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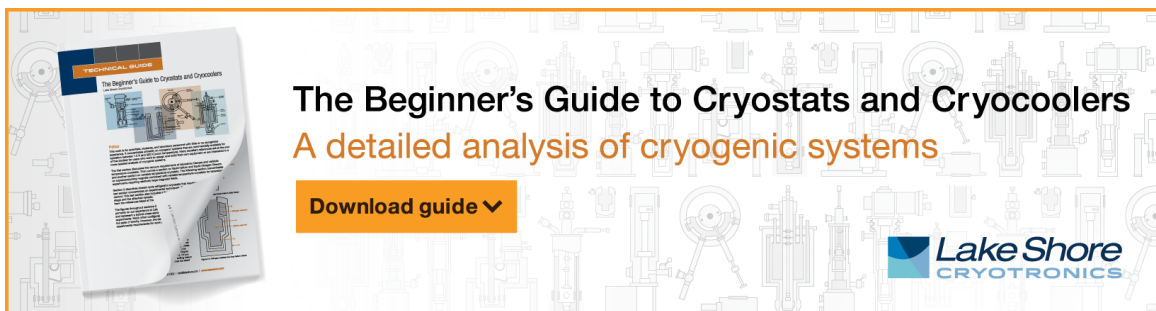


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# Employee Retention: Effect of Compensation, Work Stress, and Job Satisfaction - A Case Study in an Edible Bird's Nest Company

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**Abstract.** This study was conducted to measure compensation factors and job stress on job satisfaction that may affect employee retention rates. A case study was conducted on a swiftlet company by conducting a questionnaire-based survey to collect data and information from 112 employees in the production division as the sample of this study. Compensation and job stress factors were determined as independent variables, employee retention variable as the dependent variable, and job satisfaction as the intervening variable in analyzing the survey data with the Structural Equation Modeling technique in Smart PLS 3.0. The study found that compensation positively and significantly affects job satisfaction and employee retention. Furthermore, the study results prove that job stress has a negative effect on job satisfaction and employee retention. Therefore, job satisfaction can also have a positive and significant impact on employee retention. However, let us look more deeply at the demographic aspect of the respondents in the group of employees. For employees who already have children, job stress variables do not significantly affect employee retention. In addition, job satisfaction variables do not significantly affect employee retention for workers in the age group below 25 years and the compensation variable does not significantly affect the unmarried employee.

## INTRODUCTION

The outbreak of COVID-19 in almost all parts of the world caused millions of deaths. As a result, many alternative treatments are sought for treatment efforts, one of which is the consumption of Edible Bird's Nest that can reduce virus titers and reduce virus binding activity since Edible Bird's Nest has antiviral effects, especially against COVID-19 [1]. The processing of Edible Bird's Nest from its original condition until it is ready for human consumption must go through several processes that are not easy using human labor because it requires perseverance and skills from the workers. The obstacle encountered in the swiftlet bird's nest processing company is the high level of employees leaving the company, negatively impacting the company. In the observed company, the percentage of workers who have turnover in the last year is 18.46% per month. One of the significant impacts is a decrease in the amount of output. In addition, companies must provide training to new employees in advance so that employees are qualified to do the job. Therefore, this study will review several factors such as compensation and job stress levels on job satisfaction that may impact employee retention rates. Researchers conducted field observations to find information on the causes of the high turnover rate. Based on the results of interviews with supervisors at the company, it is known that two factors are considered to have a significant influence on employee retention rates, namely compensation and work stress factors.

## RESEARCH HYPOTHESIS AND MEASUREMENT

Research conducted in [2, 3, 4] confirm the relationship between compensation factors and employee job satisfaction in an organization or company. Further research was carried out by Guinot *et al.* [5], Hoboubi *et al.* [6],

and Prasetyo *et al.* [7] prove that job stress variable can indicate the level of employee job satisfaction. Other studies in [2, 8, 9] prove the influence of compensation variables on employee retention. Subsequent research in [10, 11, 12] proved that job stress could affect employee retention in a company. Further research in [13, 14, 15, 16] shows that employee satisfaction can affect the level of employee retention. In this study, the researchers analyzed whether the study literature results could be significantly carried out on employees in the production division at the company. The policymaker in the company could use the information in hiring the employee.

- Hypothesis 1 (H1): Compensation has a significant effect on job satisfaction.
- Hypothesis 2 (H2): Job stress has a negative impact on job satisfaction.
- Hypothesis 3 (H3): Compensation has a significant effect on employee retention.
- Hypothesis 4 (H4): Job stress has a negative impact on employee retention.
- Hypothesis 5 (H5): Job satisfaction has a significant effect on employee retention.

Based on the literature review, compensation and job stress factors were determined as independent variables, employee retention variable as the dependent variable, and job satisfaction as the intervening variable in analyzing the survey data. We also developed indicators for designing questionnaires to become more focused and structured, as shown in Table 1. Questionnaires containing questions about compensation, affective commitment, job satisfaction, and employee retention are filled out by the employee. The measurements used in the research questionnaire use a 5-point Likert scale to measure the opinions and assessments of respondents.

**TABLE 1.** Indicators of dependent, independent, and intervening variables

Variable	Literature Resources	Indicators
Compensation	Astuti and Panggabean [2], Paik <i>et al.</i> [3], Salisu <i>et al.</i> [4], and Oh [8]	<ol style="list-style-type: none"> <li>1. Salary is commensurate with the workload.</li> <li>2. The employee receives their salary on time.</li> <li>3. The employee receives a bonus for achievements.</li> <li>4. The employee understands the procedure regarding salary and bonuses.</li> <li>5. The employee has an opportunity to apply for leave (holidays, illness, death, or disaster (accident)).</li> </ol>
Work stress	Arshadi and Damiri [10], Guinot <i>et al.</i> [5], Hoboubi <i>et al.</i> [6], Jou <i>et al.</i> [12], Prasetyo <i>et al.</i> [7]	<ol style="list-style-type: none"> <li>1. There is a feeling of long working hours.</li> <li>2. There is a feeling of injustice in giving the workload.</li> <li>3. There is a feeling of boredom while working.</li> <li>4. There is a feeling of pressure due to a warning from superiors.</li> <li>5. There is a heavy feeling of carrying out work instructions.</li> </ol>
Job satisfaction	Hoboubi <i>et al.</i> [6], Prasetyo <i>et al.</i> [7], Skelton <i>et al.</i> [16] Robbins and Judge [17]	<ol style="list-style-type: none"> <li>1. Have an ability to complete the job well.</li> <li>2. Have a liking for the work that is done every day.</li> <li>3. Have a proud feeling of praise from superiors at work.</li> <li>4. Have a respected feeling by other employees at work.</li> <li>5. Have an enthusiastic attitude to come and work every day.</li> </ol>
Employee retention	Astuti and Panggabean [2], Huang <i>et al.</i> [13], Irvianti <i>et al.</i> [18], Santhanam and Srinivas [15], Skelton <i>et al.</i> [16]	<ol style="list-style-type: none"> <li>1. Willingness to work harder without coercion for company success.</li> <li>2. Willingness to work in the company until retirement.</li> <li>3. Have a feeling that the workplace is the best place to work.</li> <li>4. Willingness to recommend the company to others.</li> <li>5. Have a comfortable feeling with work colleagues.</li> </ol>

## RESEARCH METHODOLOGY

The researchers applied a Structural Equation Modeling (SEM) method with the WarpPLS 3.0 application, a statistical modelling technique that is cross-sectional and linear that includes factor analysis, path analysis, and regression analysis to analyze the data for this study. The SEM method continues path analysis and multiple regressions that build multivariate analysis [19]. We evaluated the model in SEM with 2 stages: the outer and inner models to assess the validity and reliability of the model and to predict the relationship of each latent variable.

## DATA ANALYSIS

Thirty respondents were first carried out for the validity and the reliability of the questionnaire. Questionnaire statements are considered valid if the value of the outer loading factor is greater than 0.329 with a significance level

of 5% and when each indicator's cross-loading value is greater than the loading value of other latent variables. In addition, the reliability test carried out for the level of consistency of the given measuring instrument is defined to be reliable if the value of Cronbach's alpha is greater than 0.60. Data was collected by distributing questionnaires to all employees in the production division at the company; of the 112 respondents, female respondents dominate with 82.14%, while males are only 17.86%. The majority of respondents are young people (under the age of 25 years). Based on marital status, most of the respondents are married and have their last education in high school, although many graduated from elementary and junior high schools.

Descriptive analysis was carried out to provide an overview of the characteristics of each variable viewed based on the average value (mean) and standard deviation. The following are the results of the tests carried out for endogenous variable Y (Entrepreneurial Intentions) and exogenous variable X. Each indicator has been described in each statement and aims to measure the variables. Table 2 shows descriptive analysis of compensation, work stress, and job satisfaction.

For the compensation variable, the highest average value is related to the leave granted by the company; then, the lowest value is related to work bonuses. As for the work stress variable, the desired Likert scale characteristic is that the lower, the better. The indicator with the lowest response relates to feeling depressed when receiving a reprimand from superiors. As for the job satisfaction variable, the indicator with the highest average relates to morale; then, the lowest relates to praise or appreciation from superiors. Finally, for the dependent variable, the employee retention variable, the highest average value is related to the indicator of providing this workplace recommendation to others; then, the lowest value is related to the employee's desire to work in that place until retirement as shown in Table 3.

**TABLE 2.** Mean and standard deviation result of independent and intervening variable

Variable	No	Item	Statement	Mean	St. Dev
Compensation	1	X1.1	Salary is commensurate with the workload.	4.30	0.07
	2	X1.2	The employee receives their salary on time.	4.50	0.06
	3	X1.3	The employee receives a bonus for achievements.	3.90	0.07
	4	X1.4	The employee understands the procedure explanation regarding salary and bonuses.	4.20	0.06
	5	X1.5	The employee has an opportunity to apply for leave (holidays, illness, death, or disaster (accident)).	4.70	0.04
Work stress	1	X2.1	There is a feeling of long working hours.	2.20	0.08
	2	X2.2	There is a feeling of injustice in giving the workload.	2.00	0.09
	3	X2.3	There is a feeling of boredom while working.	2.20	0.08
	4	X2.4	There is a feeling of pressure due to a warning from superiors.	2.50	0.09
	5	X2.5	There is a heavy feeling of carrying out work instructions.	2.20	0.10
Job satisfaction	1	I1.1	Can complete the job well.	4.00	0.08
	2	I1.2	Have a liking for the work that is done every day.	4.10	0.07
	3	I1.3	Have a proud feeling of praise from superiors at work.	3.80	0.09
	4	I1.4	Have a respected feeling by other employees at work.	4.30	0.07
	5	I1.5	Have an enthusiastic attitude to work every day.	4.30	0.05

**TABLE 3.** Mean and standard deviation result of dependent variable

Variable	No	Item	Statement	Mean	St. Dev
Employee retention	1	Y1.1	Willingness to work harder without coercion for company success.	4.00	0.09
	2	Y1.2	Willingness to work in the company until retirement.	3.10	0.10
	3	Y1.3	Have a feeling that the workplace is the best place to work.	4.00	0.07
	4	Y1.4	Willingness to recommend the company to others.	4.30	0.06
	5	Y1.5	Have a comfortable feeling with work colleagues.	4.30	0.08

At the structural model analysis stage, the researchers carried out two testing stages, namely the outer and inner model tests, which aimed to test the validity and reliability of the data and find out the magnitude and correlation between variables in this study. The validity test on the outer model test includes the convergent validity test (the value of the loading factor and average variance extracted) and the discriminant (the value of the cross-loading). The greater the number of loading factors, the indicator is getting more significant to represent the variables. Therefore, all indicators on research variables are valid since the value of cross loading and AVE  $\geq 0.5$ . Meanwhile, the discriminant



test is declared valid when the cross-loading value of each indicator is greater than the loading value of the other latent variables. The reliability test in this study was carried out by looking at the composite reliability. Cronbach's alpha, and full collinearity variance inflation factor (VIF) values as shown in Table 4. Brownlow *et al.*-2004 stated that if  $\alpha > 0.9$ , the result is perfectly reliable. If  $\alpha$  is 0.7 - 0.9, the result is high reliability; if  $\alpha$  is 0.5 - 0.7, then the result is moderate reliability, while  $\alpha < 0.5$  is low reliability [20]. Furthermore, according to Kock-2012, the VIF value should be less than 3.3 or 10 in the more relaxed criteria [21].

**TABLE 4.** Cronbach's alpha, composite reliability, and AVE for each variable

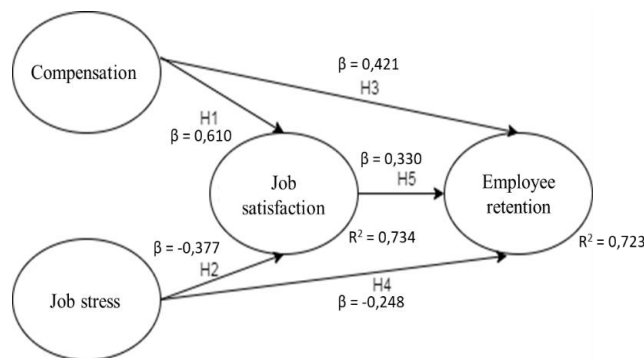
Variable	Average Variance Extracted (AVE)	Cronbach's Alpha	Composite Reliability	Full Col. VIF
X <sub>1</sub> – Compensation	0.759	0.809	0.869	2.256
X <sub>2</sub> – Job stress	0.811	0.870	0.906	1.584
I – Job satisfaction	0.827	0.880	0.914	3.691
Y – Employee Retention	0.735	0.781	0.852	2.564

This study's confidence level is 95%. so, the relationship between variables will be considered significant if the *p-value* is  $< 0.05$ . Table 5 describes the value of direct effects, indirect effects, and total effects of each hypothesis. The results show that the direct effect values are more significant than the indirect effect values for both the relationship of compensation to employee retention and job stress to employee retention variables. This implies that the influence of compensation and job stress variables are stronger affects employee retention directly than the performing job satisfaction variable as the mediation analysis.

**TABLE 5.** The direct effects, indirect effects, and total effects value of each hypothesis

Hypothesis	Relationship	Direct effects	Indirect effects	Total effects
H1	Compensation > Job satisfaction	0.610 <i>p-value</i> < 0.001		0.610 <i>p-value</i> < 0.001
H2	Job stress > Job satisfaction	-0.377 <i>p-value</i> < 0.001		-0.377 <i>p-value</i> < 0.001
H3	Compensation > Employee Retention	0.421 <i>p-value</i> < 0.001	0.201 <i>p-value</i> = 0.001	0.621 <i>p-value</i> < 0.001
H4	Job stress > Employee Retention	-0.248 <i>p-value</i> = 0.003	-0.124 <i>p-value</i> = 0.029	-0.372 <i>p-value</i> < 0.001
H5	Job satisfaction > Employee Retention	0.330 <i>p-value</i> < 0.001		0.330 <i>p-value</i> < 0.001

In addition, this study also considers the value of  $R^2$ , where this value indicates how much influence the independent variable has on the dependent variable. The greater the value of  $R^2$ , the better and more feasible the structure of the model used in a study. The  $R^2$  value of 0.723 indicates that the change in R can be explained by the variables of compensation, work stress, and job satisfaction of 72.3%, with a positive coefficient of 0.421 for compensation variable, the negative coefficient at -0.248 for job stress variable, and the positive coefficient at 0.33 for job satisfaction with  $p$ -value  $< 0.001$ . Furthermore, the other  $R^2$  value is 0.734, which means that the change in job satisfaction can be explained by compensation and job stress variables by 73.4%, with a positive coefficient of 0.610 for the compensation variable and a negative coefficient of -0.377 for the job stress variable with  $p$  value  $< 0.001$  as shown in Fig. 1.



**FIGURE 1.** Schematic model showing item score with construct score with Warp PLS

Based on the results, the compensation variable can be one of the factors for companies to increase job satisfaction which has an impact on improving employee retention. The data results show that five compensation variable indicators help determine the relationship between compensation and employee job satisfaction and employee retention. The company can use the salary indicator to evaluate whether the existing salary system is appropriate for the tasks or workloads. In addition, the company can also assess whether the company is fair in implementing the agreement regarding the time and condition of the salary. Bonuses that employees can receive can be used to measure how the employee's perspective on additional bonuses from the company. Then, the company's approval for the employee to take a leave or holiday is considered the important thing for the employees apart from the financial aspect.

Meanwhile, the findings of the job stress variable measured in 5 indicators can decrease employee satisfaction and employee retention. Companies can use indicators to assess the condition of employees whether they experience stress at work or not. For example, indicators of the length of time working and boredom at the job are used as benchmarks for companies to reduce stress factors. In addition, the company can use the indicator of workload balancing to evaluate managerial performance competence, which is responsible for providing or compiling work portions or work programs for employees.

Companies can use five indicators for job satisfaction variables to determine the condition of employees in terms of focus, enthusiasm at work, and employee priorities about working. Companies can also evaluate managerial performance who are directly responsible to employees. The existence of an award indicator for employee achievement can be used as evaluation material and future strategy preparation to increase employee retention. The results also show that the intervening variable (job satisfaction) cannot provide a more significant effect on employee retention than the direct relationship between the independent variables in the form of compensation and job stress on employee retention.

Based on the respondents' demographic data, it is known that 82 per cent of the employees who work at this bird nest company are women. The majority of workers still have other jobs besides working in other companies to get extra income. However, the workers have high enthusiasm to come to work and consider the work important in their lives. Although most workers are still very young employees, under 30 years old (90.8%), most are married. Women's motivation as housewives who also work is to help and participate in fulfilling the family's financial needs. The demographic results show that a proportion of 75% of the existing employees had changed their previous workplace more than two times.

When conducting a more detailed SEM test for each variable on the demographics of the respondents, there are some interesting facts found. For example, in the relationship between job satisfaction variables that positively affect employee retention, the p-value for workers in the age group below 25 years is 0.107, which reveals that job satisfaction variables do not significantly affect employee retention for workers in the age group below 25 years. This is because young employees want to find new experiences to get a much better job since they are still young. Meanwhile, the hypothesis that job stress can decrease employee retention provides a p-value of 0.131 for worker respondents who already have children, revealing that job stress variables do not significantly affect employees who already have children. Resistance to stress feelings at work for an employee who already has children is higher because of the responsibility to meet family needs. For a relationship where compensation has a significant positive effect on employee retention, the p-value for unmarried respondents is 0.444. The compensation variable does not significantly affect this group even though it provides reasonable compensation. The possible reason for this is because they do not have burdens for their families and children and want to find new experiences to get a much better job.

## CONCLUSION

Based on the results of data processing, all hypotheses in this study were accepted. As a result, several things can be suggestions for companies to determine the strategic policies for employees in the production department. First, the results of this study suggest the implementation of the bonus system given to employees. Second, the results of this study suggest that supervisors should be able to take a better approach to reprimand or warn employees who make mistakes. Third, there is a need to appreciate the employees who complete their work well or reach the target. Fourth, to increase employee retention rates, companies can consider compensation variables as the primary, then secondly on job satisfaction, and finally, on work stress, seen from the beta coefficient obtained for the compensation, the job satisfaction, and the job stress variable of 0.4210, 0.33, and 0.248, respectively.

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