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The Influence of Workload and Work Stress on the Productivity of PT Aseanindo Network Solution

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Abstract: Resource management has an active role in employee productivity through several variables that influence it, such as work stress and workload. This research is quantitative wih descriptive method. Thicantfis study uses primary data obtained from the distribution of research qusstionnaires. The analysis technique uses multiplelinear regression using the SPSS application to test the partial regression coefficient with a significant level of 5%. In addition instrument testing classical assumption test, heteroscedasticity test, and hypothesis testing were also carried out. The results of this study are as follows, work stress has a significant positive effect on work productivity. Workload simultaneously has a significant positive effect on work productivity. The conclusion of this study is that there is a significant positive effect between work stress and workload on employee work productivity at PT Aseanindo Network Solutions. Suggestions for further researchers to continue further research to discuss broader topics such as adding other variables.

Keywoards: Workload, Work Stress, Employee Productivity

INTRODUCTION

The competition of development in the business world is getting tighter from time to time. Business strategies and innovations are able to make companies have competition in today's business era so that a company is able to survive. Therefore, companies must have an important asset that needs to be considered, so that the vision and mission of a company can be realized. Human resources are the main asset that makes a major contribution to the success of a company. Human resources have a responsibility and commitment that can improve employee performance. Employee performance is the main factor that helps in realizing the vision and mission of a company. In the office environment of big cities, the demands of professionalism and high competition can cause pressure that must be faced by employees in the work environment. Psychologically, work stress has an impact on decreasing employee job satisfaction, while for emotional job satisfaction, it makes work enjoyable, so that someone is able to love their job.

The impact of job satisfaction is able to produce good performance or work achievements that will be achieved by employees in the organization according to their respective responsibilities in order to achieve company goals. Stress is a part of human life that cannot be avoided, because stress can happen to anyone, including employees, by paying attention to work stress it is considered able to improve employee performance. PT. Aseanindo Network Solution is a Human Resources Management company or Outsourcing company as a service that channels workers to several agencies, especially for marketing candidate searches. PT. Aseanindo Network Solution has relations or cooperates with several banks, namely PT. Bank Negara Indonesia, Tbk, PT. HSBC Indonesia, CAR Insurance, etc. In this study, the researcher took PT. Aseanindo Network Solution with its relations at PT. Bank Negara Indonesia in the Telemarketing section.

Job Stress

According to Fahmi (in Hartono & Prasetio, 2020, 79) the definition of work stress is a condition that stresses a person's soul and self beyond their capabilities, if left untreated without a solution and then it will have an impact on their health. Stress is a condition of physical or mental tension in a person due to a person's inability to adapt to factors that occur in the environment, causing physiological tension or pressure. (Chaundhary & Lodhawal in Resiana & Widyarini, 2020, 188). According to Handoko (2016, 200) "Work stress is a condition of tension that affects a person's emotions, thought processes, and conditions". Meanwhile, according to Amiruddin (in Resiana & Widyarini, 2020, 188) Stress is psychologically defined as an experience felt by individuals in facing demands, obstacles and/or uncertainty about the results.

Workload

According to Menpan (in Alriani & Lukito, 2018, 26) argues that workload is a number or set of activities that must be completed in an organizational unit or job holder within a specified time period. Tarwaka (in Tjibrata et al., 2017, 1572) defines that "workload is a state of work with a description of tasks that must be completed within a certain time". "Workload is the process of determining how many hours a person needs to complete a job in a certain amount of time". (Komarudin in Setiawan, 2016, 8). Meanwhile, according to Sunarso (in Rolos et al., 2018, 21) argues that workload is a set of activities that must be completed by an organizational unit or job holder within a specified time period.

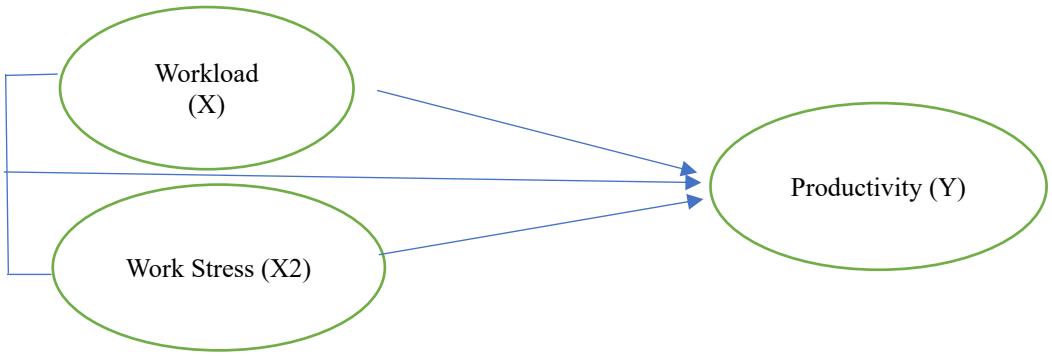
Work Productivity

According to Siagian (2015, 75) Productivity is the ability to utilize existing facilities and infrastructure optimally by producing optimal output. According to Zivin & Neidell (in Aspiyah & Martono, 2016, 340) Work productivity is a measure of the extent to which an employee can carry out his work in accordance with the quality and quantity set by the company. An employee's productivity can be measured from the total output produced by an employee while doing his work. Sutrisno (in Kurnia et al., 2019, 368) Productivity is very important for company employees and it is hoped that work can be done efficiently, so that in the end it is very important to achieve the goals that have been set. Meanwhile, according to Hasibuan (in Andika et al., 2019, 190) Work productivity is a comparison between output and input, where the output must have added value and produce better results.

ModelTheoretical

This study focuses on the relationship between workload and work stress with productivity. Excessive workload will cause work stress that can affect productivity. This model is in line with the findings of Sutrisno (2021) which highlights the synergy of these

variables in growing a productive organization. By integrating these factors, this model provides a comprehensive framework for understanding the performance dynamics of PT. Aseando Network Solution



Research Hypothesis

H1: It is suspected that Job Stress has a positive and significant effect on employee Work Productivity at PT. Aseanindo Network Solution.

H2: It is suspected that Workload has a positive and significant effect on employee Work Productivity at PT. Aseanindo Network Solution.

H3: It is suspected that Job Stress and Workload together have a positive and significant effect on employee Work Productivity at PT. Aseanindo Network Solution.

METHOD

Research Design

This study adopts a quantitative research design, which focuses on numerical data and statistical measurements to test the proposed hypothesis. Quantitative methods, as explained by Sujarweni (2015), are very useful for examining causal relationships by collecting measurable data and using statistical tools. The quantitative approach is ideal for assessing the effects of workload and work stress on productivity, because these variables can be measured and analyzed quantitatively.

Research Location

This research was conducted at PT. Aseanindo Network Solution which is located at JL. HR Rasuna Said Kav. 62, Kuningan, Karet Kuningan, Setiabudi, South Jakarta, DKI Jakarta 12920.

Research Population

The sampling technique in this study used Saturated Sampling, which was set at the number of employee population of PT. Aseanindo Network Solution as many as 100 people.

Method of collecting data

Primary data were collected through a structured questionnaire distributed to respondents. The questionnaire was designed to measure workload and work stress and productivity using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The use of a structured questionnaire ensures consistency in providing answers, thus facilitating reliable data analysis.

Instrument Validity Test

The validity of the research instrument was tested to ensure that the instrument accurately measures the intended variables. Pearson correlation analysis was used to assess the validity of each item. As stated by Solihin and Ratmono (2020), an item is considered valid if its correlation coefficient is significant at the 5% level ($p < 0.05$).

Instrument Reliability Test

Reliability is tested using Cronbach's Alpha and Composite Reliability. According to Sholihin and Ratmono (2013), a variable is considered reliable if Cronbach's Alpha and Composite Reliability exceed 0.70. High reliability indicates that the instrument consistently measures the variable on different items and respondents.

Data Analysis Methods

Data analysis was conducted using SPSS version 25, a statistical software widely used for quantitative research. The analysis involved several steps, including validity and reliability tests, classical assumption tests, coefficient of determination, and hypothesis tests.

Classical Assumption Test

Classical assumption tests are essential to ensure that the data meets the requirements for regression analysis. These tests include normality, multicollinearity, heteroscedasticity, and autocorrelation. Ensuring that the data meets these assumptions will increase the robustness and validity of the regression model.

Normality Test

The normality test is conducted to determine whether the data follows a normal distribution. As explained by Widardjono (2013), data is considered normally distributed if the Skewness and Kurtosis Critical Ratio (CR) values are in the range of -2.58 to 2.58 at a significance level of 5%.

Multicollinearity Test

Multicollinearity is tested using the Variance Inflation Factor (VIF). According to Ghozali (2018), multicollinearity does not exist if the VIF value is less than or equal to 5. Multicollinearity can distort the regression coefficients, so its absence ensures a more accurate estimate of the relationship between variables.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) is calculated to assess the explanatory power of the independent variables. An R^2 value close to 1 indicates that most of the variance in the dependent variable (productivity) can be explained by workload and job stress.

Hypothesis Testing

The hypothesis is tested using a t-test at a significance level of 5%. The hypothesis is accepted if the t-statistic value is greater than 1.96, which ensures that the findings are statistically significant. The t-test provides insight into whether each independent variable significantly affects personnel performance.

Regression Model

This study uses a multiple linear regression model to test the relationship between leadership, work discipline, motivation, and performance. The model is stated as: $Y = b1X1+b2X2$

Where:
1. X1 represents Workload
2. X2 represents Job Stress
3. Y1 represents Productivity
4. b1, b2, are the regression coefficients.

Interpretation of Regression Coefficients

The regression coefficients (b1, b2, b3) show the magnitude and direction of the influence of each independent variable on employee performance. A positive coefficient indicates a unidirectional relationship, while a negative coefficient indicates an opposite relationship.

RESULTS AND DISCUSSION

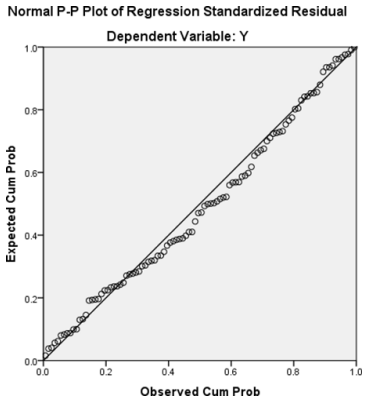
Validity and Reliability Test Results

The validity test shows that the r-count is greater than the r-table with a sample of 100 respondents and a significance level of 5% (0.1966). So that the results of the validity test of the work productivity variable are in accordance with the criteria that r-count > r-table and all questions are concluded to be valid.

The reliability test shows that the variables of work stress, workload, and work productivity show a Cornbach's Alpha value > 0.60 so that it can be concluded from the reliability test that the variable instrument is declared to meet the requirements and is reliable, so that it can be continued for testing the classical assumptions.

Normality Test Results

If the data (dots) are spread out following a direction and are around the diagonal line, then the pattern shown is normally distributed.



Heteroscedasticity Test Results

Output above it can be seen that the points do not form a clear pattern, and the points are spread above and below the number 0 on the Y axis, so it can be concluded that there is no heteroscedasticity problem in the regression model.

Multicollinearity Test Results

The multicollinearity test aims to ensure whether there is a correlation between independent variables in the regression model. This test can be done in 2 ways, namely by looking at the VIF (Variance Inflation Factors) and Tolerance Value. If the VIF value is <10 and the tolerance value is> 0.1, then there is no symptom of multicollinearity.

Model	*Collinearity Statistics*	
	Tolerance	VIF
1 (Constant)		
Job Stress	0.729	1,372
Workload	0.729	1,372

The VIF value of work stress and workload is less than 10 (VIF < 10), meaning there is no multicollinearity between the independent variables in the regression model. The Tolerance value of work stress and workload is greater than 0.1 (Tolerance > 0.1), meaning there is no multicollinearity between the independent variables in the regression model.

Autocorrelation Test Results

It can be seen from the DW (Durbin Watson) table of 1.982, to get the dL and dU values, see the DW table (attachment). From the DW table at a significance of 0.05 with n (number of data) = 100 and k (number of independent variables) = 2, it can be seen that the dL value = 1.6337 and dU = 1.7152, so 4-dU is 2.282848 and 4-dL 2.3663. This shows that the calculated DW of 1.982 is between the dU and 4-dU values, namely between 1.7152 and 2.282848, which means there is no autocorrelation.

No	Information	Test Value
1	You	1,7152
2	Dl	1.6337
3	4-dU	2,282848
4	4-dL	2,3663
5	DW	1,982

Multiple Linear Regression Results

Full model regression obtained multiple linear regression equation is as follows: $Y = 26.690 + 0.294\ X_1 + 0.830\ X_2 + e$ The results of the multiple linear regression equation show the relationship between the independent variable and the dependent variable partially, from the equation it can be concluded that the Constant value (a) is 26.690 means a positive effect, if the work stress and workload variables do not change or are zero, it means that there is an increase in work productivity of 26.690. The value of the work stress regression coefficient is 0.294 with a positive sign, meaning that it has a unidirectional relationship, meaning that if there is a 1% increase with the assumption that the workload variable (X_2) and the constant (a) is 0 (zero), then there will be an increase in work productivity of 0.294 with the assumption that the workload variable remains the same. This shows that the work stress given contributes positively to work productivity, so that the greater the work stress, the greater the employee's work productivity.

The value of the workload regression coefficient is 0.830 which is positive, meaning it has a unidirectional relationship, which means that if there is a 1% increase with the assumption that the work stress variable (X_1) and the constant (a) are 0 (zero), then there will be an increase in work productivity of 0.830 with the assumption that the work stress variable remains constant.

	Unstandardized Coefficient		Standardized Coefficient
Model	B	Std. Error	Beta
1 (Constant)	26.69	3,852	
X_1_Work Stress	,294	,12	,212
X_2_Workload	,83	,129	,555

Partial Test (t-Test)

The Influence of Work Stress Variables on Work Productivity (H_1) The work stress variable (X_1) has a positive and significant influence on work productivity. This can be seen from the sig. value of work stress (X_1) 0.016 < 0.05 and the valuet_{hitung}2,456 >$ttabel$1.984, then H_0 is rejected and H_1 is accepted. So the hypothesis states that there is an influence of work stress on work productivity. The Influence of Workload Variables on Work Productivity (H_2) The Workload Variable (X_2) has a positive and significant influence on work productivity. This can be seen from the sig. value of workload (X_2) 0.000 <0.05 and the valuet_{hitung}6,443 >$ttabel$1.984, then H_0 is rejected and H_2 is accepted. So the hypothesis states that there is an influence of workload on work productivity

Model	T	Sig.	Information
1 (Constant)	6,930	,000	
X_1_Work Stress	2,456	,016	Significantly Influential
X_2_Workload	6,443	,000	Significantly Influential

F Test Results

The test results can be seen in the F count value of 43.924 with an F table value of 3.09 and sig. 0.000 <0.05, then H_0 is rejected and H_3 is accepted, so it can be concluded that the variables of work stress (X_1) and workload (X_2) together have a significant effect on work productivity.

	Model	*Sum of Squares*	Df	*Mean Square*	F	Sig.
1	Regression	2302,082	2	1151,041	43,924	,000[b]
	Residual	2541,918	97	26,025		
	Total	4844	99			

Results of the Determination Coefficient (R^2) Test

The determination coefficient test is used to determine how big the role, ability and percentage contribution that can be caused by the independent variables (work stress and workload) can explain the dependent variable (work productivity) which can be seen through the Adjuster R Square value, which the author obtained from the results of data processing using the SPSS version 24.0 for Windows program.

Model	*R*	*R Square*	*R Square Adjuster*	*Std. Error of the Estimate*
1	*,689[a]*	*,475*	*,464*	*5,119*

*R square*for work productivity (Y) is 0.464. So the coefficient of determination of work productivity is Kd = r^2 x 100% (0.464 x 100% = 46.4%) which means that the work stress variable (X_1) and the workload variable (X_2) are able to explain the work productivity variable (Y) by 46.4%, while the remaining 53.6% is explained by other variables outside the variables in this study.

The Effect of Work Stress on Work Productivity

Based on the results of the t-test from table IV.15, it can be seen that the work stress variable (X_1) has a significant effect on work productivity (Y) with a value of$t_{hitung} > ttabel$which is 2.456 > 1.984 and sig value 0.016 < 0.05, which means that the hypothesis in this study work stress significantly determines work productivity, where it is proven that at the significant level a (0.05), thus H_0 is rejected and H_1 is accepted. So it can be concluded that work stress has a significant effect on work productivity, so that the hypothesis H_1 "work stress significantly determines employee work productivity at PT. Aseanindo Network Solution". Work stress is one of the universal things that becomes a topic of conversation for employees and is often considered to have negative connotations, but without realizing it, work stress can increase work productivity. This can be seen when the company is able to carry out proper maintenance and treatment, so that it can create stronger employee motivation and stimulation to work harder, so that it can increase productivity at work.

The Influence of Workload on Work Productivity

Based on the results of the t-test from table IV.15, it can be seen that the workload variable (X_2) on work productivity (Y) can be seen that the value$t_{hitung} > ttabel$namely 6.443 > 1.984 and sig value 0.000 < 0.05, which means that the hypothesis in this study is proven that at the significant level a (0.05), thus H_0 is rejected and H_2 is accepted. So it can be concluded that workload has a significant effect on work productivity, so that the hypothesis H_2 "workload has a significant effect on employee work productivity at PT. Aseanindo Network Solution". Workload is also one of the benchmarks and becomes a benchmark for companies to consider matters related to reducing or increasing the number of workers in a unit. Workload can have a positive effect on work productivity where a high workload makes the assessment carried out by the supervisor or superior very important

The Influence of Work Stress and Workload on Work Productivity

Based on the test results in table IV.16, it can be seen that the value$F_{hitung} > Ftabel$namely 43.924 > 3.09 and a significance value of 0.000 < 0.05, then H_0 and H_3 are accepted, so it can be concluded that the variables of work stress (X_1) and workload (X_2) together have a positive and significant effect on employee work productivity.

CONCLUSION

Based on the results of the t-test, the work stress variable (X_1) has a significant influence on employee work productivity at PT. Aseanindo network solution. Seen from the results $thitung$2,456 >$ttabel$1.984 and sig value 0.016 < 0.05 thus H_0 is rejected and H_1 is accepted. So it can be concluded that there is a significant positive influence of work stress (X_1) on work productivity, which means that work stress has a role in influencing the work productivity of employees of PT. Aseanindo Network Solution.

Based on the results of the t-test, the workload variable (X_2) has a significant influence on employee work productivity at PT. Aseanindo network solution. Seen from the results $thitung$6,443 >$ttabel$1.984 and sig value 0.000 < 0.05 thus H_0 is rejected and H_2 is accepted. So it can be concluded that there is a significant positive influence of workload (X_2) on work

productivity, which means that workload has a role in influencing the work productivity of PT. Aseanindo Network Solution employees.

Based on the results of the F test on the three variables, the significant value is 0.000 < 0.05 and$Fhitung$43,924 >$Ftabel$3.09 then H_0 is rejected and H_3 is accepted, it can be concluded that the variables of work stress (X_1) and workload (X_2) together have a positive and significant effect on employee work productivity at PT. Aseanindo Network Solution.

Based on the results of the R^2 test, the variables of work stress (X_1) and workload (X_2) have a positive and significant effect partially on the work productivity of employees of PT. Aseanindo Network Solution. It can be seen from the calculation results of Kd = r^2 x 100% (0.464 x 100% = 46.4%) which means that the variables of work stress (X_1) and workload variables (X_2) are able to explain the variable of work productivity (Y) by 46.4%, while the remaining 53.6% is explained by other variables outside the variables in this study.

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