High Rate of Turnover Intention: Study of Logistics Industrial Workers

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ABSTRACT
The research aims to uncover the root cause of the high rate in terms of logistic employee turn-over at the top ten logistics establishments under the management of Kawasan Berikat Nusantara located at the busiest logistics hub in the northern part of Indonesia. Ninety-eight respondents who were all decision makers representing ten major logistics establishments gave the primary data through structured questionnaires. Regression analysis was used to analyze the collected data as well as the description of hypothesis results. The conclusion showed that although the high tension of heavy industry in particular the logistics sector caused high job stress; it was not affecting the turn over intention of the employee. On the other side, employee job satisfaction gave more impact on employee turn-over. This circumstance gave a clear and objective description that job stress was really only the perception of the employee where they have their own flexibility and got full understanding related to the individual stress aspect. It concluded that logistics sector employees could tolerate job stress much better than their job satisfaction.

Keywords: Job stress, Turn-over intention, Logistic workers

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1. INTRODUCTION

Human resources are the most important aspect in an organization[1]. Competent and qualified human resources were needed to support productivity and activities so that the goals of an organization could be achieved properly and correctly[2]. In an organization, human resources are not only a tool but also have an important role for the sustainability of an organization[3]. Human resources had a big hand in determining the progress of an organization[4]. Without human resources, other resources could not be utilized.
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properly[5]. There were costs incurred due to turnover, including costs for recruiting and selecting new staff when employees who had worked have left the company[6]. Several factors related to the desire of employees to change jobs in a company were job satisfaction and work stress[7]. The relationship between job satisfaction, job stress, and intention to move was said that when an employee leaves an organization, the tasks that should be done by that employee would be left and this would affect the organization he left[8]. Job satisfaction was found to be an important factor in the world of work for all work groups[9]. In addition, work stress experienced by employees is also one of the factors that influence how to carry out their work[10]. Effect of job satisfaction and job stress on the desire of employees to change jobs[11]. One that often makes employees want to leave the company because they feel dissatisfied with their current job[12]. Employee dissatisfaction was the result of not achieving wants and needs when employees do their jobs[13]. Job satisfaction as individual thoughts and feelings about their workplace and various aspects about it[14]. Job satisfaction was everything about individual behavior regarding the extent to which individuals like or dislike at work[15]. Influence between job satisfaction, job stress, and the intention to change jobs, this research shows a negative effect between job satisfaction and the intention to change jobs[16]. This means that the lower the level of employee satisfaction, the higher the employee's desire to change jobs[17]. In addition to job satisfaction, there were other factors that influence employees to change jobs, namely work stress[18]. Stress occurs when individuals realize that there were pressures or requirements from work that were greater than the ability of employees[19]. Job stress was an adverse individual reaction due to excessive pressure or orders at work[20]. When employees feel stressed about their work, this could increase employee job dissatisfaction. There were two main dimensions of work stress, namely physiological stress and psychological stress. Physiological stress in question is like migraines, headaches, fatigue, chest pain, and so on. Meanwhile, psychological stress shows a response of anxiety, anger, tension, and anxiety. This would have a negative impact on employee attitudes and behavior if employees cannot control it. There were factors that cause stress, including lack of resources, work overload, lack of harmonization and ease with direct superiors and colleagues. There was a significant and positive impact between work stress and the desire of employees to move. That was, the higher the level of work stress the employee has, the higher the employee's desire to move. In line with the matters above, the estimated turnover in 2023 in Indonesia had been increased. Based on the description above, the researcher formulated the problems in this study as follows; Does job stress affect the turnover intention of logistics company employees in the Kawasan Berikat Nusantara? Does job satisfaction affect the turnover intention of logistics company employees in the Kawasan Berikat Nusantara?

2. LITERATURE REVIEW

Job satisfaction has several different definitions according to several experts, including, job satisfaction is the attitude of workers in their work and perceptions. The perception of workers about their work based on factors from the work environment such as supervisor's style, procedures and policies, working conditions, and fringe benefits (da Luz et al., 2022). Meanwhile, the definition of job satisfaction is also defined as a person's positive feelings about work resulting from the characteristics of the evaluation itself. On
the other hand, job satisfaction is the attitude of liking, pleasure, and happiness that employees feel at a job.

Job stress occurs when employees feel an imbalance between work demands and the ability that employees have to meet these demands. Furthermore, work stress is an adverse individual reaction due to excessive pressure or orders at work. There are two main dimensions of work stress, namely physiological stress and psychological stress. Physiological stress in question is like migraines, headaches, fatigue, chest pain, and so on. Meanwhile, psychological stress shows a response of anxiety, anger, tension, and anxiety.

There are factors that cause stress, including lack of resources, work overload, lack of harmonization and ease with direct superiors and with colleagues. Turnover intention is a condition voluntarily or involuntarily to leave the organization permanently. Turnover intention can be defined as an employee's choice to leave his job. Turnover intention is the conscious and planned desire of employees to leave the organization. The definition of intention to leave is the employee's plan or desire to leave the current job and look for another job in the near future. Turnover intention is a person's attitude to withdraw from the company.

Research Framework

Figure 1. Research Framework

Based on the research model above, the following is an explanation

H1: Job stress has a positive effect on turnover intention. H0: Job stress has no positive effect on turnover intention

H2: Job satisfaction has a negative effect on turnover intention.

H0: Job satisfaction (job satisfaction) has no negative effect on turnover intention.

3. METHOD

The multicollinearity test aims to test whether the regression model found a correlation between the independent (independent) variables. A good regression model should not have a correlation or not find multicollinearity between the independent variables. Multicollinearity can be seen from the tolerance value and variance inflation factor.
factor (VIF). The value used to indicate the existence of multicollinearity is tolerance ≤ 0.10 or equal to VIF ≥ 10. The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is one that has homoscedasticity or does not have heteroscedasticity.

There is a way to find out whether there is heteroscedasticity by looking at the plot graph. If there is no clear pattern and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity. The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. As it is known that the t and F tests assume that the residual values follow a normal distribution. In principle, normality can be detected by looking at the histogram of the residuals. If the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram shows a normal distribution pattern, then the regression model meets the assumption of normality.

The coefficient of determination (R2) essentially measures how far the model's ability to explain the variation in the dependent variable. The value of the coefficient of determination is between zero and one. The small value of R2 means that the ability of the independent variables to explain the variation in the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. The statistical method for examining the relationship between one dependent variable and one or more independent variables is called regression. Multiple regression is used to test the effect of one independent variable on more than one dependent variable.

The simple regression equation used in this study is: 

\[ Y_1 = a + b_1X_1 + b_2X_2 + e \]

Description:

- \( Y_1 \) = TTO (Turnover Intention)
- \( X_1 \) = TJST (Job Stress)
- \( X_2 \) = TJSF (Job Satisfaction)
- \( A \) = Constant
- \( B \) = Coefficient Regression Line
- \( E \) = Error

The t statistical test basically shows how far one explanatory or independent variable individually explains the variation of the dependent variable. The null hypothesis (H0) to be tested is whether a parameter \( b_i \) is equal to zero, or: \( H0: b_i = 0 \), meaning whether an independent variable is not a significant explanation of the dependent variable. The alternative hypothesis (HA) is that the parameter of a variable is not equal to zero, or HA: \( b_i \neq 0 \), meaning that the variable is a significant explanation of the dependent variable. Multicollinearity test aims to test whether the regression model found a correlation between independent (independent) variables. The value used to indicate the presence of multicollinearity is tolerance ≤ 0.10 or the same as VIF ≥ 10. The results of multicollinearity testing via SPSS are as follows:

<table>
<thead>
<tr>
<th>Table 1. Multicollinearity Test for Job Stress, Job Satisfaction, and Turnover Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients²</td>
</tr>
</tbody>
</table>

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From the results of data processing it can be seen that there is no multicollinearity because the tolerance value of the two independent variables is not less than 0.10 and the VIF value does not exceed 10. So, it can be said that in the regression model there is no correlation between the two independent variables. The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. In principle, normality can be detected by looking at the histogram of the residuals. If the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram shows a normal distribution pattern, then the regression model meets the assumption of normality. The normality test results are as follows:

Figure 2. Normality Test for Job Stress, Job Satisfaction, and Turnover Intention Source: Research Data (2023)
From the results of data processing it can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram graph is normally distributed so that it can be concluded that all data has shown a normal distribution pattern. The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from one residual observation to another. A good regression model is one that has homoscedasticity or does not have heteroscedasticity. There is a way to find out whether there is heteroscedasticity by looking at the plot graph. If there is no clear pattern and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity. The results of the heteroscedasticity test are as follows:
Based on data processing, it can be seen that in the scatter plot there is no clear pattern formed and the points spread above and below zero on the Y axis. Thus, it can be concluded that there is no heteroscedasticity. The coefficient of determination (R2) essentially measures how far the model's ability to explain the variation in the dependent variable. The value of the coefficient of determination is between zero and one. The small value of R2 means that the ability of the independent variables to explain the variation in the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. Therefore, in testing the coefficient of determination it is recommended to use the Adjusted R2 value when evaluating which is the best regression model. Unlike R2, the value of Adjusted R2 can increase or decrease if one independent variable is added to the model. The test results are as follows:

Table 2. Model Test Result for Job Stress, Job Satisfaction, and Turnover Intention

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.427&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.175</td>
<td>.162</td>
<td>3.706</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), TJST, TJSF
b. Dependent Variable: TTO

Source: Research Data (2023)

From the results of data processing it can be seen that the value of Adjusted R2 is 0.162. Which means the variable turnover intention can be explained by the two
independent variables (job stress and job satisfaction) of 0.162 or 16.2%. The rest (100% - 16.2% = 84.8%) is explained by other variables outside of these variables, such as leadership support, organizational commitment, and others. The t statistical test basically shows how far one explanatory or independent variable individually explains the variation of the dependent variable. One way to do the t-test is to compare the value of the t statistic with the critical value according to the table. If the t statistic value is calculated > t table then the alternative hypothesis (HA) is accepted. Which means that an independent variable individually affects the dependent variable. The results of hypothesis testing are as follows:

Table 3. Hypothesis Test Result for Job Stress, Job Satisfaction, and Turnover Intention

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>14.126</td>
<td>2.319</td>
<td>5.430</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>JSF</td>
<td>-.372</td>
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<tr>
<td>1</td>
<td>JST</td>
<td>.156</td>
<td>.087</td>
<td>.273</td>
<td>1.276</td>
</tr>
</tbody>
</table>

a. Dependent Variable: TO

From the results of the t test, it can be seen that:

The significant probability of the job stress variable (X1) is 0.175 or above 0.05, which means that job stress has no significant effect on turnover intention. This can also be seen from the count <table where 1.393 <1.6596, which means H0 is accepted and HA is rejected. (table obtained from df=106-2=104; alpha 0.05). This shows that there is no influence between job stress variables on turnover intention.

The significant probability of the job satisfaction variable (X2) is 0.001 or below 0.05, which means that job satisfaction has a significant effect on turnover intention. This can also be seen from the count > table where 3.575 > 1.6596, which means H0 is rejected and HA is accepted. (table obtained from df=106-2=104; alpha 0.05). This shows that there is an influence between job satisfaction variables on turnover intention.

Thus, from the results of the individual test or t test it can be concluded that job satisfaction is proven to have a significant relationship with turnover intention, meaning that job satisfaction has a relationship with turnover intention. Regression analysis is basically a study of the dependence of the dependent variable (bound) with one or more independent variables (explanatory/independent variables) where the results of the regression analysis are in the form of coefficients for each independent variable obtained by predicting the value of the dependent
variable with an equation. In this study, researchers used multiple linear regression analysis.

Multiple regression models: \( Y = a + b_1X_1 + b_2X_2 + e \)

Table 4. Hypothesis Test Result for Job Stress, Job Satisfaction, and Turnover Intention

<table>
<thead>
<tr>
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</tr>
</tbody>
</table>

a. Dependent Variable: TO

Source: Research Data (2023)

\[ TO = 12.556 + 0.156 \text{JST} - 0.372 \text{JSF} + 2.279 \]

From the results of the regression equation, it can be concluded as follows:

1. The constant value of 12,556 states that if the value of the variable job stress and job satisfaction is 0, then the variable turnover intention (Y) has a value of 12,556.

2. The regression coefficient \(X_1\) is 0.133 indicating the magnitude of the influence of the job stress variable on turnover intention. The positive sign indicates a positive influence. This means that every change of 1 unit of the job stress variable can cause an increase of 0.145 for the variable unit of turnover intention (Y). From the results of the t test, this factor shows a positive influence between job stress and turnover intention.

3. The regression coefficient \(X_2\) is -0.379 indicating the magnitude of the influence of the job satisfaction variable on turnover intention. This variable shows a negative effect between job satisfaction on turnover intention, meaning that every time there is an increase of 1 unit of job satisfaction, it can cause a decrease of -0.379 for the variable unit turnover intention (Y). And conversely, every time there is a decrease of 1 unit of job satisfaction, the frequency of turnover intention will increase by -0.379 assuming other factors are constant. From the results of the t test, this factor shows a negative influence between job statistics and turnover intention.
4. RESULTS AND DISCUSSION

The results of data analysis show that job stress has no effect on turnover intention of employees in the Kawasan Berikat Nusantara logistics company. Based on the results of hypothesis testing, the significance level of job stress on turnover intention is 0.145, which means greater than 0.05. The results of data analysis show that job satisfaction has an effect on turnover intention of employees in logistics companies in the Nusantara Bonded Zone. Based on the results of hypothesis testing, the significance level of job satisfaction on turnover intention is 0.001, which means less than 0.05.

5. CONCLUSION

After conducting research and studies based on the results of processed data to analyze the effect of Job Stress and Job Satisfaction on Turnover Intention of employees in logistics companies in the Kawasan Berikat Nusantara area, it can be concluded that; (1) The results of data analysis show that job stress has no effect on turnover intention of employees in the Kawasan Berikat Nusantara logistics company. Based on the results of hypothesis testing, the significance level of job stress on turnover intention is 0.145, which means greater than 0.05. (2) The results of data analysis show that job satisfaction has an effect on turnover intention of employees in logistics companies in the Nusantara Bonded Zone. Based on the results of hypothesis testing, the significance level of job satisfaction on turnover intention is 0.001, which means less than 0.05.

ACKNOWLEDGEMENTS

We express our highest gratitude and appreciation to all parties, both individuals and the University of Multimedia Nusantara who have contributed to the completion of this research. Without their support and assistance, this research would not have been possible.

REFERENCES


# BIOGRAPHIES OF AUTHORS

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