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## **Analysis of the Factors Affecting Employee Job Satisfaction on Employee Performance**

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### **ABSTRACT**

The purpose of this study is to analyze factors that affect job satisfaction, namely leadership, skills and work environment on job satisfaction and its implications on employee performance. The data in this study uses primary data, which was obtained through the distribution of questionnaires through google forms. The sampling of this study uses saturated sampling techniques (census), so that the sample used in this study is all employees of PT KAI Karawang Branch which totals 94 people. The test stages carried out are: descriptive statistics, measurement model (outer model), structural model (inner model) and path analysis (path analysis). The testing tool used is SmartPLS. The results of this study show that the variables of leadership, skills and work environment have a significant effect on job satisfaction. Job Satisfaction variables have a significant effect on employee performance. Leadership variables, skills and work environment also have a direct effect on employee performance, but the influence is smaller than the indirect influence, namely through job satisfaction, so job satisfaction is a factor that mediates the influence of leadership, skills and work environment on employee performance.

Keywords: Leadership, Skills, Work Environment, Performance Satisfaction, Employee Performance,

### **INTRODUCTION**

The human resource factor is the most important factor for every company. The level of success of a company in achieving its goals cannot be separated from the role of human resources in the company. Employees, as human resources in the company, must be given proper attention so that they can support the achievement of the company's established goals. If human resources are not managed properly, the company's success in achieving its objectives will be difficult to realize.

One way to achieve this is to manage the company's human resources through improving employee performance. To improve employee work activities, companies must be able to identify the factors that affect employee performance. A company that has employees who are skilled in carrying out and completing tasks will be encouraged to continue growing and succeeding in managing its business. Therefore, every employee must have the necessary skills to work effectively, particularly in fields that require specific expertise (Liana, 2020). As employees possess different skills, companies must be able to direct and guide them to work according to their strengths. Leadership in a company is the dominant factor in carrying out all its functions (Waworundeng, 2021). According to Kuswadi (2004), leaders must always be able to sense what employees need so that employees feel satisfied. This opinion is emphasized by Mutholib and Pratama (2022), whose research states that leadership is the driving force for all resources in an

organization. The survival of the organization is determined by the quality of its leadership—the more qualified the company’s leaders are, the better the employees’ job satisfaction will be. Leaders who provide work encouragement, give advice, foster skill development, ensure adherence to *work rules and procedures*, and offer both constructive criticism and praise to employees will enhance employee satisfaction. When employees are satisfied with the leader’s attitude and with what they receive, they will be more active in their work, thereby improving their performance.

Employees can develop and perform their duties well if supported by a good work environment. A supportive physical and non-physical work environment will contribute to employee job satisfaction. Employees who feel comfortable and satisfied with their working conditions and facilities tend to have higher morale. Hence, the work environment must be taken into consideration, as it can significantly influence employee performance.

Employee job satisfaction and performance are critical factors in organizational success, as evidenced by numerous studies. Research by Robbins (2015) highlights that job satisfaction significantly influences employee productivity, while Northouse (2010) emphasizes the pivotal role of leadership in shaping workplace dynamics. Similarly, Al-Omari and Okasheh (2017) found that a conducive work environment directly enhances job performance, particularly in high-stress industries. These studies collectively underscore the interconnectedness of leadership, skills, and work environment in fostering employee satisfaction and performance. However, despite these findings, there remains a gap in understanding how these factors interact within specific organizational contexts, particularly in public sector enterprises such as PT Kereta Api Indonesia (*KAI*), where operational demands and employee expectations may differ significantly from private sector models.

A notable research gap exists in the limited exploration of job satisfaction as a mediating variable in the relationship between leadership, skills, work environment, and performance. While studies such as Surajiyo, Nasruddin, and Paleni (2020) have examined the effects of leadership and work environment, few have integrated skills as a key variable or tested this framework in Indonesia’s railway sector. Additionally, prior research often focuses on isolated factors, neglecting their combined influence. For instance, Bahasoan and Dwinanda (2022) demonstrated the mediating role of job satisfaction in the relationship between skills and performance but did not account for leadership or environmental factors. This gap calls for a holistic analysis that can provide actionable insights for organizations aiming to optimize employee outcomes through multifaceted interventions.

The urgency of this research is amplified by the evolving demands faced by PT KAI, a state-owned enterprise critical to Indonesia’s transportation infrastructure. With increasing competition and operational challenges, improving employee performance has become paramount. Studies such as Kustini et al. (2021) reveal that skill deficiencies and poor work environments hinder productivity in similar industries, while Mutholib and Pratama (2022) stress the need for adaptive leadership in public sector reforms. Addressing these issues is urgent not only for organizational efficiency but also for national economic resilience, as PT KAI’s performance impacts the broader

logistics and mobility networks. This study, therefore, responds to a pressing need for evidence-based strategies tailored to Indonesia's unique socio-economic context.

This research introduces novelty by simultaneously examining leadership, skills, and work environment as predictors of performance, with job satisfaction as a mediator—a framework rarely tested in Indonesia's public transport sector. Unlike previous studies (e.g., Riana et al., 2015; Nurlaela and Trianasari, 2021), which focused on single variables or private enterprises, this study adopts a comprehensive approach using advanced statistical methods such as *SEM-PLS*. The inclusion of PT KAI's employees as a sample further distinguishes this work, offering insights into a traditionally underexplored demographic. By bridging theoretical and contextual gaps, this study advances the discourse on human resource management in public enterprises.

The purpose of this research is to analyze the direct and indirect effects of leadership, skills, and work environment on employee performance, mediated by job satisfaction at PT KAI. This aligns with Handoko's (2017) call for integrated HRM strategies that address both individual and organizational needs. By quantifying these relationships, the study aims to identify leverage points for enhancing performance, such as leadership training programs or workplace improvements. The findings will provide an empirical basis for PT KAI to refine its HR policies, ensuring alignment with employee expectations and operational goals. Ultimately, the research seeks to translate theoretical insights into practical solutions for improving public sector productivity.

This study contributes to both academic literature and practical HR management. Theoretically, it extends the *Job Characteristics Model* (Hackman & Oldham, 1976) by validating its applicability in Indonesia's public sector, while also enriching the discourse on mediating mechanisms in organizational behavior. Practically, the findings will guide PT KAI in designing targeted interventions, such as leadership development workshops or skill-enhancement programs, to boost job satisfaction and performance. Additionally, the research offers a replicable framework for other state-owned enterprises facing similar challenges, thereby broadening its impact beyond the immediate context.

The primary objective of this study is to empirically test the hypothesis that leadership, skills, and work environment significantly influence employee performance through the mediating role of job satisfaction. Using a quantitative approach with *SmartPLS* analysis, the research will measure the strength and direction of these relationships among PT KAI employees. Secondary objectives include identifying which factors—such as leadership style, technical skills, or physical workspace—exert the strongest influence on satisfaction and performance, thus enabling prioritized resource allocation. By achieving these objectives, the study will provide a data-driven roadmap for organizational improvement.

The benefits of this research are multifaceted. For PT KAI, the findings will inform policy decisions, potentially reducing turnover rates and enhancing operational efficiency. Employees will benefit from improved workplace conditions and career development opportunities, aligning with Hasibuan's (2019) emphasis on satisfaction as a driver of retention. Academically, the study adds to the body of knowledge on public sector HRM in developing economies. Policymakers may also leverage the results to design sector-wide reforms, ensuring sustainable workforce

development. By addressing both micro-level employee needs and macro-level organizational goals, this research promises tangible value for stakeholders across the Indonesian transportation sector.

**METHOD**

The type of research used in this study is quantitative research, with primary data obtained directly from respondents through questionnaires distributed via *Google Form*. The sampling technique applied was saturated sampling (*census*), so the sample comprised all employees of PT KAI Karawang Branch, totaling 94 people. Data processing in this study was conducted using *structural equation modeling (SEM)* through the *SmartPLS* application. *SEM* is a multivariate analysis technique that combines factor analysis and regression analysis (correlation) to test the relationships between variables in a model, whether between indicators and their constructs or between constructs themselves, making the causality relationships more informative, complete, and accurate. The stages of analysis carried out included descriptive statistics, measurement models (*outer model*), structural models (*inner model*), and path analysis (*path analysis*).

**RESULTS AND DISCUSSION**

**Statistics Descriptive**

An overview of the characteristics of the data to be analyzed is shown in Table 1.

**Table 1 Descriptive Statistical Test Results**

Name	No.	Type	Miss ings	Mean	Median	Scale min	Scale max	Observed min	Observed max	Standard deviation	Excess kurtosis	Skewness	Cramer-von Mises p value
X1.1	1	MET	0	4.074	4.000	1.000	5.000	2.000	5.000	0.903	0.371	-0.724	0.000
X1.2	2	MET	0	4.053	4.000	1.000	5.000	2.000	5.000	0.874	0.112	-0.673	0.000
X1.3	3	MET	0	4.064	4.000	1.000	5.000	2.000	5.000	0.976	-0.160	-0.626	0.000
X1.4	4	MET	0	4.074	4.000	1.000	5.000	2.000	5.000	1.013	-0.414	-0.642	0.000
X2.1	5	MET	0	4.000	4.000	1.000	5.000	2.000	5.000	0.940	-0.054	-0.676	0.000
X2.2	6	MET	0	3.967	4.000	1.000	5.000	2.000	5.000	0.925	0.003	-0.625	0.000
X2.3	7	MET	0	3.974	4.000	1.000	5.000	2.000	5.000	0.950	-0.054	-0.667	0.000
X2.4	8	MET	0	3.964	4.000	1.000	5.000	2.000	5.000	0.973	-0.157	-0.582	0.000
X3.1	9	MET	0	4.175	4.000	1.000	5.000	2.000	5.000	0.916	-0.460	-0.727	0.000
X3.2	10	MET	0	3.976	4.000	1.000	5.000	1.000	5.000	1.011	-0.623	-0.626	0.000
X3.3	11	MET	0	4.011	4.000	1.000	5.000	2.000	5.000	1.007	-0.592	-0.628	0.000
X3.4	12	MET	0	4.064	4.000	1.000	5.000	2.000	5.000	0.875	-0.084	-0.684	0.000
X3.5	13	MET	0	4.064	4.000	1.000	5.000	2.000	5.000	0.934	0.045	-0.665	0.000
Z.1	14	MET	0	4.043	4.000	1.000	5.000	2.000	5.000	0.944	-0.024	-0.655	0.000
Z.2	15	MET	0	4.043	4.000	1.000	5.000	2.000	5.000	1.010	-0.252	-0.625	0.000
Z.3	16	MET	0	3.954	4.000	1.000	5.000	2.000	5.000	0.882	-0.070	-0.776	0.000
Z.4	17	MET	0	4.064	4.000	1.000	5.000	2.000	5.000	0.958	-0.116	-0.645	0.000
Z.5	18	MET	0	4.043	4.000	1.000	5.000	2.000	5.000	0.948	-0.017	-0.673	0.000
Z.6	19	MET	0	4.032	4.000	1.000	5.000	2.000	5.000	0.942	0.030	-0.715	0.000
Y.1	20	MET	0	4.032	4.000	1.000	5.000	2.000	5.000	0.882	0.162	-0.752	0.000
Y.2	21	MET	0	4.145	4.000	1.000	5.000	2.000	5.000	0.974	-0.056	-0.626	0.000
Y.3	22	MET	0	4.074	4.000	1.000	5.000	2.000	5.000	1.044	-0.468	-0.627	0.000
Y.4	23	MET	0	3.957	4.000	1.000	5.000	2.000	5.000	0.905	-0.155	-0.626	0.000
Y.5	24	MET	0	4.053	4.000	1.000	5.000	2.000	5.000	0.916	-0.173	-0.626	0.000
Y.6	25	MET	0	4.053	4.000	1.000	5.000	2.000	5.000	0.916	-0.173	-0.626	0.000

Source: SmartPLS 4.0 Processing Results (2024)

From Table 1, it shows that the mean value is between 3,819 and 4,170 which means that employees of PT Kereta Api Indonesia Cikarang Station are neutral and agree with the median value of 4 and the minimum value is at 1 and 2 and the maximum value is 5.

**Convergent Validity**

Ghozali (2021) The convergent validity test can be seen from the loading factor value for each construct indicator and the rule of thumb, which is commonly used to assess, namely the loading factor > 0.7 and the average variance extracted (AVE) value must be > 0.5.

**Table 2 Convergent Validity Test Results**

Variable	Indicator	Outer Loading	Average Variance Extracted	Result
Leadership (X1)	X1.1	0.850	0.807	Valid
	X1.2	0.936		
	X1.3	0.917		
	X1.4	0.887		
Skills (X2)	X2.1	0.877	0.824	Valid
	X2.2	0.923		
	X2.3	0.906		
	X2.4	0.924		
Work environment (X3)	X3.1	0.872	0.690	Valid
	X3.2	0.793		
	X3.3	0.822		
	X3.4	0.848		
	X3.5	0.799		
	X3.6	0.846		
Job satisfaction (Z)	Z.1	0.879	0.751	Valid
	Z.2	0.839		
	Z.3	0.799		
	Z.4	0.846		
	Z.5	0.883		
	Z.6	0.850		
Employee performance (Y)	Y.1	0.874	0.722	Valid
	Y.2	0.851		
	Y.3	0.881		
	Y.4	0.847		
	Y.5	0.879		

Source: SmartPLS 4.0 Processing Results (2024)

Based on Table 2, it shows that questions from each indicator of leadership, skills, work environment, job satisfaction and employee performance were declared valid because the *outer loading* value was > 0.7 and the *average variance extracted* value > 0.5.

**Discriminant Validity**

Ghozali (2021) The discriminant validity test can be seen from the cross-loading value for each variable must be > 0.7.

**Table 3 Results of the Discriminant Validity Test**

Variable	Indicator	Outer Loading	Result
Leadership (X1)	X1.1	0,850	Valid
	X1.2	0,936	
	X1.3	0,917	
	X1.4	0,887	
Skills (X2)	X2.1	0,877	Valid
	X2.2	0,923	
	X2.3	0,906	
	X2.4	0,924	
Work environment (X3)	X3.1	0,872	Valid
	X3.2	0,793	
	X3.3	0,822	
	X3.4	0,848	
	X3.5	0,799	
	X3.6	0,846	
Job satisfaction (Z)	Z.1	0,879	Valid
	Z.2	0,839	
	Z.3	0,799	
	Z.4	0,846	
	Z.5	0,883	
	Z.6	0,850	
Employee performance (Y)	Y.1	0,874	Valid
	Y.2	0,851	
	Y.3	0,881	
	Y.4	0,847	
	Y.5	0,879	

Source: SmartPLS 4.0 Processing Results (2024)

Based on Table 3, it shows that the variables of leadership, skills, work environment, job satisfaction and employee performance have a *cross-loading* value of  $> 0.7$ , then the data is declared valid.

**Reliability Test**

Ghozali (2021) reliability test was used to prove the accuracy, consistency and accuracy of the instrument in measuring constructs by looking at *the value of Cronbach alpha*  $> 0.6$  and *the composite reliability* value  $> 0.7$ .

**Table 4. Reliability Test Results**

	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
X1	0.920	0.925	0.943	0.807
X2	0.929	0.929	0.949	0.824
X3	0.910	0.911	0.930	0.690
Y	0.917	0.918	0.938	0.751
Z	0.923	0.924	0.940	0.722

*Source: SmartPLS 4.0 Processing Results (2024)*

Based on Table 4, it is shown that all variables in this study, namely leadership, skills, work environment, job satisfaction, and employee performance, have a Cronbach's alpha value of > 0.6 and a composite reliability value of > 0.7, so the data is declared reliable.

**Coefficient of Determination**

Ghozali (2021) changes in the value of R-Square can be used to explain the influence of certain exogenous latent variables on endogenous latent variables whether they have a substantive influence.

**Table 5. Determination Coefficient Test Results**

	<b>R-square</b>	<b>R-square adjusted</b>
<b>Work Satisfaction (Z)</b>	0.971	0.970
<b>Employee Performance (Y)</b>	0.934	0.931

*Source: SmartPLS 4.0 Processing Results (2024)*

Based on Table 5, it can be said that the results of the determination coefficient (r-square) test of the job satisfaction variable have a value of 0.971 or 97.1%. This shows that the variables of leadership, skills and work environment have an effect of 97.1% on job satisfaction. While the remaining 0.029 or 2.9% was influenced by other variables that were not studied in this study such as work motivation, work discipline, work wages and so on.

Then, the value of the determination coefficient (r-square) of the employee performance variable has a value of 0.934 or 93.4%. This shows that the variables of leadership, skills and work environment have an effect of 93.4% on employee performance. While the remaining 0.066 or 6.6% was influenced by other variables that were not studied in this study such as work motivation, work discipline, work wages and so on.

**Predictive Relevance**

Ghozali (2021) The *predictive relevance test* aims to validate the predictive ability of the model.

$$Q^2 = 1 - (1 - R^2)(1 - R^2)$$

$$Q^2 = 1 - (1 - 0,971)(1 - 0,934)$$

$$Q^2 = 1 - (0,029)(0,066)$$

$$Q^2 = 1 - 0,0019 = 0,9981$$

Based on the results of the calculation above, the Q-Square value is 0.9981 or 99.81%. This shows that the amount of diversity of data that can be explained by the research model is 99.81%. While the remaining 0.0019 or 0.19% is explained by other variables that are not studied in this study such as work motivation, work discipline, work wages and so on.

**Goodness of Fit**

Ghozali (2021) test the goodness of fit model, namely by using *Standardized Root Mean Square Residual* (SRMR) which can be used to avoid model specification errors. If the resulting value is less than 0.08 then the model can be said to be good or suitable. If the resulting value is between 0.08 and 0.10, then the model is still acceptable.

**Table 6 Goodness of Fit Test Results**

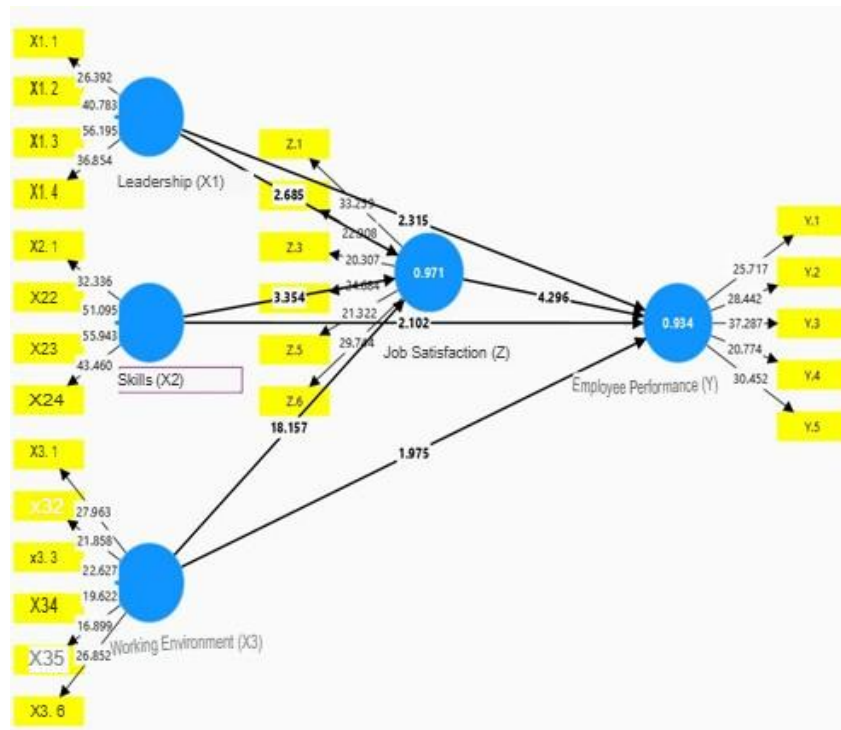
	<b>Saturated model</b>	<b>Estimated model</b>
<b>SRMR</b>	0.072	0.072
<b>d<sub>ULS</sub></b>	1.685	1.685
<b>d<sub>G</sub></b>	3.337	3.337
<b>Chi-square</b>	1239.670	1239.670
<b>NFI</b>	0.651	0.651

*Source: SmartPLS 4.0 Processing Results (2024)*

Based on Table 6, it can be said that the results of the *goodness of fit* model test have a value of  $0.072 < 0.08$ , so it can be concluded that overall the model in this study is good.

**Path Analysis**

Ghozali (2021) path analysis is used to complete a study that uses *intervening* or *moderating* variables which aims to compare which influence is greater between direct and indirect influences, so as to determine the presence of mediating variables that can strengthen or weaken the influence of *independent variables* on dependent variables in the model. If the value produced by the T-statistic  $>$  T-value is 1.96 and the P-value  $<$  0.05, then the *path coefficient value* is declared to be affected.



Source: SmartPLS 4.0 Processing Results (2024)

Figure 1. Bootstrapping Modeling Result Path Diagram

Based on Figure 1, it shows that the results of the final modeling were carried out with the bootstrapping technique to obtain the T-Statistics value. The magnitude of the influence between variables can be seen from the criteria for estimating the path coefficient in each existing path. The results of the direct *effect* test using SmartPLS are shown in Table 7.

Table 7. Direct Influence Test Results

Path coefficients - Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Leadership (X1) -> Job satisfaction (Z)	-0.264	-0.265	0.098	2.695	0.007
Leadership (X1) -> Employee performance (Y)	0.298	0.315	0.129	2.315	0.021
Job satisfaction (Z) -> Employee performance (Y)	0.720	0.723	0.168	4.296	0.000
Skills (X2) -> Job satisfaction (Z)	0.347	0.353	0.104	3.354	0.001
Skills (X2) -> Employee performance (Y)	0.293	0.264	0.140	2.102	0.036
Work environment (X3) -> Job satisfaction (Z)	0.911	0.906	0.050	18.157	0.000
Work environment (X3) -> Employee performance (Y)	-0.320	-0.331	0.162	1.975	0.048

Source: SmartPLS 4.0 Processing Results (2024)

Based on Table 7, the results of the direct effect test will be explained as follows:

### 1. The Influence of Leadership on Job Satisfaction

Based on the calculation in the *path coefficient test*, the leadership variable on job satisfaction obtained a T-Statistics value of 2.685 > a T-value of 1.96 and had a P-value of 0.007 < 0.05, it can be stated that leadership has a direct influence on job satisfaction.

The results of this study show that the job satisfaction of employees of PT Kereta Api Indonesia Cikarang Station is influenced by leadership. This can be shown by the way of leaders who reprimand and praise objectively for the development of employees, leaders who have a good personality and always set a good example, leaders who pay attention to employees, are willing to listen to complaints and suggestions from their employees. With this leadership, employees feel satisfied as evidenced by the way employees are polite and respectful, communicate well, honestly and open to the leadership. With good leadership, it also has an impact on employee job satisfaction which is shown by completing work correctly, meticulously and on time. The results of this study are in line with the results of research conducted by Riana, Sintaasih, and Suprpta (2015), whose results stated that leadership has a positive and significant effect on employee job satisfaction at Wake Bali Art Market Kuta-Bali.

### 2. The Effect of Skills on Job Satisfaction

Based on the calculation in the *path coefficient test*, the skill variable on job satisfaction obtained a T-Statistics value of 3.354 > T-value of 1.96 and had a P-value of 0.001 < 0.05, then it can be stated that skills have a direct influence on job satisfaction. The results of this study show that the job satisfaction of employees of PT Kereta Api Indonesia Cikarang Station is influenced by skills such as when employees start working have good interpersonal skills and can solve existing problems. This can be seen when employees work together with other employees to solve a problem so that activities run smoothly. With such skills makes the appearance of perceived job satisfaction. The results of this study are in line with the results of a study conducted by Rini, & Winata, (2021), whose results stated that Work Environment, Skills and Competencies affect Employee Job Satisfaction at Ariya Metta School Tangerang.

### 3. The Influence of the Work Environment on Job Satisfaction

Based on the calculation in the *path coefficient test*, the variable of the work environment on job satisfaction obtained a T-Statistics value of 18.157 > a T-value of 1.96 and had a P-value of 0.000 < 0.05, it can be stated that the work environment has a direct influence on employee job satisfaction.

The results of this study show that the job satisfaction of PT Kereta Api Indonesia employees is influenced by the work environment such as when establishing good relationships with leaders and other employees while working. This can be seen when employees ask leaders if there is an unclear job and employees are always willing to cooperate with other employees in any work-related matter. With such a work environment, it creates job satisfaction felt by PT Kereta Api Indonesia employees. The results of this study are also in line with the results of research

conducted by Rini, & Winata, (2021), whose results stated that Work Environment, Skills and Competencies affect Employee Job Satisfaction at Ariya Metta School Tangerang.

#### 4. The Effect of Job Satisfaction on Employee Performance

Based on the calculation in the *path coefficient test*, the variable of job satisfaction to employee performance obtained a T-Statistics value of  $4.296 > t$ -value of 1.96 and had a P-value of  $0.000 < 0.05$ , it can be stated that job satisfaction has a direct influence on employee performance.

The results of this study show that the performance of PT Kereta Api Indonesia employees is influenced by job satisfaction such as when establishing good working relationships and being able to complete tasks on time. This can be seen when employees are always honest and open about the information available related to work and feel satisfied when employees are able to complete tasks on time. With such a sense of job satisfaction, optimistic employee performance at PT Kereta Api Indonesia Cikarang Station appears. The results of this study are also in line with the results of research conducted by Nurlaela and Trianasari (2021), the results state that job satisfaction has a significant effect on the performance of employees of the Karangasem Regency Social Service.

#### 5. The Influence of Leadership on Employee Performance

Based on the calculation in the *path coefficient test*, the leadership variable on employee performance obtained a T-Statistics value of  $2.315 > t$ -value of 1.96 and had a P-value of  $0.021 < 0.05$ , it can be stated that leadership has a direct influence on employee performance.

The results of this study show that the performance of PT Kereta Api Indonesia employees is influenced by leadership such as when giving orders according to the employee's abilities and having a good personality. This can be seen when leaders always set a good example to employees such as arriving on time, giving gifts to diligent employees. With such leadership, employee performance at PT Kereta Api Indonesia has emerged. The results of this study are also in line with the results of research conducted by Riana, Sintaasih, and Suprpta (2015), whose results stated that leadership has a positive and significant effect on employee performance at Wake Bali Art Market Kuta-Bali.

#### 6. The Influence of Skills on Employee Performance

Based on the calculation in the *path coefficient test*, the skill variable on employee performance obtained a T-Statistics value of  $2.102 > t$ -value of 1.96 and had a P-value of  $0.036 < 0.05$ , then it can be stated that skills have a direct influence on employee performance.

The results of this study show that the performance of PT Kereta Api Indonesia employees is influenced by skills, such as when employees start working, they already have basic skills and technical skills. This can be seen when employees are able to count quickly, read and write clearly, can use computers and other electronic devices well and can be reliable in their field of work. With such skills, employee performance at PT Kereta Api Indonesia has emerged. The results of this

study are also in line with the results of research conducted by Parta and Mahayasa (2021) the results stated that Work Skills, Team Work, and Motivation have a positive and significant effect on the Performance of Production Section Employees at the Cahaya Silver Art Shop in Celuk, Gianyar.

7. The Influence of the Work Environment on Employee Performance

Based on the calculation in the *path coefficient test*, the variable of the work environment on employee performance obtained a T-Statistics value of 1.975 > T-value of 1.96 and had a P-value of 0.048 < 0.05, it can be stated that the work environment has a direct influence on employee performance.

A conducive work environment, both physical and non-physical, is one of the important factors in human resource management. PT KAI employees feel a clean, comfortable, and safe work environment and feel a good relationship with leaders and fellow employees, so that employees feel satisfaction in doing the tasks given so as to create a conducive work atmosphere. The results of this study are also in line with the results of research conducted by Nurlaela and Trianasari (2021), the results stated that the work environment has a significant effect on the performance of Karangasem Regency Social Service employees.

The results of the indirect effect test using SmartPLS are as follows:

**Table 8 Indirect Influence Test Results**

**Specific indirect effects - Mean, STDEV, T values, p values**

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Leadership (X1) -> Job Satisfaction (Z) -> Employee Performance (Y)	-0.190	-0.192	0.087	2.176	0.030
Skills (X2) -> Job Satisfaction (Z) -> Employee Performance (Y)	0.250	0.252	0.089	2.803	0.005
Work Environment (X3) -> Job Satisfaction (Z) -> Employee Performance (Y)	0.655	0.659	0.171	3.830	0.000

*Source: SmartPLS 4.0 Processing Results (2024)*

Based on Table 8, the results of the indirect *effect test* are as follows:

1. The Influence of Leadership on Employee Performance through Job Satisfaction as a *Mediating Variable*

Based on the calculation in the *specific indirect effect test*, the leadership variable on employee performance through job satisfaction as an *intervening variable* obtained a T-Statistics value of 2.176 > 1.96 and had a P-value of 0.030 < 0.05, it can be stated that leadership indirectly affects employee performance through job satisfaction as an *intervening variable*.

The results of this study show that the performance of PT Kereta Api Indonesia employees is influenced by leadership through job satisfaction. Leaders who always set a good example for employees, praise and reprimand employees in the right way will increase employee job satisfaction. Furthermore, job satisfaction shown by completing tasks and working relationships with leaders and fellow employees will improve their performance. The results of this study are also in line with the results of research conducted by Surajiyo, Nasruddin and Paleni, H. (2020) whose results stated that Job Satisfaction as an Intervening Variable on the Influence of Leadership and Work Environment on Employee Performance in South Lubuklinggau I and South II Districts.

## 2. The Influence of Skills on Employee Performance through Job Satisfaction as a *Mediating Variable*

Based on the calculation in the specific indirect effect test, the skill variable on employee performance through job satisfaction as an *intervening variable* obtained a T-Statistics value of  $2.803 > 1.96$  and had a P-value of  $0.005 < 0.05$ , it can be stated that skills indirectly affect employee performance through job satisfaction as an *intervening variable*. The results of this study show that the performance of PT Kereta Api employees is influenced by skills through job satisfaction. Employees who have basic skills, technical skills, good interpersonal skills and the ability to solve existing problems will increase job satisfaction, which further affects employee performance. The results of this study are also in line with the results of research conducted by Bahasoan and Dwinanda (2022), the results state that skills have a positive and significant effect on employee performance mediated by job satisfaction at PT Bosowa Propertindo Makassar.

## 3. The Influence of the Work Environment on Employee Performance through Job Satisfaction as a *Mediation Variable*

Based on the calculation in the *specific indirect effect* test, the work environment variable on employee performance through job satisfaction as an *intervening variable* obtained a T-Statistics value of  $3.830 > 1.96$  and had a P-value of  $0.000 < 0.05$ , it can be stated that the work environment indirectly affects employee performance through job satisfaction as an *intervening variable*.

The results of this study show that the performance of employees of PT Kereta Api Indonesia is influenced by the work environment through job satisfaction. A physical and non-physical environment at work, such as a clean environment, having good lighting equipment, cool air temperature, and a good security system will increase employee job satisfaction which will further improve their performance. The results of this study are also in line with the results of research conducted by Surajiyo, Nasruddin and Paleni, H. (2020) whose results state that Job Satisfaction as an Intervening Variable on the Influence of Leadership and Work Environment on Employee Performance in South Lubuklinggau I and South II Districts.

## CONCLUSION

Based on the research conducted by the author on the influence of leadership, skills, and work environment on employee performance through job satisfaction as a mediating variable at PT Kereta Api Indonesia (*KAI*), it can be concluded as follows: Leadership, skills, and work environment affect job satisfaction at PT Kereta Api Indonesia. Job satisfaction, in turn, affects employee performance at PT Kereta Api Indonesia. Leadership, skills, and work environment also have a direct effect on employee performance; however, the value of their indirect influence on employee performance through job satisfaction is greater than the direct influence. Therefore, it can be stated that job satisfaction plays a significant role as a mediating variable in the relationship between leadership, skills, and work environment, and the employee performance of PT Kereta Api Indonesia.

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