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## Strategy for Building Optimal Performance of Medical Laboratory Technologists: Synergy of Organizational Culture and Work Environment with Job Satisfaction as an Intervening Variable

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**Abstract:** This research aims to find out the determinants of job satisfaction and its impact on the performance of ATLM Hospital employees in West Java Province (Bekasi, Sukabumi, Karawang). The research method used in this research is a quantitative method with an associative approach. The number of research respondents used was 120 hospital employees, namely Medical Laboratory Technologists (ATLM) in West Java Province (Bekasi, Sukabumi, Karawang), while the sampling technique was probability sampling with stratified sampling with a methodical approach used to ensure that each subgroup (strata) in the population is well represented in the sample. The results of the research are (a) organizational culture has no and no significant effect on ATLM job satisfaction, (b) organizational culture has a positive and significant effect on employee performance, (c) job satisfaction has a positive and significant effect on employee performance, (d) the work environment has an effect positive and significant on employee job satisfaction, (e) the work environment has a positive and significant effect on employee performance, (f) organizational culture has no and no significant effect on employee performance through job satisfaction, and (g) the work environment has a positive and significant effect on performance employees through job satisfaction.

**Keywords:** Organizational Culture, Work Environment, Job Satisfaction, Performance.

## INTRODUCTION

Many research results have proved that in the development process in developing countries, it is important that developing countries harmonize high household income with high levels of health. However, ironically, in several developing countries, this does not work according to what the population expects. The cause of this is that human capital continues to receive special attention, even in a rapidly developing economy. Human resources can help every family improve the quality of the economy in terms of education and health. (Meldo et al., 2021)

Medical Laboratory Technologists have a vital role in health services in hospitals. They are responsible for laboratory examinations, which act as the basis for diagnosing,

treating, and monitoring patients' health conditions. The performance of these experts affects the overall quality of health services. In West Java, with the number of hospitals continuing to increase and the public's need for health services increasing, the performance of Medical Laboratory Technologists needs to be a significant concern in managing health resources. Apart from that, according to research results from (Jayanti et al., 2024), it is said that Medical Laboratory Technologists. ATLM has a significant influence on determining service quality. ATLM is the spearhead in determining a patient's diagnosis because laboratory examinations support medical actions that doctors will carry out.

Internal management aspects also influence ATLM performance management in hospitals. According to recent research adopting WISN and FTE, there is a significant need to improve human resource management in hospital laboratories to minimize unproductive workloads, such as administrative tasks, equipment maintenance, and report preparation. Other research also shows that a high workload without adequate facilities and technology support can decrease the quality of laboratory examination results, which ultimately has a negative impact on the overall quality of health services (Arifin, 2018).

Many factors influence employee performance assessment, including organizational culture, which is a pattern consisting of basic assumptions built by a group to manage and overcome problems that occur or will arise in an organization. Robbins (2012: 271) states that organizational culture refers to a system of shared meaning shared by members that differentiates the organization from others.

A strong organizational culture means having key values that are firmly held and widely followed and significantly influence employees. Employee involvement in the company is greater, so it has the impact of increasing higher performance. (Divine, 2020). Apart from that, organizational culture has a close relationship, which is one of the determinants of success and failure in an organization's performance. (Hadju & Adam, 2019).

In a company, it is necessary to pay attention to the work environment, which is the central part that can improve the quality of work productivity. Mangkunegara (2017) states that the work environment is the totality of tools and materials used in the surrounding environment where a person works, as well as work methods and work arrangements individually and in groups. In an organizational context, organizational culture and work environment play an important role in determining employee performance. Organizational culture includes shared values, norms, and beliefs within the group, functioning as a guide for behavior and decision-making (Schein, 2017). Meanwhile, the work environment includes physical and social conditions influencing work comfort and productivity (Gibson et al., 2018).

These two factors play a crucial role for medical laboratory technologists. A supportive organizational culture, effective communication, and a conducive work environment can increase job satisfaction (Robbins & Judge, 2017), which then impacts performance. Job satisfaction is a mediating variable that can bridge the influence of organizational culture and work environment on employee performance (Judge et al., 2001).

Meanwhile, for companies that can exist and develop amidst the level of growth of tight competitiveness, if employees work sincerely and wholeheartedly, paying attention to employee desires and needs can strengthen their satisfaction, thereby enabling employees to work. (Baribin & Cici Bela Saputri, 2020). Previous research shows that a positive organizational culture and a good work environment can increase job satisfaction, which significantly influences employee performance. For example, research by (Nguyen et al., 2021) shows that a strong organizational culture contributes to increased job satisfaction and employee performance in the health sector—likewise, a study by (Anitha, 2014).

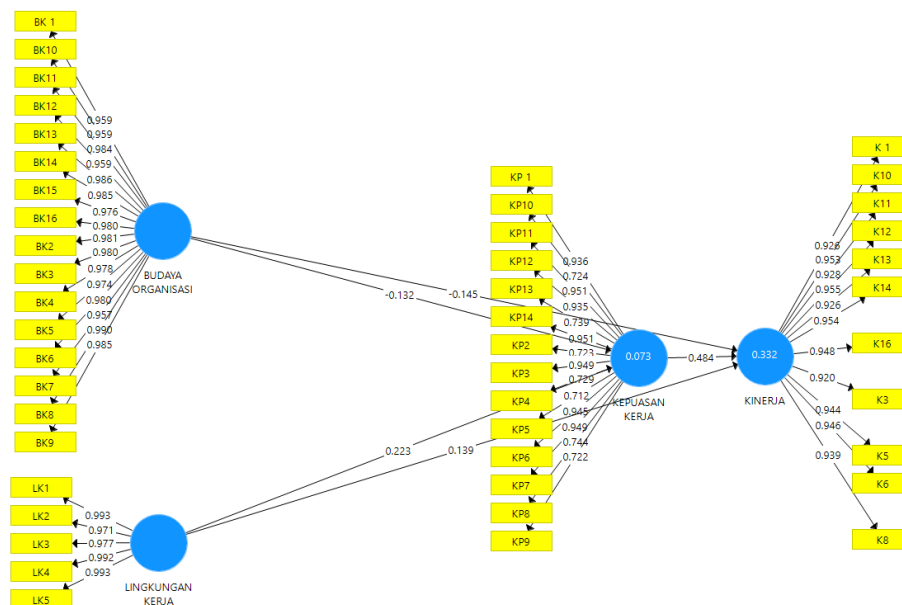
## METHOD

The data analysis technique in this research uses the help of the PLS computer program (*Partial Least Square*). The method used is causal hypothesis testing to find out the cause and effect between two or more variables. Variable x (independent variable) is organizational culture and work environment, variable Y (dependent variable) is employee performance, and variable Z (intervening variable) is satisfaction. The sample used was 120 ATLM respondents from a population of 14 medical laboratory technology experts at Type C Hospitals in West Java, with a private ownership status of 172 respondents. Using the Likert scale measurement technique and in statistical data analysis using clever PLS analysis techniques, with two analyses, namely *outer model* And *inner model*.

## RESULTS AND DISCUSSION

### Convergent Validity Testing

Convergent validity test to determine the relationship between indicators and latent variable constructs. The results of the outer model evaluation are tested as follows:



Picture 1. Outer Model

Based on figure 1 value *outer loading* above, it can be concluded that all items in the job satisfaction, organizational culture, work environment and performance variables have outer loading values above 0.70, so they are declared valid or convergently good. Discriminate Validity measures indicators based on cross loading with latent variables. The AVE value, which is an indicator of validity, must have a value > 0.50 (Ghazali, 2014:40).

Table 1. Average Variance Extracted (AVE)

Variable	AVE	Information
Organizational culture	0.952	Valid
Job Satisfaction	0.711	Valid
Performance	0.883	Valid
Work environment	0.971	Valid

In Table 1 above, the values can be seen. The *Average Variance Extracted* (AVE) for all variables is greater than 0.50, so it can be stated that all research variables have a value of *discriminant validity* that is good or valid.

In this research, researchers continue to use values *composite reliability* And *Cronbach's alpha* in order to provide more confidence in the reliability of each latent construct. Recommended values to obtain reliable internal consistency, namely *composite reliability* > 0.7 and *Cronbach's alpha* > 0.60 (Abdillah, 2018). The following are the internal consistency reliability results, which can be seen in Table 2 below:

**Table 2. Consistency Reliability Values**

Variable	Cronbach's Alpha	Composite Reliability	Information
Organizational culture	0.997 > 0,60	0.997 > 0,70	Reliable
Job Satisfaction_	0.967 > 0,60	0.971 > 0,70	Reliable
Performance	0.987 > 0,60	0.988 > 0,70	Reliable
Work environment	0.992 > 0,60	0.994 > 0,70	Reliable

The results of the internal consistency reliability values in Table 2 after respecification of the measurement model show that the four latent constructs, namely organizational culture, job satisfaction, performance, and work environment, have value *composite reliability* of 0.997, 0.971, 0.988, 0.994 (four CR values  $\geq 0.70$ ) and *Cronbach's alpha* of 0.997, 0.967, 0.987, 0.992 (four CA values  $\geq 0.60$ ). All four latent constructs (Organizational Culture, Job Satisfaction, Performance, and Work Environment) are declared reliable so they can be analyzed for the next stage, namely, the analysis of the inner model.

### Inner Model

In this research, Test *Coefficient Determination* (RSquare) measures how much the dependent variable can be influenced by other variables.

**Table 3. R-Square Measurement Results**

Variable	R Square	R Square Adjusted	Category
Job Satisfaction_	0.073 < 0,19	0.057	Weak
Performance	0.332 = 0,33	0.315	Currently

The R Square results in Table 3 above show that the R Square value of the Job Satisfaction variable is 0.073 or 7%, which means that the contribution of the organizational culture and work environment variables to job satisfaction is 7%, including in the weak category. Meanwhile, other variables outside the research model contribute to or explain the rest. Furthermore, the R Square value of the Performance variable is 0.332 or 33.2%, which means that the contribution of the organizational culture, work environment, and job satisfaction variables to performance is 33.2%, so it is included in the weak category. Meanwhile, the rest is contributed or explained by other variables outside the research model.

### Hypothesis Testing

Based on the results of data management that researchers have carried out, it is used to answer the hypothesis by looking at the t statistic and P value. The hypothesis is declared accepted if the t statistic value > t table, namely 1,658, and the P value < 0.05 (Muniarti et al., 2013).

**Table 4. Direct Effect (*Direct Effect*)**

Correlation (Connection)	Direct Effect	
	T-Statistic	P-Value (1-Tailed)
Organizational Culture => Job Satisfaction	1.484 < 1.658	0.140
Organizational Culture => Performance	2.505 > 1.658	0.014
Job Satisfaction => Performance	4.900 > 1.658	0.000
Work Environment => Job Satisfaction	2.423 > 1.658	0.017
Work Environment=> Performance	2.390 > 1.658	0.018

In Table 4 above, the direct influence can be explained (*Direct Effect*) as follows:

- Organizational culture has an insignificant effect on job satisfaction with the original sample value, namely -0.0132 with a t-statistic value (1,484) < t-table (1,658) and a p-value (0.140) >  $\alpha$  (0.05). This shows that Ha1 is rejected and H0 is accepted, which means that organizational culture has an insignificant effect on job satisfaction. The interpretation of this research is that the higher the level of organizational culture in a hospital, the less influence it will have on the job satisfaction of hospital employees.
- Organizational culture has a positive and significant effect on performance with the original sample value, namely -0.210 with a t-statistic value (2.505) > t-table (1.658) and a p-value (0.014) <  $\alpha$  (0.05). This shows that Ha2 is accepted and H0 is rejected, which means that organizational culture has an effect on performance. The interpretation of this research is that the higher the level of organizational culture in a hospital, the more positive influence it will have on the performance of hospital employees.
- Job satisfaction has a positive and significant effect on performance with the original sample value, namely 0.484 with a t-statistic value (4,900) > t-table (1,658) and a p-value (0.00) <  $\alpha$  (0.05). This shows that Ha3 is accepted and H0 is rejected, which means that performance has an effect on job satisfaction. The interpretation of this research is that the higher the level of employee job satisfaction in a hospital, the more positive influence it will have on the performance of hospital employees.
- The work environment has a positive effect on job satisfaction with the original sample value, namely 0.223 with a t-statistic value (2,423) > t-table (1,658) and a p-value (0.017) >  $\alpha$  (0.05). This shows that Ha4 is accepted and H0 is rejected, which means that the work environment influences job satisfaction. The interpretation of this research is that the higher the level of the work environment in the hospital, the more influence it will have on the job satisfaction of hospital employees.
- The work environment has a positive and significant effect on employee performance with the original sample value, namely 0.247 with a t-statistic value (2.390) > t-table (1,657) and a p-value (0.018) <  $\alpha$  (0.05). This shows that Ha5 is accepted and H0 is rejected, which means that the work environment influences performance. The interpretation of this research is that the higher the level of work environment in a hospital, the more positive influence it will have on the performance of hospital employees.

**Table 5. Indirect Effect (*Indirect effect*)**

Variable	T-Statistics	P-Value
Organizational culture => Job satisfaction => Performance	1.654	0.130
Work Environment => Job Satisfaction => Performance	2.238	0.049

Based on Table 5, it can be explained the indirect influence (*Indirect effect*), as follows:

- Organizational culture has an insignificant effect on employee performance through job satisfaction, which has the original sample value, namely - 0.064 with a t-statistic value



- (1,654) < t table (1.658) and a p-value (0.130) >  $\alpha$  (0.05). This shows that Ha6 is rejected and H0 is accepted, which means that the organizational culture of hospital employees has an insignificant effect on employee performance through job satisfaction. The interpretation of this research is that job satisfaction does not mediate between organizational culture and hospital employee performance. Thus, **Job satisfaction is not a mediating variable**.
- b. The work environment has a positive and significant effect on employee performance through job satisfaction, which has an original sample value, namely 0.108 with a t-statistic value (2,238) > t table (1.658) and a p-value (0.049) <  $\alpha$  (0.05). This shows that Ha7 is accepted and H0 is rejected, which means that the work environment of hospital employees influences employee performance through job satisfaction. The interpretation of this research is that job satisfaction mediates the work environment on ATLM employee performance. Thus, job satisfaction **is a mediating variable**.

## Discussion

The research discussion will be linked to theory and empirical research, which has been described in the literature review, conducting hypothesis testing and answering the research problem formulation, as follows:

### 1. The influence of organizational culture on job satisfaction

The results obtained from the statistical data processing that has been carried out show that the organizational culture variable has no effect on employee job satisfaction. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 1 (one) is rejected. This shows that organizational culture has no effect on the job satisfaction of hospital employees.

The results of this research are not in line with researchers from (Suryati et al., 2022) who stated that organizational culture has a positive effect on teacher job satisfaction at the Prajnamita Maitreya Pekanbaru Foundation.

### 2. The influence of organizational culture on performance

The results obtained from the statistical data processing that has been carried out show that the organizational culture variable has an influence on employee performance. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 4 (four) is accepted. This shows that hospital organizational culture influences the performance of hospital employees.

The results of this research are in line with researchers (Nurhasanah et al., 2022) who stated that organizational culture has a positive effect on the performance of PT employees. Nusantara Plantations.

### 3. The influence of job satisfaction on performance

The results obtained from the statistical data processing that has been carried out, can be seen that the performance variable shows that the job satisfaction variable has an influence on employee performance. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 3 is accepted. This shows that employee job satisfaction influences the performance of hospital employees. The results of this research are in line with those of researchers (Hasanah & Harisantoso, 2020) who stated that job satisfaction has a positive influence on the performance of educators at Mts Negeri 1 Situbondo.

### 4. The influence of the work environment on job satisfaction

The results obtained from the statistical data processing that has been carried out show that the work environment variables have no effect on employee job satisfaction. Thus, the

hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 2 is rejected. This shows that the work environment has no effect on the performance of hospital employees.

The results of this research are not in line with the results of researchers from (Jasmine and Edalmen, 2020), who stated that the work environment has a positive effect on employee job satisfaction in the company.

#### **5. The influence of the work environment on performance**

The results obtained from the statistical data processing that has been carried out, can be seen that work environment variables show that work environment variables have an influence on employee performance. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 1 is accepted. This shows that the work environment influences the performance of hospital employees. The results of this study are in line with researchers (Mudiansyah et al., 2024) who stated that the work environment has a positive effect on the performance of hospital employees.

#### **6. The Influence of Organizational Culture on employee performance through job satisfaction.**

The results obtained from the statistical data processing that has been carried out, can be seen that the organizational culture variable shows that the job satisfaction variable cannot mediate organizational culture on employee performance. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 6 (six) is rejected. This shows that job satisfaction cannot mediate hospital organizational culture on employee performance. The results of this research are not in line with those of researchers (Ramban & Edalmen, 2022), who stated that there is a simultaneous and partial influence of employee performance variables on employee job satisfaction at PT. Indonesia Applicad

#### **7. The influence of the work environment on employee performance through job satisfaction**

The results obtained from the statistical data processing that has been carried out, can be seen that the work environment variable shows that the job satisfaction variable can mediate the work environment on employee performance. Thus, the hypothesis that has been formulated is in accordance with the results of the research that has been carried out. Hypothesis 7 is accepted. This shows that job satisfaction can mediate the hospital work environment on employee performance.

The results of this research are in line with those of researchers (Siregar, 2020) who stated that the work environment significantly influences performance through job satisfaction.

### **CONCLUSION**

Based on the analysis and discussion, as well as test results in this research regarding the influence of organizational culture and work environment on employee performance with job satisfaction as a mediating variable, the researcher can conclude the following:

1. Hospital organizational culture does not affect the job satisfaction of Medical Laboratory Technologists (ATLM). This is because it can be interpreted that when the hospital's organizational culture is good, it cannot affect employee performance.
2. The organizational culture of Medical Laboratory Experts (ATLM) influences the performance of hospital employees. This is because it can be interpreted that when the

- hospital's organizational culture is good, it can influence employee performance at the hospital.
3. Job satisfaction of Medical Laboratory Experts (ATLM) influences employee performance in hospitals. This is because it can be interpreted that when ATLM performance is good it can influence the job satisfaction of hospital employees.
  4. The hospital work environment influences the job satisfaction of Medical Laboratory Technologists (ATLM). This is because it can be interpreted that when the hospital work environment is good, it can influence the job satisfaction of Medical Laboratory Technologists (ATLM).
  5. The hospital work environment influences the performance of the hospital's Medical Laboratory Technologist (ATLM). This is because it can be interpreted that when the hospital work environment is good, it can influence the performance of medical laboratory technology experts at the hospital.
  6. Hospital organizational culture does not affect employee performance through job satisfaction. This can be interpreted as when the hospital's organizational culture cannot influence the performance of Medical Laboratory Technologist (ATLM) employees through job satisfaction.
  7. The hospital work environment influences ATLM employee performance through job satisfaction. This can be interpreted that when the hospital work environment is good it can improve the performance of ATLM employees through job satisfaction.

## REFERENCE

- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Baribin, D. P., & Cici Bela Saputri. (2020). The Influence of Organizational Culture and Work Environment on Work Motivation and Its Impact on Employee Job Satisfaction. *JRMSI - Indonesian Science Management Research Journal*, 11(1), 46–61. <https://doi.org/10.21009/jrmsi.011.1.03>
- Gibson, J., Ivancevich, J., Donnelly, H.J., & Konopaske, R. (2018). *Organizations Behavior, Structure, Processes* (Fourteenth, Issue 112). McGraw-Hill Education.
- Hadju, L., & Adam, N. (2019). The Influence of Organizational Culture on Employee Performance at the Bone Bolango Regency Transportation Service. *Public: Journal of Human Resources Management, Administration and Public Services*, 6(2), 125–135. <https://doi.org/10.37606/publik.v6i2.14>
- Hasanah, H., & Harisantoso, J. (2020). The Influence of Work Performance and Discipline on Teacher Job Satisfaction at Mts Negeri 1 Situbondo. *Journal of Education and Entrepreneurship*, 7(2), 55–65. <https://doi.org/10.47668/pkwu.v7i2.33>
- Ilahi, M. W. (2020). *The Influence of Organizational Culture on Employee Performance at PT. Gapura Pekanbaru Branch*. Riau Islamic University.
- Jasmine, I., & Edalmen, E. (2020). The Influence of the Work Environment on Job Satisfaction with Motivation as Mediator. *Journal of Managerial and Entrepreneurship*, 2(2), 450. <https://doi.org/10.24912/jmk.v2i2.7938>
- Jayanti, E., Avianti, W., & Jusdijachlan, R. (2024). *The Influence of Work Motivation and Professionalism on the Performance of Medical Laboratory Technologist (ATLM) Employees in the Hospital Laboratory Field TK II Year 03. 05 . 01 Dustira City*. 2(2), 87–98.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). *The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review*. 127(3), 376–407.
- Meldo, Y. A., Zulher, Z., & Setiawan, A. (2021). the Influence of Organizational Culture and



- the Work Environment on Employee Work Spirit in the Communication Department, Information and Code of Kampar District. *Indonesian Management Research Journal*, 3(2), 249–256. <https://doi.org/10.55768/jrmi.v3i2.86>
- Mudiansyah, A., Khoerudin, M., Kh, R. F. F., Ngurah, I. G. G. A., Zebua, A. M., Sofiana, K., Christabel, A., Shafira, I. G., Berliani, K. N., & Sikki, N. (2024). The Influence of the Work Environment on Employee Performance at Dr Aryoko Sorong Hospital. *Innovative: Journal Of Social Science Research*, 4(3), 18345–18353.
- Nguyen, Taylor, R., & Kluemper, D. (2021). The effects of organizational culture and climate on employee outcomes in health care organizations. *Journal of Healthcare Management*, 1(66), 12-25.
- Nurhasanah, N., Jufrizen, J., & Tupti, Z. (2022). The Influence of Work Ethics, Organizational Culture and Workload on Employee Performance with Job Satisfaction as an Intervening Variable. *Jesya (Journal of Economics & Sharia Economics)*, 5(1), 245–261. <https://doi.org/10.36778/jesya.v5i1.618>
- Ramban, K., & Edalmen, E. (2022). The Mediating Effect of Job Satisfaction on the Influence of the Work Environment on Employee Performance. *Managerial and Entrepreneurship Journal*, 4(1), 132. <https://doi.org/10.24912/jmk.v4i1.17177>
- Robbins, S. P., & Judge, T. A. (2017). *Organizational Behavior* (S. Wall (ed.); Seventeenth). Pearson.
- Schein, P. (2017). Organizational Culture and Language. In *The Innovator's Discussion*. <https://doi.org/10.4324/9781351017510-15>
- Sihaloho, R. D., & Siregar, H. (2020). The influence of the work environment on employee performance at PT. Super loyal Sagita Medan. *Jurnal Ilmiah Socio Secretum*, 9(2), 273–281.
- Suryati, S., Nyoto, N., & Sudarno, S. (2022). The Influence of Organizational Culture on Teacher Job Satisfaction at the Prajnamitra Maitreya Pekanbaru Foundation. *Maitreyawira Journal*, 3(1), 36–47. <https://doi.org/10.69607/jm.v3i1.50>