The Effect of Physical Work Environment and Compensation on Turnover Intention With Job Satisfaction Mediation at PT Pakubumi Inti Mineral Central Sulawesi

Nurhayati[1*], Taufiq Rachman[2], Fitri Rezeki[3]
[1]Universitas Pelita Bangsa, Bekasi, Indonesia, nurhayati08062000@gmail.com
[2]Universitas Pelita Bangsa, Bekasi, Indonesia, tfqman@gmail.com
[3]Universitas Pelita Bangsa, Bekasi, Indonesia, fitri_rezeki@pelitabangsa.ac.id

[*]Corresponding Author: nurhayati08062000@gmail.com

Abstract: The human resources (HR) element plays a crucial role for employees to act as planners, implementers, and controllers, continuously playing an active role in achieving the company's goals. Productive human resources will be able to adopt designs that are set as organizational goals or targets. This phenomenon often occurs in companies where employees have the desire to leave the company. The focus of this research is on PT Pakubumi Inti Mineral in Central Sulawesi, examining the Influence of Physical Work Environment and Compensation on Turnover Intention with the Mediation of Job Satisfaction. The research method used is quantitative, distributing questionnaires that were then processed using the SmartPLS 3.0 application. The results of the study show that both the physical work environment and compensation have a positive and significant impact on employee turnover intention, with compensation showing a stronger and more significant influence. Job satisfaction also plays a significant mediating role between compensation and turnover intention, but not in the case of the physical work environment.

Keyword: Physical Work Environment, Compensation, Turnover Intention, Job Satisfaction.

INTRODUCTION

The quality and growth of an organization require the role of the human resources (HR) department to support business success. A company does not always depend on how productive, potential, and capable it is, but on how it can offer incentives to influence employee productivity. PT Pakubumi Inti Mineral was established on January 7, 2020, and is a company involved in mining exploration, drilling, geotechnics, and the provision of mining equipment to meet the first steps of mining and provide quality reports. PT Pakubumi Inti Mineral has experience in exploring mines in Sulawesi. The land of Sulawesi is rich in mining products such as nickel, oil and gas, galena, iron ore, gold, copper, chromite, and many others. Every single mining plan always starts from the exploration step. This step aims to determine how potential the mining area is (IUP - Mining Location Permit). PT Pakubumi

Inti Mineral has a fairly high level of productivity, but it cannot be denied that there are many problems occurring in the company. Therefore, the author is interested in addressing the issues in PT Pakubumi Inti Mineral, as the company has a high level of turnover intention.
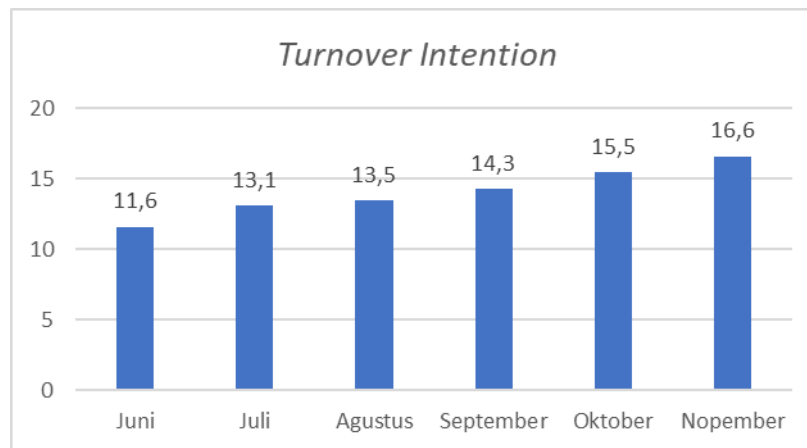
Source : HRD PT Pakubumi Inti Mineral Central Sulawesi, 2023
Figure 1. Turnover Intention 2023 Data

Turnover Intention is the intention of employees to leave their jobs and results in the company being faced with decreased employee continuity and high costs that must be incurred to recruit and train new employees (Gunawan & Andani, 2020). Turnover intention becomes a serious problem for a company if the employees who leave are potential employees who have skills, abilities and experience or employees who occupy important positions in the company that can interfere with the effectiveness of the company (Mon & Mulyadi, 2021). Companies need potential employees and low turnover intentions. Employee turnover intention is quickly becoming one of the most important managerial functions because it can affect the effectiveness of the organization, due to the increasing turnover of employee intention around the world (Prawitasari, 2020).

The graph above shows the turnover intention data of PT Pakubumi Inti Mineral, in June there was a turnover intention of 11.6%, then it continued to increase every month where in July the turnover intention was 13.1%, in August the turnover intention was 13.5%, in September the turnover intention was 14.3%, in October the turnover intention was 15.5% and the highest turnover intention in November was 16.6%. The highest turnover rate occurred in November at 16.6% and the lowest in June at 11.6%.

The results of the pre-survey related to variable turnover intention, physical work environment, compensation and job satisfaction were carried out by providing four statements. The following are the results of the pre-survey conducted.

Table 1. Results of the Pre-Survey Identification of the Phenomenon of Turnover Intention, Physical Work Environment, Compensation and Job Satisfaction

No	Pertanyaan	Jumlah Karyawan		
		Ya	Tidak	Total
1	Saya merasa puas dengan gaji yang di dapatkan	30	68	98
2	Penerangan, suhu ruang dan pencahayaan yang baik	24	74	98
3	Saya memiliki keinginan untuk meninggalkan perusahaan	17	81	98
4	Promosi karyawan di perusahaan dilakukan dengan objektif	22	76	98

Source : Data processed by the author, 2023

It can be seen in the table above as many as 68 people are not satisfied with the salary they get, 74 people do not get good lighting, temperature, space and accommodation, 82 people have the desire to leave the company and 76 people admit that employee promotions are carried out objectively, it causes a high turnover intention rate. To reduce the number of employee Turnover Intention, one of them is to pay attention to the job satisfaction of employees and the compensation they get as well as a comfortable work environment.

According to Afandi (2018) in (Gorda, 2019) Job satisfaction is an effective or emotional response to various aspects of work. A set of employee feelings about whether or not their work is enjoyable. A person's general attitude toward work shows the difference between the amount of compensation employees receive and the amount they believe they should receive. Then (Arsih, 2020) Job satisfaction is an attitude of an employee that describes the attitude in fulfilling several wants and needs through their work or work activities. According to (Anastasia & Widiawan, 2023) Employee job satisfaction is an individual's general attitude towards his or her job.

The physical work environment is everything that exists around the workplace that can affect employees either directly or indirectly, Sedarmayanti wrote in her journal (Marisya, 2022). According to (Ahmad, 2022) In his journal he said that "the work environment is everything in the environment that can directly or indirectly affect a person or a group of people in carrying out their activities. According to (Safiati Astuti & Bima, 2022) The physical work environment is everything that is physical around the worker and can influence him or her in carrying out the tasks given.

According to Hasibuan (2015) in (Rahayu & Juhaeti, 2022) Compensation is all income in the form of money, physical or indirect goods that employees receive in return for services provided to the company. Mathis and Jackson (2006) in (Nur'Arif, 2022) states that compensation is a key element that influences how and why individuals work in one organization and not in another. According to Umar (2007) in (Armansyah, 2020), Compensation is something that employees receive in return for their work. Apart from being rewarded, compensation can also motivate them to achieve the company's goals.

METHOD

This research was conducted at PT Pakubumi Inti Mineral. The type of research conducted by the author is a type of research with a quantitative approach by distributing questionnaires and processed using the SmartPLS 3.0 application whose conclusion focuses on hypothesis submission, where to test the hypothesis variables are used with measurable data and will produce conclusions that can be generalized. The population in this study is all employees at PT Pakubumi Inti Mineral which totals 327 people. The number of samples to be used in the study uses the Slovin formula with a tolerance of 5% and is produced as many as 180 samples. Sampling was carried out by the sampling technique used in this study, which is random sampling (probability sampling), namely by simple random sampling.

RESULTS AND DISCUSSION

The analysis method used in this study is the Partial Least Square (PLS) method using the SmartPLS 3.0 program. The Path Outer Model design functions to connect independent, mediated, and dependent variables. The design of the Path Outer Model in this study can be illustrated in the following figure:
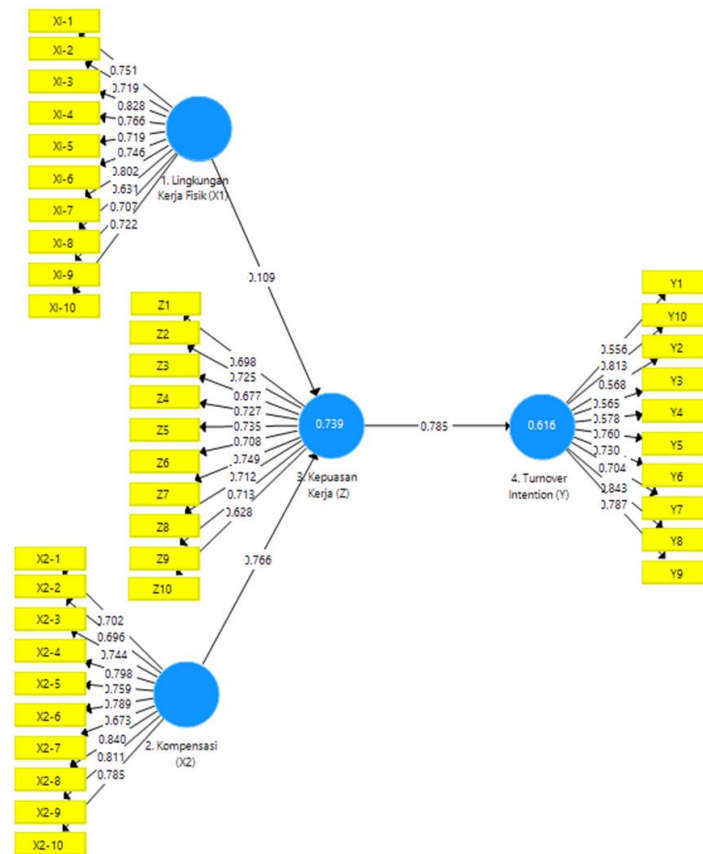
Source: Smart PLS 3.0 data processed, 2024
Picture 1. *Outer Model*

Convergence Validity Test

A research indicator will be considered valid if it has an outer loading value above 0.7 in each instrument. However, an outer loading value of 0.5 is still considered sufficient (Hasrizal & Games, 2023). If the outer loading value is <0.5, then the question item must be eliminated. However, there are also those who use the guideline <0.6, so the statement item must be eliminated.

Table 1. *Outer Loading*

Variabel	Indicator	Outer Loading	Description
1. Physical Work Environment (X1)	XI-1	0,756	VALID
	XI-10	0,720	VALID
	XI-2	0,726	VALID
	XI-3	0,822	VALID
	XI-4	0,765	VALID
	XI-5	0,727	VALID
	XI-6	0,745	VALID
	XI-7	0,798	VALID
	XI-8	0,637	VALID
	XI-9	0,701	VALID
2. Compensation (X2)	X2-1	0,703	VALID
	X2-10	0,790	VALID
	X2-2	0,697	VALID
	X2-3	0,750	VALID

	X2-4	0,793	VALID
	X2-5	0,762	VALID
	X2-6	0,786	VALID
	X2-7	0,671	VALID
	X2-8	0,839	VALID
	X2-9	0,809	VALID
3. Job Satisfaction (Z)	Z1	0,697	VALID
	Z10	0,628	VALID
	Z2	0,725	VALID
	Z3	0,677	VALID
	Z4	0,727	VALID
	Z5	0,735	VALID
	Z6	0,708	VALID
	Z7	0,749	VALID
	Z8	0,712	VALID
	Z9	0,713	VALID
4. Turnover Intention (Y)	Y1	0,558	VALID
	Y10	0,813	VALID
	Y2	0,565	VALID
	Y3	0,580	VALID
	Y4	0,580	VALID
	Y5	0,753	VALID
	Y6	0,730	VALID
	Y7	0,705	VALID
	Y8	0,838	VALID
	Y9	0,785	VALID

Source: Smart PLS 3.0 data processed, 2024

Based on the data in table 1 above, it can be seen that all indicators already have a value of > 0.6, so they are considered feasible or valid so that they can be continued to the next test. The following is the image of the outer loading of the research after elimination:
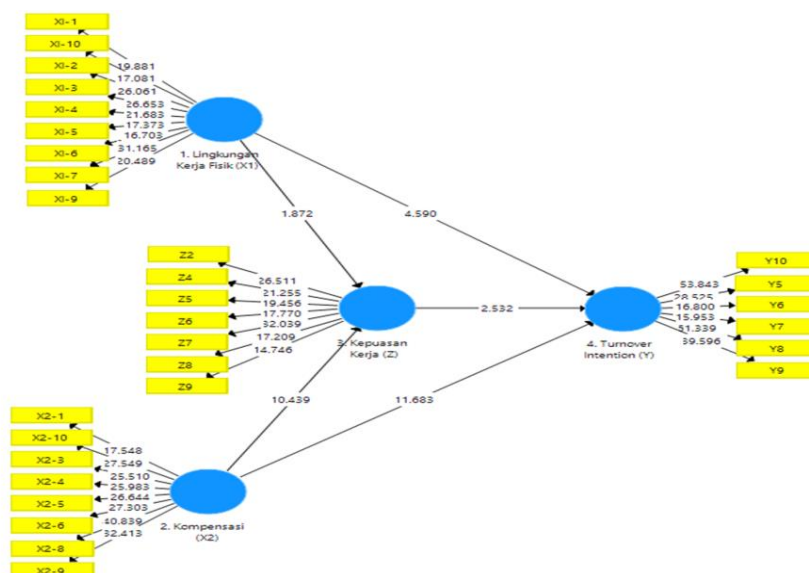
Source: Smart PLS 3.0 data processed, 2024
Picture 1. *Outer Model*

Discrimination Validity Test

The Discriminant Validity value is a cross loading value that serves to determine whether a construct has adequate discriminant. Discriminant Validity can be seen in the square of Average Variance Extracted (AVE) value. Discriminant Validity or correlation value is said to be achievable or valid if the AVE value > 0.5 and the correlation value is declared invalid if the AVE value < 0.5 Ghozali, 2015 in (Hasrizal & Games, 2023).

Table 2. *Average Variance Extracted (AVE)*

Variable	*Average Variance Extracted (AVE)*
Physical Work Environment (X1)	0,549
Satisfaction(x2)	0,580
Job satisfaction (Z)	0,501
Turnover Intention (Y)	0,588

Source: Smart PLS 3.0 data processed, 2024

Cronbach Alpha Reliability Test

The reliability test is assessed through 2 (two) methods, namely Cronbach's Alpha and Composite Reliability. A variable can be said to have good reliability if the value of Cronbach's Alpha > 0.6. Ghozali, 2015 in (Hasrizal & Games, 2023).

Table 3. *Cronbach's Alpha*

Variable	Cronbach's Alpha	Keterangan
Physical Work Environment (X1)	0,909	Reliabel
Satisfaction(x2)	0,919	Reliabel
Job satisfaction (Z)	0,889	Reliabel
Turnover Intention (Y)	0,879	Reliabel

Source: Smart PLS 3.0 data processed, 2024

Based on table 3 above, it can be concluded that the cronbach's alpha value of all constructs is > 0.6 which means that all constructs meet the criteria of cronbach's alpha and each construct in this study has a high reliability value.

Composite Reliability Test

The reliability test is assessed through 2 (two) methods, namely Cronbach's Alpha and Composite Reliability. A variable can be said to have good reliability if the Composite Reliability value has a value of > 0.7 Ghozali, 2015 in (Hasrizal & Games, 2023).

Table 4. *Composite Reliability*

Variable	Cronbach's Alpha	Keterangan
Physical Work Environment (X1)	0,924	Reliabel
Satisfaction(x2)	0,932	Reliabel
Job satisfaction (Z)	0,909	Reliabel
Turnover Intention (Y)	0,903	Reliabel

Source: Smart PLS 3.0 data processed, 2024

Inner Model Analysis

After conducting validity tests and reliability tests, it can be continued by testing structural models or inner models. The analysis of the Inner Model can be assessed through the R-Square test. The following are the R-Square values of this research:

Table 5. *R Square*

Variable	R Square	R Square Adjusted
Job satisfaction (Z)	0,737	0,734
Turnover Intention (Y)	0,791	0,788

Source: Smart PLS 3.0 data processed, 2024

Based on table 5 above, the R-Square value of job satisfaction of 0.737 can be explained that the influence of the variables Physical Work Environment (X1) and compensation (X2) on job satisfaction (Z) gives a value of 0.737, with the interpretation that the variables of job satisfaction construct can be explained by the variables of Physical Work Environment (X1) and compensation (X2) with a percentage of 73.7% and the remaining 26.3% explained by other variables outside this study, while the R-Square Turnover Intention of 0.791 can be explained that the influence of the variables Physical Work Environment (X1) and compensation (X2) on Turnover Intention (Y) gives a value of 0.791, with the interpretation that the variable of Turnover Intention construct can be explained by the variables of Physical Work Environment (X1) and compensation (X2) with a percentage of 79.1% and the remaining 20.9% explained by other variables outside this study.

Hypothesis Analysis

The hypothesis test in this study can be seen in the Path Coefficient table which serves to test whether a hypothesis can be accepted or rejected. The Path Coefficient criterion is 5%, t = 1.96. If the t-statistic value is greater (>1.65), then the hypothesis is significant or H0 is rejected and Ha is accepted. The Path Coefficient table of this study is as follows:

Table 6. Path Coefficient

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDE)	T Statistics (|O/STDEV)	P Values
Physical Work Environment -> Job Satisfaction (Z)	0,157	0,167	0,084	1,872	**0,062**
Physical Work Environment -> Turnover Intention (Y)	-0,319	-0,318	0,069	4,590	**0,000**
Compensation (X2) -> Job satisfaction (Z)	0,738	0,730	0,071	10,439	**0,000**
Compensation (X2) -> Turnover Intention (Y)	0,825	0,825	0,071	11,683	**0,000**
Job Satisfaction (Z) -> Turnover Intention (Y)	0,243	0,246	0,096	2,532	**0,012**

Source: Smart PLS 3.0 data processed, 2024

H1: The size of the parameter t-statistic coefficient for Physical Work Environment -> Turnover Intention has a P Value of 0.000 and a t statistic of 4.590, indicating it is significant (t table significance at 5% = 1.65), which means Ho is rejected and Ha is accepted, implying that the Physical Work Environment has a significant effect on Turnover Intention.

H2: The size of the parameter t-statistic coefficient for Compensation -> Turnover Intention has a P Value of 0.000 and a t statistic of 11.683, indicating it is significant (t table significance at 5% = 1.65), which means Ho is rejected and Ha is accepted, implying that Compensation has a significant positive effect on Turnover Intention.

H3: The size of the parameter t-statistic coefficient for Physical Work Environment -> Job Satisfaction has a P Value of 0.062 and a t statistic of 1.872, indicating it is not significant (t table significance at 5% = 1.65), which means Ho is accepted and Ha is rejected, implying that the Physical Work Environment has a positive but not significant effect on Job Satisfaction.

H4: The size of the parameter t-statistic coefficient for Compensation -> Job Satisfaction has a P Value of 0.000 and a t statistic of 10.439, indicating it is significant (t table significance at 5% = 1.65), which means Ho is rejected and Ha is accepted, implying that Compensation has a significant positive effect on Job Satisfaction.

H5: The size of the parameter t-statistic coefficient for Job Satisfaction -> Turnover Intention has a P Value of 0.012 and a t statistic of 2.532, indicating it is significant (t table significance at 5% = 1.65), which means Ho is rejected and Ha is accepted, implying that Job Satisfaction has a significant positive effect on public compensation.

To test the hypothesis between the variables of Physical Work Environment on Turnover Intention mediated by Job Satisfaction and the variable of Compensation on Turnover Intention mediated by Job Satisfaction, a Bootstrapping test -> Special Indirect Effects was conducted with the following results:

Table 7. Path Coefficient

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Physical Work Environment -> Job Satisfaction (Z) -> Turnover Intention (Y)	0,038	0,040	0,026	1,446	**0,149**
Compensation (X2) -> Job Satisfaction (Z) -> Turnover Intention (Y)	0,179	0,180	0,072	2,484	**0,013**

Source: Smart PLS 3.0 data processed, 2024

H6: The magnitude of the t-statistical parameter coefficient for Physical Work Environment -> job satisfaction -> Turnover Intention has P Values of 0.149 and t statistic 1.446, then it is declared insignificant (t significance table 5% = 1.65) or it can be stated that Ho is accepted and Ha is rejected, meaning that the Physical Work Environment has no effect on Turnover Intention through job satisfaction.

H7: The magnitude of the coefficient of the t-statistical parameter for compensation -> job satisfaction -> Turnover Intention has a P Values of 0.013 and a statistical t of 2.484, then it is declared significant (t of the significance table 5% = 1.65) or it can be stated that Ho is rejected and Ha is accepted, meaning that compensation has a significant positive effect on Turnover Intention through job satisfaction.

CONCLUSION

Based on the results of data using SmartPLS 3.0, it was concluded that both the physical work environment and compensation have an important role in influencing employee turnover intention at PT Pakubumi Inti Mineral Central Sulawesi, with compensation showing a stronger and significant influence. Job satisfaction also plays a significant mediating role between compensation and turnover intention, but this is not the case with the physical work environment.

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