

The Influence of Work Environment and Work Motivation on Employee Performance with Work Discipline as an Intervening Variable at PT. Surya Nusantara Sentosa

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Abstract. In the era of global competition, employee performance is a key factor in organizational success, influenced by the work environment, motivation, and discipline. PT. Surya Nusantara Sentosa, an automotive service company, faces challenges in maintaining motivation, discipline, and a conducive work environment across its branches. This study analyzes the influence of work environment and work motivation on employee performance with work discipline as an intervening variable. Data were collected from 240 respondents using questionnaires and analyzed through PLS with SmartPLS 4. The results indicate that: (1) the work environment does not affect employee performance; (2) work motivation affects employee performance; (3) the work environment affects work discipline; (4) work motivation affects work discipline; (5) work discipline affects employee performance; (6) the work environment does not indirectly affect employee performance with work discipline as an intervening variable; and (7) work motivation does not indirectly affect employee performance with work discipline as an intervening variable. These findings highlight the importance of motivation and work discipline as key factors in improving employee performance, while the role of the work environment is more dominant in shaping discipline rather than directly influencing performance.

Keywords: Environment; Motivation; Employee; Discipline.

INTRODUCTION

In an era of global competition, human resources (HR) are the most valuable asset in determining organizational success (Faugoo, 2024a, 2024b). Employees are not only viewed as labor but also as key players in achieving the company's vision, mission, and goals (Akter, 2021; Az-Zaakiyyah, Ausat, & Suherlan, 2024). Therefore, HR must be managed, retained, protected, and developed to ensure productivity and optimal contribution (Sudaryo, Ariwibowo, & Sofiati, 2018).

Human resource management (HRM) plays a vital role in planning, organizing, directing, and supervising employee activities—from recruitment and training to performance appraisal and compensation—to create a conducive work environment (Anggraini et al., 2024; Chiara, Diego, & Mara, 2023). Its primary goal is to enhance employees' roles in achieving organizational productivity (Sudaryo, Ariwibowo, & Sofiati, 2018).

Research shows that motivation, discipline, and the work environment are key determinants of employee performance (Noviantoro, Marisa, & Sakarina, 2022; Rozi, Sundari, & Syaikuddin, 2024; Salsafila, Narpati, Wijayanti, & Yulaeli, 2023). Van de Lande in (Baiti, Djumali, & Kustiyah, 2020) emphasized that productivity is influenced by both internal (motivation, discipline) and external (work environment) factors.

To further understand differences in performance, it is essential to explore the factors influencing them (Lindhard & Larsen, 2016). For instance, organizational culture, managerial approaches, and institutional factors can significantly shape motivation and work discipline across branches (Adinew, 2024). Variations in management styles, leadership approaches, and

workplace culture can lead to substantial differences in employee performance and outcomes (Maamari & Saheb, 2018; Sharma et al., 2025).

The work environment encompasses physical conditions, facilities, atmosphere, relationships among coworkers, and organizational culture (Hamed, Hussain, Jani, Sabri, & Rusli, 2024; Sunarsi, 2019). Research demonstrated that the work environment has a significant positive effect on performance (Aslia A, 2019). In fact (Fajri, Rahman, & Wahyudi 2022) showed that a conducive work environment can improve performance by more than 50%.

In addition to the environment, work motivation is an important internal factor. Motivation is understood as the driving force that encourages employees to achieve optimal performance (Dotulong & Assagaf, 2015). High motivation drives employees to work diligently and comply with regulations, while low motivation results in decreased productivity.

Another internal factor is work discipline. According to Hasibuan (2016), discipline reflects an awareness and willingness to comply with applicable regulations and norms. Work discipline fosters responsibility, orderliness, and work effectiveness. Wardhani (2021) emphasized that discipline has a significant partial effect on employee performance.

The relationship between variables indicates that the work environment and motivation can influence discipline, which in turn impacts performance. A conducive work environment encourages discipline, while high motivation strengthens compliance with regulations (Pratama & Hidayat, 2019). Thus, work discipline has the potential to act as a mediating variable.

This approach is supported by research from (Rachmaniah, 2022), which found that motivation and discipline influence performance through job satisfaction. This finding strengthens the hypothesis that discipline can function as an intervening variable, bridging the effects of the work environment and motivation on performance.

PT. Surya Nusantara Sentosa (SNS) is an automotive services company that has experienced rapid growth since 2017, focusing on vehicle air conditioning maintenance services. To date, SNS has more than 179 partner branches in over 50 cities across Indonesia. With its extensive operational network, ensuring consistent employee performance remains a major challenge for the company, particularly in maintaining service standards across all branches.

As the company expands, SNS faces issues related to performance disparities among branches. Several units demonstrate suboptimal performance, which is suspected to be influenced by the work environment, employee motivation, and discipline. Phenomena such as delays, missed service targets, and customer complaints reinforce the assumption that these factors are constraining performance outcomes.

Therefore, it is important to examine more deeply the influence of work environment and work motivation on employee performance with work discipline as an intervening variable. This study is expected to provide a comprehensive understanding of the factors influencing performance and serve as a foundation for formulating effective HR management strategies for SNS.

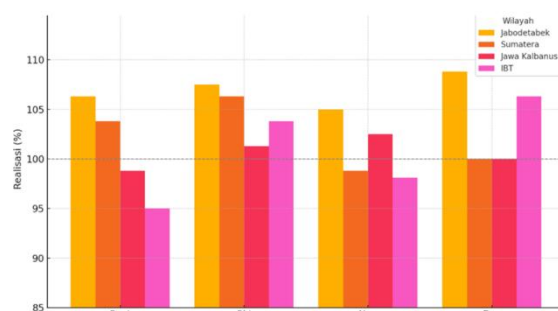


Figure 1. Work Target and Actual Data per Region PT. SNS, September-December 2024

Source: HRD Executive (2025)

The urgency of this research lies in the observed performance discrepancies among PT. Surya Nusantara Sentosa (SNS) branches. Several branches have demonstrated suboptimal performance, raising concerns about factors such as the work environment, motivation, and discipline. These performance gaps have both operational and financial consequences, including missed service targets, delays, and an increase in customer complaints. Understanding the root causes of these issues will not only help address operational inefficiencies but also minimize potential financial losses, ensuring SNS's long-term sustainability and growth.

The novelty of this study lies in its approach to examining the complex relationships between the work environment, work motivation, and employee performance. By utilizing mediation analysis, this research provides a more detailed exploration of the causal mechanisms, emphasizing how work discipline functions as an intervening variable between the work environment, motivation, and performance. This method offers a deeper understanding of the dynamics within SNS's workforce, which has not been explored in previous studies on The Influence of Work Environment and Work Motivation on Employee Performance with Work Discipline as an Intervening Variable at PT. Surya Nusantara Sentosa.

The primary objective of this study is to analyze the influence of the work environment and work motivation on employee performance, with work discipline serving as an intervening variable. The findings of this research are expected to provide SNS with valuable insights to improve HR strategies, enhance employee performance, and achieve organizational goals more effectively. Additionally, the study will contribute to the broader field of HRM by offering empirical evidence of the impact of work discipline as a mediating factor.

MATERIALS AND METHOD

This study employed a quantitative approach using a survey method through questionnaires. The research design was explanatory, aiming to test the influence between variables and to explain the direct and indirect relationships among the work environment, work motivation, and employee performance, with work discipline functioning as an intervening variable. The subjects of this study were employees of PT. Surya Nusantara Sentosa, while the research variables included the work environment, motivation, performance, and discipline.

The population consisted of all employees working at PT. Surya Nusantara Sentosa. Since the total number of employees was known, the sample size was determined using the

Slovin formula, as referenced by (Nilawati & Fati 2023).

Based on the Slovin formula, the sample size can be determined as follows:

$$n = \frac{594}{1 + Ne^2}$$
$$n = \frac{594}{1 + 594(0.05)^2}$$
$$n = \frac{594}{2.485}$$
$$n = 239.03$$

Description:

n: Number of samples

N: Population size

e2: Error tolerance limit

The sample population required for this study was calculated to be 239.03 employees of PT. Surya Nusantara Sentosa (SNS). For convenience, the number of respondents was rounded to 240 employees.

The sampling technique used was purposive sampling, a non-probability method determined by specific criteria. The respondents selected for this study were:

1. Employees of PT. Surya Nusantara Sentosa aged at least 20 years.
2. Employees who had worked for a minimum of six months.

The study utilized both primary and secondary data sources (Sugiyono, 2022). Secondary data were obtained from internal company documents and archives, including financial reports, organizational structures, and personnel administration data. Primary data were collected directly from respondents through a structured questionnaire distributed to selected employees.

The research began with identifying the problem of employee performance at PT. Surya Nusantara Sentosa, which was influenced by the work environment, motivation, and work discipline. Research objectives were then formulated to guide the study. A literature review was conducted to examine previous theories and relevant research, forming the basis for hypothesis development.

Data collection was carried out using a Google Form-based questionnaire distributed to 240 purposively selected respondents. The questionnaire was designed based on indicators of each research variable. The data obtained were analyzed descriptively to describe respondent characteristics and inferentially using the Partial Least Squares (PLS) method through SmartPLS 4 to test the measurement model, structural model, and hypotheses of both direct and indirect effects.

The analysis results were used to develop the research model and discussion, comparing findings with existing theories and prior studies while identifying practical implications. The final stage involved drawing conclusions based on hypothesis testing results and formulating recommendations for the company and future research.

RESULTS AND DISCUSSION

Outer Model

Validity Test

Convergent validity is a test to ensure that the indicators that are supposed to measure a construct (latent variable) are truly highly correlated with each other. To test convergent validity, the loading factor value in SmartPLS 4.0 software is used. The loading factor value must be greater than 0.70 for the research construct to be accepted and considered valid. The results of the convergent validity test for all statement items covering work environment, work motivation, employee performance, and work discipline indicated that there were invalid variable indicators, namely X2.1 (physical needs) and Z1.5 (responsibility). Therefore, corrections to these invalid indicators were required by deleting them. The results of the convergent validity test after corrections showed an outer loading value >0.70 and an AVE value >0.50 . Therefore, all variables in this study were declared valid and met the requirements for data analysis.

Discriminant validity was conducted by examining the cross-loading values of the indicators. Discriminant validity is considered good if an indicator correlates more highly with its variable than with other variables. The discriminant test results indicate that all indicators have cross-loading values >0.70 . Therefore, all variables in this study can be considered valid and meet the requirements for data analysis.

Reliability Test

Construct reliability was tested using composite reliability and Cronbach's alpha values for the construct indicator blocks. A construct is considered reliable if it has a composite reliability >0.70 and a Cronbach's alpha >0.70 .

The reliability test results indicate that all indicators have composite reliability and Cronbach's alpha >0.70 . Therefore, all variables in this study can be said to have good reliability.

Inner Model

The R-Square test measures the extent to which endogenous variables are influenced by exogenous variables. Based on the R-Square test results, it is clear that the work environment and work motivation variables have an influence of 0.106, or 10.6%, on work discipline. The remaining 89.4% is influenced by other variables not included in this study, such as job training and job satisfaction. It can be concluded that the R^2 value for work discipline is in the weak category. The work environment and work motivation through work discipline have an influence on employee performance of 0.598, or 59.8%, while the remaining 49.2% is influenced by other variables not included in this study. It can be concluded that the R^2 value for employee performance is in the moderate category.

The F-Square test measures the model's effectiveness. A value greater than 0.15 is expected to indicate a good model fit. Based on the F-Square test results, it can be seen that only the relationship between work motivation (X2) and the work environment (X1) showed an f^2 value of 1.048, work environment (X1) and work discipline (Z) of 0.019, work motivation (X2) and work discipline (Z) of 0.075, and work discipline (Z) and employee performance (Y) of 0.061.

From these test results, it can be concluded that only the work motivation and work

environment variables meet the criteria for a fairly good model ($f^2 > 0.15$). The other relationships had f^2 values below 0.15, and therefore were considered to contribute less strongly to the model.

The Q-Square to measure a model is said to have predictive relevance if it has a Q^2 value > 0 . A model is said to have poor predictive ability if it has a Q^2 value < 0 .

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \dots (1 - R_p^2)$$

$$Q^2 = 1 - (1 - 0.098)(1 - 0.593) = 0.64$$

Based on the calculation above, the Q-square value is greater than 0 (zero), indicating that the model has predictive relevance.

Goodness of Fit (GoF) tests the extent to which the model fits the research data. A model is considered good if the GoF value is above 0.38.

$$GoF = \sqrt{AVE * R^2}$$

$$GoF = \sqrt{AVE * R^2} = \sqrt{0.640 * 0.352} = 0.474$$

Based on the calculation above, the Goodness of Fit (Gof) value is greater than 0.38, namely 0.474, indicating that the model has a good Gof value.

Hypothesis Testing

This research hypothesis was tested using a bootstrapping procedure on sample data obtained from the previously tested structural model. This hypothesis test must meet two criteria for direct and indirect effects: the probability value (P-value) and the T-statistic value. The hypothesis is accepted if the t-statistic value is greater than the t-table value. In this study, the hypothesis was tested using a two-tailed test with a significance level (alpha) of 5% (0.05).

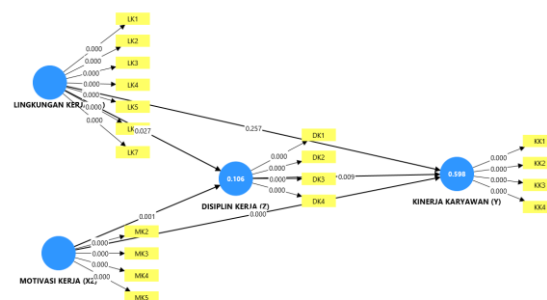


Figure 1. Bootstrapping

Direct Effect

of Work Environment (WE) on Employee Performance (EMP)

The work environment has a path coefficient of 0.051 on employee performance. This indicates that the work environment has a positive effect on employee performance. However, with a probability value (p-value) of 0.257 (> 0.05), supported by a T-statistic of $1.137 < T$ -table of 1.64, this indicates that the work environment does not significantly influence employee performance at PT. Surya Nusantara Sentosa. Although the direction of the effect was positive in the original sample, the effect was not statistically strong enough to be considered significant. Therefore, the hypothesis stating that the work environment influences

employee performance cannot be accepted.

Work Motivation (WE) on Employee Performance (EMP)

Work motivation has a path coefficient of 0.693 on employee performance. This indicates that work motivation has a positive effect on employee performance. The p-value is 0.000 (<0.05) and the T-statistics value is $13.101 > T\text{-table} = 1.64$, indicating that work motivation significantly influences employee performance at PT. Surya Nusantara Sentosa. The higher the work motivation, the higher the employee performance. Therefore, the hypothesis that work motivation influences employee performance is accepted.

Work Environment (WE) on Work Discipline (DK)

The work environment has a path coefficient of 0.134 on work discipline. This indicates that the work environment has a positive effect on work discipline. The p-value is 0.027 (<0.05) and the T-statistics value is $2.219 > T\text{-table} = 1.64$. This indicates that the work environment significantly influences work discipline at PT. Surya Nusantara Sentosa. The better the work environment, the better the employee discipline. Therefore, the hypothesis that the work environment influences work discipline is accepted.

Work Motivation (MK) on Work Discipline (DK)

Work motivation has a path coefficient of 0.226 on work discipline. This indicates that work motivation has a positive effect on work discipline. The probability value (p-value) is 0.001 (<0.05) and the T-statistics value is $3.449 > T\text{-table} = 1.64$. This indicates that work motivation has a significant effect on work discipline at PT. Surya Nusantara Sentosa. The better the work motivation, the better the employee discipline. Therefore, the hypothesis that work motivation influences work discipline is accepted.

Work Discipline (DK) on Employee Performance (KK)

Work discipline has a path coefficient of 0.165 on employee performance. This indicates that work discipline has a positive effect on employee performance. The probability value (p-value) is 0.009 (<0.05) and the T-statistics value is $2.619 > T\text{-table} = 1.64$. This indicates that work discipline has a significant effect on employee performance at PT. Surya Nusantara Sentosa. The better the work discipline, the better the employee performance. Therefore, the hypothesis that work discipline influences employee performance is accepted.

Indirect Effect

Relationship between Work Environment (WE) and Employee Performance (KK) with Work Discipline as an Intervening Variable (DK)

The original sample value for the total indirect effect of the work environment on employee performance at PT. Surya Nusantara Sentosa was 0.022, with a t-statistic of 1.329, which is smaller than the t-table value (1.96), and a p-value of 0.185, which is greater than 0.05. This indicates that the hypothesis stating that work discipline does not indirectly mediate the influence of the work environment on employee performance.

Relationship between Work Motivation (WE) and Employee Performance (KK) with

Work Discipline as an Intervening Variable (DK)

The original sample value for the total indirect effect of the work environment on employee performance at PT. Surya Nusantara Sentosa is 0.044 with a t-statistic value of 1.519, which is smaller than the t-table value (1.96), and a p-value of 0.130, which is greater than 0.05. This indicates that the hypothesis stating that work discipline does not indirectly mediate the effect of work motivation on employee performance.

CONCLUSIONS

Based on the analysis results, the study concluded that the work environment had no direct or indirect effect on employee performance at PT. Surya Nusantara Sentosa, while work motivation significantly influenced both employee performance and work discipline. The work environment and work motivation each affected work discipline, which in turn had a positive impact on employee performance. However, neither the work environment nor work motivation indirectly influenced performance through work discipline as an intervening variable. Future research should explore additional factors—such as leadership style, organizational culture, or employee engagement—that may further explain variations in performance and strengthen the mediating role of work discipline.

REFERENCES

- Adinew, Y. (2024). A comparative study on motivational strategies, organizational culture, and climate in public and private institutions. *Current Psychology*, 43(13), 11470–11492.
- Assagaf, S. C. Y., & Dotulong, L. O. H. (2015). Pengaruh disiplin, motivasi dan semangat kerja terhadap produktivitas kerja pegawai Dinas Pendapatan Daerah Kota Manado. *Jurnal EMBA*, 3(2), 639–649. <https://doi.org/10.32400/emba.v3i2.2015>
- Aslia, A. F. (2019). Pengaruh lingkungan kerja terhadap kinerja karyawan pada PT. Amanah Finance. *Jurnal Profitability Fakultas Ekonomi dan Bisnis*, 3(1), 66–90.
- Akter, S. (2021). Companies' vision, mission, and core values focus on human resource management. *International Journal of Financial, Accounting, and Management*, 2(4), 343–355.
- Angraini, E., Alqoisya, N., Nuraeny, I., Fauziah, L. F., Huda, M., & Hadiati, E. (2024). Human resource management concept. *Proceeding of International Conference on Education, Society and Humanity*, 2(2), 1456–1465.
- Az-Zaakiyyah, H. K., Ausat, A. M. A., & Suherlan, S. (2024). Corporate culture and employee performance: The role of vision, mission, norms, and employee focus. *Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan*, 18(4), 2647–2659.
- Baiti, K. N., Djumali, & Kustiyah, E. (2020). Produktivitas kerja karyawan ditinjau dari motivasi, disiplin kerja dan lingkungan kerja pada PT. Iskandar Indah Printing Textile Surakarta. *Edunomika*, 4(1), 69–87.
- Cappelletti, C., Valenti, D., & Saresella, M. (2023). Human resource management (human resource planning). *Sharia Oikonomia Law Journal*, 1(1), 49–60.
- Fajri, C., Rahman, Y. T., & Wahyudi, W. (2022). Membangun kinerja melalui lingkungan kondusif, pemberian motivasi, dan proporsional beban kerja. *SJR: Studi Jurnal Riset*, 1(3), 365–372. <https://ojspustek.org/index.php/SJR/article/view/269>
- Faugoo, D. (2024a). Human capital as strategic valued assets: Core drivers of organizational success in the modern-day workplace. *International Journal of Business and Technology Management*, 6(3), 617–628.

- Faugoo, D. (2024b). Human resources as valued assets/human capital: An essential prerequisite for organisational success. *Proceedings of the 5th International Conference on Management, Education, Social Sciences and Innovation*, 27, 1–11.
- Hamed, S. A., Hussain, M. R. M., Jani, H. H. M., Sabri, S. S. S., & Rusli, N. (2024). The influence of physical workplace environment (PWE) for a healthy culture of employees. *Journal of Health and Quality of Life*, 2(1), 1–11.
- Lindhard, S., & Larsen, J. K. (2016). Identifying the key process factors affecting project performance. *Engineering, Construction and Architectural Management*, 23(5), 657–673.
- Maamari, B. E., & Saheb, A. (2018). How organizational culture and leadership style affect employees' performance of genders. *International Journal of Organizational Analysis*, 26(4), 630–651.
- Nilawati, & Fati, N. (2023). *Metodologi penelitian*. Tanjung Pati: Politeknik Pertanian Negeri Payakumbuh.
- Noviantoro, D., Marisa, S., & Sakarina, S. (2022). The influence of communication, work motivation and work environment on employee performance with work discipline as a mediating variable. *Accounting & Finance/Oblik i Finansi*, 98(4).
- Rachmaniah, R. (2022). Pengaruh disiplin kerja dan motivasi kerja terhadap kinerja karyawan dengan kepuasan kerja sebagai variabel intervening. *Jurnal Manajerial*, 9(3), 351–367. <https://doi.org/10.30587/manajerial.v9i03.4037>
- Rozi, A. F., Sundari, A., & Syaikuddin, A. Y. (2024). Work environment, employee motivation, and discipline as drivers of employee performance in local government-owned bank. *Klabat Journal of Management*, 5(2), 167–183.
- Salsafila, P. H., Narpati, B., Wijayanti, M., & Yulaeli, T. (2023). The influence of work discipline, work motivation, and work environment on employee performance. *International Journal of Accounting, Management, Economics and Social Sciences (IJAMECS)*, 1(6), 882–894.
- Sharma, K., Joshi, C. K., Boopathy, M. C., Kazmi, S., Arumugam, S., & Attri, R. K. (2025). The impact of organizational culture on employee performance: A study of leadership styles and workplace productivity. *Metallurgical and Materials Engineering*, 205–215.
- Sunarsi, D. (2019). The analysis of the work environmental and organizational cultural impact on the performance and implication of the work satisfaction. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran dan Penelitian Administrasi Publik*, 9(2), 237–246.
- Sudaryo, Y., Ariwibowo, A., & Sofiati, N. A. (2018). *Manajemen sumber daya manusia, kompensasi tidak langsung dan lingkungan kerja fisik*. Yogyakarta: ANDI.
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- Wardhani, W. (2021). Pengaruh disiplin dan kepemimpinan terhadap kinerja karyawan. *E-Journal UIGM*. <https://ejournal.uigm.ac.id/index.php/EG/article/view/1567>

