) and Non-Physical Work Environment (X2), considered together, have a positive and significant effect on Employee Performance (Y). The calculated F-value of 35.814 exceeds the F-table value of 3.34, and the significance value of 0.000 is below 0.05, supporting H3. The model's R² of 0.726 means that the two predictors account for 72.6% of the observed variation in employee performance. The remaining 27.4% is attributable to factors outside the present model, potentially including work motivation, work stress, compensation, and career development.

The joint result is consistent with organizational-behavior theory, which recognizes that both material surroundings and social conditions shape how individuals behave and perform at work (Muhtarom et al., 2023; Dewi et al., 2025). Similar conclusions were presented by Puspita (2023) in BPKAD Banyuasin, Hikmah (2024) in the Mallawa District Office, and Samsiah Risahondua and Laurens (2024). Collectively, those studies suggest that addressing physical and social workplace conditions in an integrated manner can produce a stronger effect than concentrating on only one dimension.

Ranayudha (2020) and Ariani and Atidira (2025) found that physical and non-physical work environments jointly affected job satisfaction rather than performance directly. Their findings differ in outcome focus but do not necessarily conflict with the present results. In hotel operations, performance expectations are explicit and routinely observable, so supportive physical facilities and social relationships may influence employee performance without first operating through job satisfaction as an intervening mechanism.

CONCLUSION

First, H1 is supported because the Physical Work Environment (X1) has a positive and significant partial relationship with Employee Performance (Y) at Hilton Bali Resort ($t\text{-value} = 2.201 > t\text{-table} = 2.052$; $\text{sig.} = 0.036$). Better lighting, temperature, humidity, ventilation, noise control, and workplace safety are therefore associated with more effective employee performance.

Second, the evidence supports H2 and identifies the Non-Physical Work Environment (X2) as the stronger predictor of Employee Performance (Y) ($t\text{-value} = 4.668 > t\text{-table} = 2.052$; $\text{sig.} = 0.000$; $\beta = 0.627$). This result highlights the strategic importance of psychological and relational conditions, especially constructive relationships between supervisors and subordinates and among coworkers, in shaping performance within the hospitality sector.

Third, H3 is supported because the Physical Work Environment (X1) and Non-Physical Work Environment (X2) jointly show a positive and significant relationship with Employee Performance (Y) ($F\text{-value} = 35.814 > F\text{-table} = 3.34$; $\text{sig.} = 0.000$; $R^2 = 72.6\%$). The finding indicates that sustained management of both tangible workplace conditions and social-relational conditions is important for optimizing employee performance.

RECOMMENDATIONS

Hilton Bali Resort management should periodically assess, improve, and maintain the physical work setting, with particular attention to room-temperature control and noise originating from meeting areas. Because the non-physical environment shows the stronger statistical contribution, managerial attention should also be directed toward building a more open and collaborative communication climate. Leadership-development initiatives that promote democratic, two-way communication between supervisors and subordinates may help reduce communication barriers associated with seniority.

Subsequent studies may extend the current model by incorporating other determinants of employee performance, including work motivation, compensation, leadership style, or work discipline, since 27.4% of the variance is not explained by the two predictors examined here. Future research could also include several five-star hotels across Bali and combine quantitative and qualitative methods so that the resulting evidence is broader and potentially more generalizable.

REFERENCES

- Ariani, N. P. E., & Atidira, R. (2025). Pengaruh lingkungan kerja fisik dan lingkungan kerja non fisik terhadap kepuasan kerja pegawai Kantor Pertanahan Kabupaten Buleleng. *Jurnal Manajemen dan Bisnis*, 7(1).
- Ariati, D., Hamid, N., & Kusumawati, A. (2023). Non-physical work environment, career development, and work motivation on employee performance. *Ilomata International Journal of Management*, 4(3), 356–367. <https://doi.org/10.52728/ijjm.v4i3.806>
- Arifin, S., & Mirnayanti, S. (2025). Pengaruh lingkungan kerja fisik dan non fisik terhadap kepuasan kerja karyawan PT. Bhadra Cemerlang Lestari (BCL). *JAPB (Jurnal Administrasi Publik dan Bisnis)*, 8(1), 463–478.
- Cintia, E., & Gilang, A. (2021). Pengaruh lingkungan kerja fisik dan nonfisik terhadap kinerja karyawan pada KPPN Bandung I. *Jurnal Sosioteknologi*, 15(1), 136–154.
- Dewi, W. P., Baharsyah, N. A., Dewi, E. R., & Hartono, B. (2025). Perilaku organisasi: Literature review. *Jurnal Kesehatan Tambusai*, 6(1).
- Dharmawan, H. B., & Nugroho, R. H. (2023). Pengaruh lingkungan kerja terhadap kepuasan kerja pada PT Dhamar Tunggal Wulung Kota Kediri. *Reslaj: Religion Education Social Laa Roiba Journal*, 5, 83. <https://doi.org/10.47476/reslaj.v5i1.1253>
- Hasibuan, M. S. P. (2020). *Manajemen sumber daya manusia (Edisi Revisi)*. Bumi Aksara.
- Hikmah, G. S. P., Putro, G. S., Arfiany, & Nurhidayanti. (2024). Pengaruh lingkungan kerja fisik dan non fisik terhadap kinerja pegawai pada Kantor Kecamatan Mallawa Kabupaten Maros. *INNOVATIVE: Journal of Social Science Research*, 4(2), 2750–2760.
- Lase, M. S. (2025). Pengaruh lingkungan kerja non fisik terhadap kinerja pegawai di UPTD Puskesmas Hilizalootano. *Jurnal Ilmu Manajemen*. <https://jurnal.uniraya.ac.id/index.php/IJM>
- Mugniyah, A. A., Darwis, A. M., & Wahyuni, A. (2023). Hubungan lingkungan kerja fisik dan non fisik dengan stres kerja. *Hasanuddin Journal of Public Health*, 4(2), 159–170. <https://doi.org/10.30597/hjph.v4i2.26364>
- Muhtarom, A., Rahman, A., & Basirun, T. S. (2023). Konsep dasar perilaku organisasi. *Jurnal Pendidikan Tambusai*, 7(1), 1421–1427.

- Noorainy, F. (2017). Pengaruh lingkungan kerja fisik dan non fisik terhadap kinerja pegawai pada Sekretariat Daerah Kabupaten Pangandaran. *Jurnal Manajemen*, 1, 75–85.
- Noya, J. (2024). Physical and non-physical work environment on employee performance. *Asian Journal of Management Entrepreneurship and Social Science*, 4(2), 908–912.
- Pasha, M. K., Rismayadi, B., & Pertiwi, W. (2024). Analisis lingkungan kerja fisik untuk meningkatkan kinerja pegawai. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(12), 5347–5362. <https://doi.org/10.47467/elmal.v5i12.5324>
- Puspita, W., & Darwin. (2023). Pengaruh lingkungan kerja fisik dan non fisik terhadap kinerja pegawai di BPKAD Pemerintah Kabupaten Banyuasin. *Edunomika*, 8(1).
- Ranayudha, L. M. (2020). Pengaruh lingkungan kerja fisik dan non fisik terhadap kepuasan kerja karyawan [Skripsi, Universitas Islam Riau].
- Risahondua, N. S., & Laurens, S. (2024). Pengaruh lingkungan kerja fisik dan non fisik terhadap kinerja pegawai. *Journal of Social Science Research*, 4, 7054–7065.
- Rosdiana, D., Rahayu, S., Fitrianty, R., & Wulansari, C. (2025). The influence of physical and non-physical work environment on employee performance in postgraduate UIN Sunan Ampel Surabaya. *Majalah Ilmiah Binaniaga*, 19(7).
- Wijaya, L., & Edimasjar, K. (2025). Pengaruh lingkungan kerja terhadap kinerja karyawan. *Jurnal Kesehatan dan Pembangunan*, 15(2).