

The Influence of Motivation and Work Culture on Employee Performance at the Isotope and Radiation Application Center - National Nuclear Energy Agency, Lebak Bulus, South Jakarta

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ABSTRACT

This study concludes that leadership and work discipline significantly affect employee performance in a beauty clinic in Bandung. Both variables have been demonstrated to enhance staff productivity and work efficiency significantly. Effective leadership fosters a supportive work environment wherein individuals feel encouraged, directed, and inspired to attain optimal outcomes. An effective leader provides clear guidance and fosters open communication with the team, enabling people to execute their tasks confidently.

Moreover, work discipline is a crucial element in enhancing performance. Effective discipline signifies employee adherence to regulations and obligations inside the workplace. This condition is shown in punctuality, achievement of job objectives, and persistence in task execution. Work discipline is crucial for upholding high and consistent performance levels in a clinical setting, where patient care quality significantly influences reputation and operations.

The correlation between leadership and work discipline indicates that effective leadership can foster enhanced employee discipline. Leaders who can implement regulations decisively yet equitably will foster a disciplined work environment, inspiring employees to adhere to relevant protocols. Employees who perceive appreciation and encouragement from their bosses typically exhibit a more disciplined work ethic. Consequently, both are interrelated and mutually enhance one another in promoting superior performance. This study's findings underscore the significance of clinic management in fostering an inclusive leadership style and promoting a culture of discipline. Enhancing employee performance can be accomplished not only via effective leadership but also through the establishment of consistent disciplinary measures. Consequently, strategic measures encompassing leadership development and enhancing work discipline are necessary. A Beauty Clinic in Bandung can enhance patient service quality by optimizing human resource management, emphasizing leadership development, and rigorous discipline enforcement.

Keywords: Motivation, Work Culture and Employee Performance.

INTRODUCTION

Management is a distinct process involving planning, organizing, motivating, and directing actions to establish direction and attain specified objectives using people and other resources. Effective administration is essential, as the absence of proficient oversight diminishes the success of the organization's endeavors. The success of an organization is contingent upon the manager's capacity to facilitate collaboration. Leading, organizing, managing, controlling, and developing organizational activities constitute management activities.

Human Resources encompass the cohesive capacity of an individual's mental and physical faculties. Human Resources is crucial and strategic in attaining objectives within the organization. Human Resources are essential for firms in managing, coordinating, and optimizing personnel utilization to ensure productive operations that align with corporate objectives. Human Resources serve as the pivotal element in the organization's attainment of its objectives; thus, the organization must continue to motivate employees to enhance their performance. Employees are expected to realize high-quality work outcomes (employee performance) and effectively fulfill their responsibilities.

The significance of human resources in an organization necessitates using strategies to

inspire people to optimize their performance and capabilities.

The performance of its employees significantly determines the efficacy of an organization. Organizations consistently endeavor to enhance employee performance to achieve their objectives. Diverse organizations, institutions, enterprises, and agencies endeavor to enhance the performance of all components inside their entities to ensure organizational sustainability. The performance of the company's employees evidences its possession of dependable and high-caliber human resources. Employee performance is evaluated by a corporation or agency based on policy formulation, competence, self-improvement, and motivation to achieve optimal work outcomes. (Kuo, Khan, Islam, Abdullah, Pradana & Kaewsaeng-On, 2022; Liu, Yin, Li, Qiao & Chen, 2023; Alarabiat & Eyupoglu, 2022)

Indonesia is facing a significant health crisis. The issue is the dissemination of the coronavirus, specifically Covid-19. Indonesia has encountered health issues prompting the government to develop rules to mitigate the virus, specifically by enforcing social and physical distancing measures to minimize interpersonal connections. This condition occurs due to the physical restrictions on community activities to mitigate the transmission of the virus. In response to the government appeal and the necessity of limiting large gatherings, most companies have adopted

remote work policies, enabling employees to maintain productivity and meet deadlines through technological advancements, including online media, video conferencing, and other applications that facilitate collaboration without physical interaction. (Iis, Wahyuddin, Thoyib, Ilham & Sinta, 2022; Tampi, Nabella & Sari, 2022; Zhenjing, Chupradit, Ku, Nassani & Haffar, 2022)

The government's policy to enforce remote work has resulted in certain employees working from home. The drawbacks of remote work manifest in a manner that diverges from employees' expectations, as they incur increased expenses related to internet usage for professional purposes. Although these costs are reimbursed by their respective employers, they still pose a challenge due to the varying internet speed requirements in different residential areas, necessitating additional expenditures to enhance connectivity. A notable disadvantage of the work-from-home model is the decline in employee motivation due to the absence of direct supervision from superiors, as is customary in traditional work environments. This lack of oversight often leads to procrastination in task completion, resulting in diminished employee performance. (Nurlina, 2022; Triansyah, Hejin & Stefania, 2023; Kwarteng, Frimpong, Asare & Wiredu, 2024)

Additionally, the home environment can be a significant source of distraction, particularly for female employees, who frequently prioritize

household responsibilities before attending to their work obligations. This dynamic presents a considerable challenge for female employees in effectively executing the work-from-home concept. Performance is crucial as an individual must provide quality and quantity in their work outputs while fulfilling their obligations. (Bellora, Cabello, Barral, Ciafardini, Viva, Corti & Vildosola, 2023; Suryawan, 2024; Koutsoumpa, 2023)

The National Nuclear Energy Agency's performance could be better. Suboptimal employee performance is evident in the work results concerning SKP (employee work targets), which must meet expectations. Employee behavior deviates from agency standards, and more creativity is needed. The quality of human resources necessary for success and overall performance must reflect this.

The average total number of employees and work metrics are currently undergoing adjustments. The assessment conducted is to ascertain the organization's advancement. The evaluations conducted by each department head subsequently aggregated within the domain of employee recruitment, indicated that work quality, work quantity, task execution in disciplinary actions, and employee accountability achieved only 64.2% in 2016. This figure rose to 70.0% in 2017, increased to 70.3% in 2018, but declined to 64.0% in 2019. The entire average score was merely 67.1% under moderate standards. Subpar employee performance is believed to be affected

by inadequate motivation. Consequently, motivation is a significant aspect that profoundly impacts employee performance.

Employee collaboration from 2016 to 2020 had variable percentage growth. Regarding income enhancement, it achieved an average of 35.65%, while the safety culture value at work attained 70.61%. Compliance with operational standards or work order provisions reached 70%, and competence enhancement only reached 46.92%. The graph exhibits a consistent reduction over the years. This indicates that such conditions must be promptly enhanced to ensure high employee motivation. Suboptimal employee performance may also be attributed to the influence of workplace culture.

Consequently, work culture is a significant determinant of employee performance. Nonetheless, the efficacy of hard work in yielding anticipated results remains uncertain until it is directed toward a leader to fulfill organizational objectives. Consequently, the aforementioned activities are aligned and more congruent with the firm's objectives. Organizations must determine their members' preferences to foster job happiness by addressing both intrinsic motivators and extrinsic hygiene concerns.

An unfulfilled need generates tension that motivates an individual to pursue a specific goal. Consequently, motivation is crucial as it pertains to human requirements that must align with organizational objectives. Performance

enhancement is attainable with effective management. This management should involve a cyclical process involving planning, implementation, monitoring, and evaluation stages. The performance assessment outcomes serve as feedback for the subsequent planning phase. All organizations anticipate high performance from their personnel. Employee performance data is acquired via performance evaluations. The outcomes of employee performance evaluations indicate an employee's effectiveness, as evidenced by the comparison between the organizational performance benchmarks and the employee's performance assessment categories. A higher assessment indicates that the employee's performance meets the organization's expectations.

The author's preliminary research on employee performance at the Isotope and Radiation Application Center in Lebak Bulus, South Jakarta, indicates suboptimal work achievement, as evidenced by a significant number of employees exhibiting low attendance and discipline, failure to meet work completion targets and inconsistent service quality. (Lesmana & Damanik, 2022; Kim & Jung, 2022; Wahyuni, Ramli & Mawardi, 2023)

Based on the aforementioned issues, the author intends to research a thesis titled "The Influence of Motivation and Work Culture on Employee Performance at the Isotope and

Radiation Application Center-National Nuclear Energy Agency in Lebak Bulus, South Jakarta."

METHOD

This journal employs a descriptive-analytic methodology. This method seeks to elucidate the correlation among motivation, work culture, and employee performance at the Isotope and Radiation Application Center—National Nuclear Energy Agency in Lebak Bulus, South Jakarta. The collected data are statistically processed and evaluated using pertinent theoretical frameworks to elucidate the research subject and derive conclusions from the findings.

A descriptive study aims to gather comprehensive knowledge regarding interconnected conditions and occurrences, namely motivation, work culture, and employee performance. The acquired data will be analyzed using established theoretical frameworks to elucidate the relationship between the examined variables. The objective is to methodically comprehend and elucidate the challenges employees encounter concerning motivation and workplace culture and their impact on performance.

The data collection strategy employed in this study utilized a survey method conducted in a natural context without manipulating the research subjects. The researcher employed a questionnaire as the primary instrument for data

collection, which was disseminated to the whole population of employees at the Isotope and Radiation Application Center, including 144 individuals. This study used a saturation sample technique, utilizing all population members as respondents due to the manageable population size that facilitates thorough sampling. Statistical testing was conducted on the study instrument to assess the validity and reliability of the data, ensuring that the questionnaire accurately measured the researched variables (validity) and yielded consistent results (reliability). Validity testing evaluates whether the instrument accurately measures the intended construct, and reliability testing confirms the consistency of measurement outcomes when replicated under identical conditions. After data processing, the study's results are analyzed, and conclusions are formulated to elucidate the impact of motivation and work culture on employee performance.

RESULTS and DISCUSSION

The research instrument comprises two components: the validity and reliability tests. This instrument test is conducted to ascertain the feasibility of a measuring instrument (questionnaire) in research. The subsequent results pertain to the validity and reliability tests administered by the researcher.

The validity test assesses the accuracy and consistency of the research instrument utilized in data gathering. The product-moment correlation determines the validity index. The statement item is

deemed valid if the correlation coefficient exceeds 0.3. A statistical method is employed to assess the reliability of a measuring device, namely through the reliability coefficient; if this number exceeds 0.7, the equipment can be deemed dependable. The subsequent results pertain to the validity and reliability tests for each variable.

Table 1. Assessment of Validity and Reliability

No	Motivatio n	Work Cultur e	Employee Performanc e
1	0.748	0.556	0.817
2	0.722	0.419	0.785
3	0.724	0.662	0.735
4	0.777	0.543	0.841
5	0.647	0.529	0.668
6	0.768	0.704	0.800
7	0.812	0.667	0.876
8	0.814	0.716	0.888
9	0.778	0.587	0.876
10	0.810	0.701	0.851
11	0.854	0.796	0.896
12	0.772	0.592	0.781
13	0.713	0.703	0.736
14	0.799	0.728	0.818
15	0.731	0.762	0.769
Cronbach' s Alpha	0,959	0,924	0,968

Table 1 presents the outcomes of the validity and reliability assessments for the three primary variables in this study: leadership, work culture, and employee performance. The validity test assesses the extent to which the research instrument accurately represents the measured variables. In contrast, the reliability test evaluates the consistency of the data produced by the research instrument. This table presents the correlation coefficients among the items in the instrument alongside Cronbach's Alpha values for

each variable. The leadership variable exhibits a strong correlation among all components, with values ranging from 0.647 to 0.814. This result signifies that each item in the instrument demonstrates a high level of validity, as most correlation coefficients exceed 0.70, which is typically regarded as the minimal standard for acceptable item validity. This condition indicates that these items are dependable for assessing the leadership variable. Cronbach's Alpha rating for the leadership variable is 0.959, signifying an exceptionally high degree of reliability. An instrument is considered dependable if its Cronbach's Alpha value exceeds 0.70. Consequently, the instrument employed to assess leadership demonstrates high consistency and reliability.

The correlation values among items within the work culture variable range from 0.419 to 0.796. While certain items exhibit correlation values below 0.70, including the second and fourth items with values of 0.419 and 0.543, respectively, most items have satisfactory correlation values beyond 0.70. This condition indicates that despite certain less valid elements, the instrument remains sufficiently effective for assessing work culture. The Cronbach's Alpha coefficient for the work culture variable is 0.924, signifying the instrument's excellent reliability. Despite multiple items with low validity, the high-reliability value signifies that this instrument consistently measures the work culture variable.

The correlation coefficient for the employee performance variable among items varies from 0.668 to 0.896. All elements in this variable exhibit correlation values exceeding 0.60, signifying that the instrument employed to assess employee performance is valid. The elevated correlation score

signifies that each item in the instrument effectively represents employee performance characteristics. The Cronbach's Alpha coefficient for the employee performance variable is 0.968, indicating the instrument's exceptional reliability. Consequently, this tool demonstrates high consistency and reliability in assessing employee performance. The validity and reliability assessments presented in this table demonstrate that the instrument employed in this study is generally dependable for measuring the examined variables. Despite multiple items with poor correlation values, each variable's elevated Cronbach's Alpha signifies that the instrument consistently yields reliable results. Consequently, researchers may ascertain that the data gathered via this instrument is accurate and reliable for subsequent analysis of the impact of motivation and work culture on employee performance.

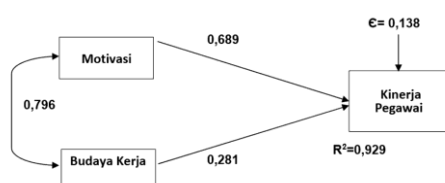


Figure 1. Path Analysis

Figure 1 depicts the relational model among motivation, work culture, and employee performance characteristics examined in this study. This model illustrates the direct impact of motivation and work culture on employee performance at the Isotope and Radiation Application Center - National Nuclear Energy Agency in Lebak Bulus, South Jakarta. The model presents the correlation coefficient, the impact of each variable, and the coefficient of determination (R^2), indicating the extent of effect the independent

variable exerts on the dependent variable. Initially, we examine the impact of motivation on employee performance, as evidenced by a path coefficient of 0.689. This condition indicates that motivation significantly enhances employee performance. Higher employee motivation correlates with improved performance outcomes. This result aligns with numerous human resource management ideas that assert motivation is a primary component driving individuals to exert more significant effort, maintain focus, and enhance productivity. Compelling motivation can stem from intrinsic and extrinsic variables, including incentives, rewards, well-defined objectives, and a conducive work atmosphere. Within the scope of this study, these motivational elements significantly enhance staff performance at the Isotope and Radiation Application Center.

Moreover, work culture significantly impacts employee performance, evidenced by a path coefficient 0.281. While its impact is less significant than motivation, work culture positively enhances employee performance. An influential work culture fosters a happy, collaborative, and inventive atmosphere, enabling employees to feel at ease and to contribute optimally. Work culture includes the principles embraced by the organization, daily work practices, and managerial attitudes toward employees. At the Isotope and Radiation Application Center, a positive work culture is evidenced by collaboration, commitment to job quality, and encouragement of employee skill enhancement. A positive work culture fosters greater employee attachment to the organization and enhances motivation for maximum performance.

This chart illustrates a correlation coefficient of 0.796 between motivation and work culture. This result signifies a strong correlation between the two factors, wherein elevated motivation is typically associated with a favorable work culture. In firms with a positive work culture, individuals are more inclined to be motivated to exert more significant effort and attain superior outcomes. In contrast, employee motivation may diminish in businesses with a less supportive work culture. Consequently, firms must cultivate a work culture that continuously fosters employee incentives to enhance performance.

The R^2 value of 0.929 in this model indicates that motivation and work culture collectively account for 92.9% of the variance in employee performance. This elevated number signifies that motivation and work culture are significant determinants of employee success at the Isotope and Radiation Application Center. The residual 7.1% is attributed to factors not encompassed by this model. Consequently, these findings underscore the significance of motivation and organizational culture in influencing employee performance.

The epsilon (ϵ) value of 0.138 signifies the extent of the impact of factors outside motivation and work culture on employee performance. This score is comparatively low, indicating that the factors of motivation and work culture may effectively elucidate the majority of employee performance. Many elements may influence employee performance, including leadership, management systems, work experience, education, and the external environment. However, their impact is not as significant as motivation and work culture.

In conclusion, the model depicted in Figure 1 elucidates the significance of motivation and work culture in impacting employee performance. Motivation exerts a more significant impact than work culture; nonetheless, both are interconnected and play a crucial role in shaping employee performance. Organizations must prioritize enhancing employee motivation by implementing career development programs, offering suitable rewards, and fostering a happy work environment by reinforcing a supportive organizational culture. Consequently, it is anticipated that employee performance will persist in its enhancement, ultimately benefiting the attainment of overarching organizational objectives.

This study significantly enhances comprehension of the elements affecting employee performance, particularly within the specialized context of the Center for Isotope and Radiation Applications—National Nuclear Energy Agency. These findings can serve as a foundation for management to develop more effective human resource management policies and foster a productive and highly competitive work environment.

CONCLUSION

The research findings indicate that motivation and work culture significantly enhance employee performance at the Center for Isotope and Radiation Applications - National Nuclear Energy Agency in Lebak Bulus, South Jakarta. Motivation has been established as the primary determinant of employee performance. Employees who possess elevated intrinsic or extrinsic motivation exert more effort and demonstrate enhanced commitment to their

obligations and responsibilities. Elevated motivation propels individuals to attain organizational objectives with more efficacy and efficiency.

Conversely, work culture significantly impacts employee performance, but to a lesser extent than motivation. An affirmative work culture fosters a supportive atmosphere in which employees feel valued and comfortable and exhibit a strong spirit of collaboration. An influential work culture promotes productivity, enhances employee involvement, and cultivates a sense of task accountability. Consequently, while work culture is not as critical as motivation in enhancing performance, a positive work culture remains significant in fostering an environment conducive to optimal employee productivity.

This study demonstrates a strong correlation between motivation and workplace culture. Elevated motivation frequently correlates with a positive work culture. People are often more motivated in a workplace characterized by a robust and good culture. Employee motivation may be hindered if an organization's work culture is supportiveimproved. Consequently, firms must prioritize enhancing employee motivation and cultivating a positive work culture. This study emphasizes the significance of motivation and workplace culture in affecting employee performance. Organizations seeking to enhance employee performance must focus on these two areas. Organizations can enhance performance by augmenting motivation through diverse reward systems, career growth, and suitable incentives while fostering a work culture promoting cooperation, innovation, and workplace comfort. These insights serve as a foundation for management to develop more effective policies and methods for optimizing

human resource management to meet organizational objectives.

REFERENCES

- Alarabiat, Y. A., & Eyupoglu, S. (2022). Is silence golden? The influence of employee silence on the transactional leadership and job satisfaction relationship. *Sustainability*, 14(22), 15205.
- Bellora, M. S., Cabello, F. M., Barral, M. A., Ciafardini, M., Viva, F. A., Corti, H. R., & Vildosola, V. L. (2023). Effect of the Substrate and the Morphology on Electrochemical Separation of Lithium Isotopes: Insights from DFT. *The Journal of Physical Chemistry C*, 127(44), 21713-21720.
- lis, E. Y., Wahyuddin, W., Thoyib, A., Ilham, R. N., & Sinta, I. (2022). The effect of career development and work environment on employee performance with work motivation as intervening variable at the office of agriculture and livestock in Aceh. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 2(2), 227-236.
- Kim, J., & Jung, H. S. (2022). The effect of employee competency and organizational culture on employees' perceived stress for better workplace. *International Journal of*

- Environmental Research and Public Health*, 19(8), 4428.
- Koutsoumpa, E. (2023). Effect of Emotional Intelligence on Work Performance: A Comprehensive Analysis. *Technium Business and Management*, 5, 15-27.
- Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsang-On, R. (2022). Impact of green HRM practices on environmental performance: The mediating role of green innovation. *Frontiers in Psychology*, 13, 916723.
- Kwarteng, S., Frimpong, S. O., Asare, R., & Wiredu, T. J. N. (2024). Effect of employee recognition, employee engagement on their productivity: the role of transformational leadership style at Ghana health service. *Current Psychology*, 43(6), 5502-5513.
- Lesmana, M. T., & Damanik, F. A. (2022). The Influence of Work Environment, Work Discipline and Motivation on Employee Performance. *International Journal of Economics, Social Science, Entrepreneurship and Technology (IJESET)*, 1(1), 36-49.
- Liu, Z., Yin, X., Li, H., Qiao, D., & Chen, L. (2023). Effects of different floral periods and environmental factors on royal jelly identification by stable isotopes and machine learning analyses during non-migratory beekeeping. *Food Research International*, 173, 113360.
- Nurlina, N. (2022). Examining linkage between transactional leadership, organizational culture, commitment and compensation on work satisfaction and performance. *Golden Ratio of Human Resource Management*, 2(2), 108-122.
- Suryawan, I. N. (2024). Does Employee-Related Factors Success Mediate To The MSME's Marine Products Business?. *Jurnal Manajemen*, 28(3), 613-630.
- Tampi, P. P., Nabella, S. D., & Sari, D. P. (2022). The influence of information technology users, employee empowerment, and work culture on employee performance at the Ministry of Law and Human Rights Regional Office of Riau Islands. *Enrichment: Journal of Management*, 12(3), 1620-1628.
- Triansyah, F. A., Hejin, W., & Stefania, S. (2023). Factors Affecting Employee Performance: A Systematic Review. *Journal Markcount Finance*, 1(3), 150-159.
- Wahyuni, W., Ramli, R., & Mawardi, W. (2023). Optimizing Employee Performance in Tapalang Health Center, Tapalang District, Mamuju Regency: The Interplay of Work Environment, Discipline, and Motivation. *Management Studies and Entrepreneurship Journal (MSEJ)*, 4(5), 6786-6795.
- Zhenjing, G., Chupradit, S., Ku, K. Y., Nassani, A. A., & Haffar, M. (2022). Impact of

employees' workplace environment on employees' performance: a multi-mediation model. *Frontiers in public health*, 10, 890400.



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