

The Effect of Workload and Work Environment on Turnover Intention at PT. Nissin Biscuit Indonesia

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Abstract. This study examines the main issues related to job turnover intention at PT. Nissin Biscuit Indonesia, focusing on how workload and work environment impact turnover intention. The study is to examine the partial and simultaneous effects of workload and work environment on turnover intention. In this research, a quantitative approach is used with a population of 700 production department employees and 100 respondents taken as a sample. The technique applied in data processing is using SPSS version 27. The results of this study's show that workload has a significantly and favorably effect on turnover intention. In other words, the more workload given to employees, the greater their intention to leave the company. Turnover intention, is positively and significantly impacted by the work environment as well. Similarly, workload and work environment positively affect turnover intention.

Keywords : Workload; Work Environment; Turnover Intention

INTRODUCTION

Intensified competition in the business world requires companies to continue to innovate and maintain a competitive advantage through optimization of all operational aspects. In this dynamic market condition and intense competition, companies face great challenges to retain their best talents so that they do not move to competitors. Therefore, digital implementation has become an important element in Human Resource (HR) management to address issues such as turnover intention. Digital implementation offers a significant opportunity for companies to build a more responsive and recorded work system. By adopting technologies such as digital HR management information systems, tools to monitor employee engagement in real time, and adaptive learning platforms with artificial intelligence, companies can detect potential employee issues earlier and provide more efficient and individualized solutions in a timely manner. This is in line with what Sedarmayanti (2017: 3) said in (Mawey et al., 2024) that manpower is the most valuable and crucial asset or wealth owned by a company or institution because the human element greatly affects organizational success. The success of a company or entity is influenced by various aspects, among which are skills in maintaining employees. Measures to reduce low retention rates, especially in preventing employee turnover intention, are important in maintaining organizational stability and efficiency.

Turnover Intention according to Mobley (2011), is the desire or interest of an employee to voluntarily leave their position or switch to another work location according to their own wishes (Desi1 et al., 2023). According to a report from Michael Page in (Karnadi, 2022), by 2022, 74% of employees in the Asia Pacific region intend to disengage within the next six months, with figures in the Southeast Asia region reaching 81%. Based on the information from the survey, it is clear that turnover intention is a challenge that needs to be addressed by organizations or companies around the world. This shows that companies need to design and strategize to retain their employees. Robbins and Judge (2009) in

(Mawey et al., 2024) state that the consequences of employee turnover or company turnover include increased workload.

The great degree of turnover intention, as explained earlier, suggests that there are certain factors that encourage employees to want to leave work. One factor that has been found to be closely related is workload. A heavy workload can result in workers leaving the company. Balanced workload management is crucial to retaining qualified workers and reducing turnover (Sutikno, 2020). In addition, high workload is the main factor that causes the desire to change jobs, so with this understanding, organizations can design appropriate workload management strategies to reduce turnover rates (Fitriantini & Nurmayanti, 2020). Excessive workload can trigger psychological and physical stress, which in turn reduces work efficiency and increases the risk of losing key employees (Kristin et al., 2022).

Apart from the workload, the work environment is a factor to encourage employees to leave work. A conducive work environment has a crucial role for labor happiness and productivity (Apriyanto & Haryono, 2020). Meanwhile, a less supportive work environment, both in terms of physical and other aspects, has an impact on increasing work stress and turnover rates among employees (Rahmawati Santoso et al., 2024). A positive and supportive work environment can reduce turnover intention, while an unpleasant environment can increase employees' desire to move (Kamis et al., 2021).

The results of research conducted (Cahyaniz & Badrianto, 2023) on the variability of turnover intention indicate the "existence of other elements that have not been analyzed or included in the existing model. In addition, there is a correlation between workload and work environment variables that has not been thoroughly examined. This implies that more research is necessary to improve our knowledge of the relationship between workload, work environment, and intention to leave. By investigating additional factors and interactions between these variables, this study is expected to provide a deeper understanding of the dynamics of turnover intention among employees. As the study conducted by (Dhea Wulandari et al., 2024) workload and work environment did not have a relevant impact on turnover intention, there is a need to investigate moderating or mediating elements that may play a role in influencing the relationship. This suggests that the interaction between these variables may be more complex than expected. Studies that have been conducted (Nengsih et al., 2024) there are few studies that thoroughly explore "the relationship between workload, work environment conditions, and turnover intention simultaneously by applying multiple linear regression analysis, and strictly maintaining the validity and reliability of measuring instruments. Given the identified study deficit, it is still highly pertinent to do research on turnover intention, particularly at PT Nissin Biscuit Indonesia. The phenomenon that is often found in this company is the high number of employees who wish to change jobs or show a desire to leave, resulting in their decision to leave their position (turnover intention).

According to the background information, the purpose of this study is to investigate how work environment and workload affect employees' intentions to leave. Specifically, this study focuses on workload and work environment, both separately and simultaneously, affecting employees' tendency to leave the organization. The results of this study are expected to be useful in both theoretical and practical aspects for the development of more effective human resource management strategies in retaining talent and reducing turnover rates in various industrial sectors. Therefore, the researcher determined the title formulated as The Effect of Workload and Work Environment on Turnover Intention at PT Nissin Biscuit Indonesia.

METHOD

This study applies a quantitative approach where data collection procedures are based on numbers and analysis is carried out statistically (Sugiyono, 2023). This study examines the effect of workload and work environment on intention to transfer. The population involved is the production employees of PT.Nissin Biscuit Indonesia which reaches 700 people. The research location is at PT.Nissin Biscuit Indonesia which is located on Jl. Raya Semarang Salatiga, KM. 23, Babadan, Gedanganak, Kec.Ungaran Timur, Kab. Semarang. Determination of the research sample refers to the opinion of Roscoe (1982: 253) in (Sugiyono, 2023) which provides guidance on sample size for research as follows: 1. An adequate sample size in research ranges from 30 to 500. 2. One (1) variable is at least 10 respondents, since in this study there are 3 variables so $3 \times 10 = 30$. Researchers set a sample of 100 respondents by taking random samples. The technique applied in data processing is using the SPSS version 27 program.

RESULTS AND DISCUSSION

A. Research Results

PT Nissin Biscuits Indonesia is a food company established in 1977 and has production facilities in Ungaran, Central Java. The company has produced a wide range of snack products in hundreds of variants, including biscuits, krakers, cookies, wafers, and other snacks with various brands. As one of the leading players in the food industry, PT Nissin Biscuits Indonesia has successfully distributed its products throughout Indonesia and exported to various countries in the world.

1. Validity Test.

Correlations			
Variable	R Count	R table	sig.
Workload (X1)	0.706	0.196	0.000
	0.904	0.196	0.000
	0.883	0.196	0.000
	0.876	0.196	0.000
Work Environment (X2)	0.924	0.196	0.000
	0.875	0.196	0.000
	0.725	0.196	0.000
	0.902	0.196	0.000
Turnover Intention (Y)	0.859	0.196	0.000
	0.734	0.196	0.000
	0.831	0.196	0.000
	0.697	0.196	0.000

Table 1. Validity Test Results

All statement items used to measure workload variables, work environment, and turnover intention were deemed valid based on the validity test results because the significance level was below 0.05 and the calculated r value exceeded the r table ($r \text{ count} > r \text{ table}$).

2. Reliability Test

Reliability Statistics

Variable	Cronbach's Alpha	Critical Limit	Description
Workload (X1)	0.852	0.60	Reabel
Work Environment (X2)	0.867	0.60	Reabel
Turnover Intention (Y)	0.787	0.60	Reabel

Table 2. Reliability Test Results

According to the reliability test results above, the data tested exhibits a satisfactory level of reliability because all Cronbach's alpha values are higher than the 0.06 threshold. The workload and work environment variables have reliability values of 0.852 and 0.867, respectively, while the turnover intention variable has a score of 0.787.

3. Classical Assumption Test'

The classical assumption test is a series of statistical procedures that are needed as a requirement for multiple linear regression analysis in order to obtain accurate output. The series of classic assumption tests that need to be done include:

a. Normality Test

Normality test is used to test the distribution of regression data, dependent variables, and independent variables are normal or close to normal. The normality test carried out by the author is as follows:

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual.
N			100
Normal Parameters ^{a,b}	Mean		.0000000
	Std. Deviation		1.33225664
Most, Extreme Differences	Absolute		.080
	Positive'		.080
	Negative		-.054
Test Statistic			.080
Asymp. Sig. (2-tailed) ^c			.115
Monte Carlo Sig. (2-tailed) ^d	Sig.		.113
	99% Confidence Interval.	Lower Bound	.104
		Upper Bound	.121
a. Test distribution is Normal.;			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. Lilliefors, method based on 10000 Monte Carlo samples with starting seed 299883525.			

Table 3. Normality Test

The normality test results indicate that the Asymp.sig. (2-tailed) value shows 0.115 and monte carlo value is 0.113, both higher than 0.05. This indicates that the residual data is normally distributed. In other words, the normality requirement has been met.

b. Multicollinearity Test

Model	Coefficients ^a			t	Sig.	Collinearity Statistics	
	Unstandardized Coefficients ^b	Std. Error	Standardized Coefficients ^b			Tolerance	VIF ^c
1	(Constant)	2.454	.880	2.789	.006		
	Workload(X1)	.386	.147	.391	.010	.166	6.013
	Work Environment (X2)	.407	.142	.428	.005	.166	6.013

a. Dependent Variable: Turnover Intention

Table 4. Multicollinearity Test Results

The multicollinearity test displays the results of the Tolerance number for the workload and work environment variables is 0.166 with a VIF of 6.013. This is evidenced through the tolerance value higher than 0.1 and VIF less than 10, these findings indicate the absence of multicollinearity disorders in the research data.

b. Test t (Partial Test)

The t test or partial test is used to determine the ability of each independent variable to influence the dependent variable.

Model	Unstandardized Coefficients		Coefficients Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 Constant	2.454	.880		2.789	.006		
Workload	.386	.147	.391	2.617	.010	.166	6.013
Work Environment	.407	.142	.428	2.864	.005	.166	6.013

a. Dependent Variable: Turnover Intention

Table 5. T Test Results (Partial)

Workload has a t-value of 2.617 with a significance level of 0.010, according to the t-test results, while the work environment variable has a t-value of 2.864 with a significance value of 0.005. Given that both variables show significance values below 0.05, the findings indicate that workload and work environment individually have a positive and significant impact on turnover intention.

c. F Test

To ascertain how the combined effects of workload and work environment variables on turnover intention, the F Test, also known as the Simultaneous Test, is utilized.

Model	Sum of Squares ^a	Df	Mean Square	F.	Sig.
1 Regression	313.034	2	156.517	86.402	.000 ^b
Residual	175.716	97	1.812		
Total	488.750	99			

a. Dependent Variable: Turnover Intention

b. Predictors: (Constant), Workload, work environment.

Table 6. F Test Results

The F test results show that the Sig. value of 0.000 is smaller than the alpha value of 0.05. Thus, it can be said that factors related to workload and work environment both significantly and favorably affect the turnover intention.

Multiple Linear Regression Test

Model	Unstandardized Coefficients		Coefficients ^a		t	Sig.	Collinearity Statistics	
	B'	Std. Error	Standardized Coefficients; Beta				Tolerance	VIF
1 (Constant)	2.454	.880			2.789	.006		
Workload X1	.386	.147	.391		2.617	.010	.166	6.013
Work Environment X2	.407	.142	.428		2.864	.005	.166	6.013

a. Dependent Variable: Turnover Intention

Table 7. Multiple Linear Regression Test Results

$$Y = a + B_1X_1 + B_2X_2$$

$$Y = 2.454 + 0.36 + 0.407$$

Explanation of the above equation:

1. the constant reaches a value of 2.454, this indicates that if the workload and work environment variables have a constant value of zero, the turnover intention value is 2.454.
2. The workload variable has a positive regression coefficient of 0.386. This indicates that turnover intention will rise by 0.386 for every unit added to the workload.
 The Work Environment variable has a positive regression coefficient of 0.407. Which means that every addition of one unit to the work environment variable will cause turnover intention to increase by 0.407.

R square test / Coefficient of Determination

Model Summary ^b				
Model	R	R Square.	Adjusted R Square.	Std. Error of the Estimate.
1	.800 ^a	.640	.633	1.346

a. Predictors: (Constant), workload (x1); work environment (x2)

b. Dependent Variable: Turnover Intention

Table 8. R square test results

The work environment and workload characteristics in the population under study can jointly account for 63.3% of the variation in turnover intention, according to the Adjusted R-square value of 0.633 obtained from the coefficient of determination test. The

small drop from R-square (0.640) to Adjusted R-square (0.633) is normal and indicates that the model is still robust.

B. Discussion

1. Effect of Workload on Turnover Intention

Considering the results of this investigation, it indicates that the work pressure variable has a positive and significant influence on the desire to change jobs on the production staff of PT Nissin Biscuit Indonesia. This finding proves that when the higher the pressure felt by employees increases, there is a tendency for employees to have the intention to leave a workplace (turnover intention)

This study is consistent with studies carried out by (Hisbih et al., 2023) where researchers show that through the analysis conducted, it shows that work pressure has a positive impact on turnover intention. The contribution rate of employee work pressure at Permata Hospital to turnover intention is 19%.

2. The Effect of Work Environment on Turnover Intention

Research indicates that the work environment at PT Nissin Biscuit Indonesia has a favorable and significant impact on the intention of production workers to leave the company. This proves that a poor work environment, both in terms of physical and other aspects, can increase employees' desire to leave the company. Conversely, a quality work environment is essential for creating happiness and increasing worker productivity. With this, companies need to provide a comfortable and supportive work environment to reduce turnover intention and retain employees.

This study is consistent with studies carried out by (Khomaryah et al., 2020). Their research also shows a positive and significant effect of work atmosphere on intention to leave the company at PT Efrata Retailindo Surakarta. This research indicates that even though the working conditions at PT Efrata are considered very good, this does not necessarily guarantee a low employee turnover rate.

3. The Effect of Workload and Work Environment on Turnover Intention

Based on the findings of this study, it can be concluded that workload factors and workplace environment contribute significantly and positively to the intention to leave the company."This is evident through the F-count value which reaches 86,402, and the significance value of 0.000 is far below the specified limit of 0.05, so it is concluded that these two factors together have a very significant influence on employees' desire to leave the company. From the R Square test with a value that reaches 0.640 or 64.0%. This indicates that factors related to workload and work environment account for 64.0% of the variation in employee turnover intention. As much as 36.0% is influenced by other factors that have not been analyzed in this study."

CONCLUSION

This study shows a positive and significant impact between workload and work environment on employee turnover intention partially at PT Nissin Biscuit Indonesia, where employees who feel high job pressure have a tendency to leave the company. In addition, an unfavorable work environment, both physically and in other aspects, exacerbates turnover intention, while a positive work environment can contribute to increased employee satisfaction and performance. Simultaneously, workload and environment have a positive and significant impact on turnover intention, with the R

Square value reaching 64.0%, which indicates that these two factors have a significant role in the decision of workers to have the intention to leave the company (turnover intention)."

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