Workload Analysis and Green Human Resource Management on Employee Performance

Rafa Anugrah[1], Kokom Komariah[2], Faizal Mulia Z[3]
Faculty of Social Sciences,. University of Muhammadiyah Sukabumi
Email : [1]rafaanugrah19@ummi.ac.id, [2] ko2mpuspa@ummi.ac.id,[3] faizal_88@ummi.ac.id

Abstract

The manufacturing industry sector is an industrial sector in Indonesia that is developing and contributes to the industry nationally, therefore companies engaged in this field must be able to face competition which is the impact of the growing industry. So that human resources are an important part of the company, if the human resources are lacking, the company's target in achieving its goals will not be carried out PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor. Tbk Sukbumi -Bogor is a company engaged in the automotive manufacturing industry that has problems with employee performance. This study aims to find out whether workload and *green human resource management* have an influence and impact on employee performance at PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor. The research method used is a quantitative method using descriptive and associative methods. The data source used by conducting interviews and distributing questionnaires as a tool in obtaining data and samples was used namely saturated sampling to 31 respondents of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor by using a differential semantic measurement system. Then the data that has been obtained is carried out several tests such as validity and reality tests, then a classical assumption test is carried out, which is then analyzed with the help of SPPS 23 software to answer the hypothesis in this study. The results of the study show that there is a positive and significant influence between workload and *green human resource management* on employee performance and by reducing workload and implementing *green human resource management* can improve the performance of employees of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor.

Keywords: Workload; Green Human Resource Management; Employee Performance

INTRODUCTION

The development of the automotive manufacturing industry in Indonesia is growing and has a positive impact on the economy, with this development will affect the increasingly fierce competition between companies engaged in automotive manufacturing, in responding to this the company not only focuses on products and sales but on the aspect of success related to human resources.

Human resources determine the success of the company's achievements, human resources themselves are directly related to productivity and work results from the company's performance. Employee performance will have an impact on the success of the company, because it is one of the most important aspects and components in any business because the company's goals or objectives can only be achieved if the performance of employees does their work with and vice versa if the performance is poor, the results obtained are not good.

One of the efforts to avoid poor employee performance is by paying attention to the employee's workload, both the physical workload and the mental load. The workload here refers to the tasks that employees receive in excess of what is not in accordance with usual, it will burden the employee. The workload factor on employee performance has a significant impact, in addition there are important elements that can cause poor employee performance in the workplace such as environmental factors that play an important role in the organization, the company must be able to create a comfortable and safe environment so that it has an impact on employees who become more productive. (Hartono & Kusuma, 2020)

A comfortable and safe environment can be created by implementing a green culture, a green culture that is increasingly being discussed and the government is also paying more attention to the environment. One solution is to implement *Green Human Resource Management*, it is a new branch of management that deals with employee management but better understands and appreciates the green culture in an organization. Many companies have developed and implemented this strategy for the training and development of employees, this program helps companies in implementing green work programs through performance management (Imron & Taswiyah , 2022) .

By incorporating this concept through the functions and ideas of resource management in the company, it can affect the way employees behave to better understand and care for the environment, both the work environment and the environment around the company. However, the participation of employees in environmental performance depends on the balance between *green human resource management* implemented by the company. Because making employees not feel overloaded and making a comfortable work environment is very important and employee performance is more optimal.

PT. Astra International Tbk – Isuzu Sales Operation or commonly known as Astra Isuzu is a manufacturing company in the automotive industry, distribution and after-sales for vehicles. According to the initial findings, in October all divisions did not reach the set targets and the following month only in the mechanical division the target was achieved and only in December all the targets of the division had been achieved. This is a problem of employee performance in companies where the quantity is not achieved. This can happen because excessive workload makes employees tired faster and results in a decrease in quantity and in terms of lack of direction to employees in tasks or achievement targets that make performance decrease. Previous research has highlighted the importance of workload in the context of employee wellbeing and productivity.

Review the Library
Workload

According to explaining that workload is the amount of work that must be done by an employee in a given period. Workload refers to the ability of an employee to complete excess tasks in a certain time. The dimensions of the workload are physical workload, psychological workload and time aspect. Siregar & Ardeanda (2023)

Green Human Resource Management

Green Human Resource Management According to is a management technique to assist companies in managing the environment by improving environmental strategies, where this is an innovative activity on the performance of human resources (HR) in a company based on the principles of green culture. This is an innovative activity in making performance of human resource performance based on the concept of the environment. The dimensions are Imron & Taswiyah (2022) *Green planning, Green Job design analys, Green Recruitment, Green Selection, Green Induction, Green performance evaluation, Green Reward, Green healy and safety, Green employee discipline, Green employee relations*.

Employee Performance

According to Muis et al. (2018) Employee performance is from the quality and quantity of results achieved by employees in carrying out their duties in accordance with the obligations given by the company. The results of work performance here are achieved by a person or a group of people in an organization with the task of each or a group in fulfilling the company's goals to achieve the success of the target. There are aspects to measure employee performance, namely quality, quantity, responsibility, cooperation and initiative

Thinking Framework

A framework of thinking is a statement or description of a problem-solving concept that has been identified or formulated, a framework of thinking in quantitative research greatly determines the variables and processes of the research as a whole as a basis for formulating a hypothesis. This study uses the workload variable, *Green Human Resource Management* and employee performance because the topic of workload problems is a state related to performance and *Green Human Resource Management* This is a method to make human resources better and is a new topic to research.

Based on these considerations, the researcher made a research model with workload and green human resource management that is considered to be able to affect employee performance. The framework of thinking is as follows:
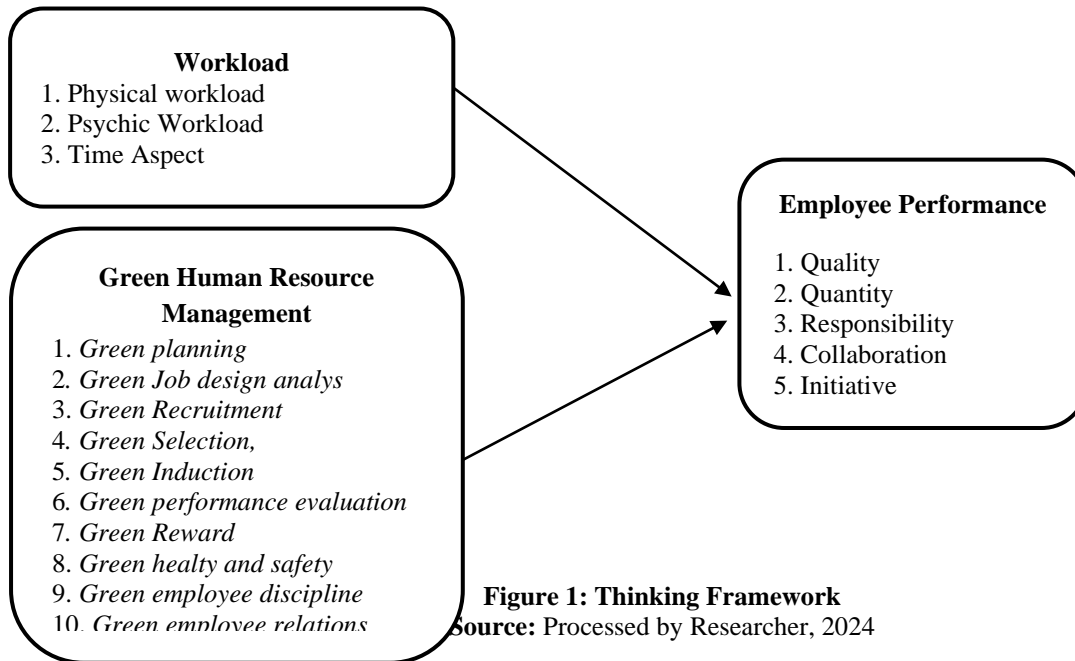
Workload
1. Physical workload
2. Psychic Workload
3. Time Aspect

Green Human Resource Management
1. *Green planning*
2. *Green Job design analys*
3. *Green Recruitment*
4. *Green Selection,*
5. *Green Induction*
6. *Green performance evaluation*
7. *Green Reward*
8. *Green healty and safety*
9. *Green employee discipline*
10. *Green employee relations*

Employee Performance
1. Quality
2. Quantity
3. Responsibility
4. Collaboration
5. Initiative

Figure 1: Thinking Framework
Source: Processed by Researcher, 2024

Hypothesis

A hypothesis is a provisional answer from the research to the formulation of the problem and can be defined as a relationship between two variables or more to be shown in the form of a testable question. The hypotheses proposed are as follows:

Hypothesis 1: There is an effect of workload on employee performance

Hypothesis 2: There is an influence of *green human resource management* on employee performance

METHOD

The research methods used in this study are descriptive quantitative methods and associative analysis methods. According to (Sugiyono, 2019), the definition of a descriptive method is a research method that is carried out to describe independent variables, be it only on one or more variables (independent variables) without comparing and searching for that variable with other variables, while associative research aims to find out the relationship between two or more variables.

Population is a thing that includes all subjects of research, starting from subjects and objects that have certain characteristics and characteristics. According to Population is the sum of each element that will be used as research and has the characteristic of being a group of individuals, research objects or events that are then drawn a conclusion. The author determined the members of the population in this study, namely employees at PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi – Bogor. Ghozali (2020)

According to the sample is a part of the population or representative that shows the characteristics of the population which to be able to determine and identify the appropriate sample in the study, both in determining the number and choosing the sample to be taken. In determining the sample in this study, a saturated sampling method was used. The sample in this study is 31 employees at PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor. Amin et al. (2023)

Data collection is a technique used by researchers in collecting ongoing research problems. According to data collection, it is a technique and tool used to strategically search for primary and secondary data in research because it aims to obtain valid and definite data. Some of the methods used to obtain primary and secondary data are: Sugiyono (2019)

Data analysis techniques are methods or approaches to transform data into information so that the data can be understood and used to solve and find problems about a research. The data analysis methods used in this study include: Research Instrument Test (Validity test, Reality test), Classical

assumption test (normality test, multicollinearity test, autocorrelation test, and heterokedasticity test, linearity test), multiple correlation analysis, determination coefficient analysis, multiple regression linear analysis, hypothesis testing (f test, t test)   Ardiawan   (2022)

RESULTS AND DISCUSSION
Research Instrument Test Results
Validity Test

Table 2. Validity Test Results of Variables X1, X2 and Y

Variable	No. Item	R Calculate	R Critical	Information
	X1.1	0,365	0,3	Valid
	X1.2	0,777	0,3	Valid
	X1.3	0,670	0,3	Valid
	X1.4	0,819	0,3	Valid
	X1.5	0,584	0,3	Valid
	X1.6	0,778	0,3	Valid
	X1.7	0,787	0,3	Valid
	X1.8	0,358	0,3	Valid
Workload (x1)	X1.9	0,532	0,3	Valid
	X2.1	0,661	0,3	Valid
	X2.2	0532	0,3	Valid
	X2.3	0,803	0,3	Valid
	X2.4	0,818	0,3	Valid
	X2.5	0,836	0,3	Valid
	X2.6	0,756	0,3	Valid
	X2.7	0,846	0,3	Valid
	X2.8	0,790	0,3	Valid
	X2.9	0,793	0,3	Valid
	X2.10	0,609	0,3	Valid
	X2.11	0,638	0,3	Valid
	X2.12	0,553	0,3	Valid
Green Human	X2.13	0,653	0,3	Valid
Resource	X2.14	0,691	0,3	Valid
Management	X2.15	0,566	0,3	Valid
(X2)	X2.16	0,502	0,3	Valid
	Y1	0,639	0,3	Valid
	Y2	0,644	0,3	Valid
	Y3	0,727	0,3	Valid
	Y4	0,598	0,3	Valid
	Y5	0,860	0,3	Valid
	Y6	0,598	0,3	Valid
	Y7	0,713	0,3	Valid
Employee	Y8	0,547	0,3	Valid
Performance (Y)	Y9	0,579	0,3	Valid

From the data in the table above, it is known that in the workload variable (X1), the correlation value of items no one to item no nine all the results of the test item each have a score value above 0.3 so that all items are declared valid. Furthermore, on the variable *Green Human Resource Management* The correlation value of item number one to item number sixteen all test item results each have a value above 0.3 so that all items are declared valid. Then in the employee performance variable (Y) the correlation value of item number one to item number nine, all test items each have a value above 0.3 so that all of these items are declared valid.

Reality Test Results

Table 3. Variable Reality Test Results X1, X2 and Y

Variable	*Cronbach's Alpha*	*N of item*
Workload (X1)	0, 757	9
Green Human Resource Management	0,762	16

(X2)		
Employee Performance (Y)	0,734	9

Source: Processed by Researcher, 2024

Based on the table above, it can be seen that the value of the coefficient in the Workload variable (X1) with a total value of 0.75 with a total number of statements of 9 questions, the value of the coefficient in the variable *Green Human Resource Management* (X2), with a value of 0.762 with a total number of statements of 16 statements and the coefficient value of the employee performance variable (Y), with a value of 0.73 with a total number of statements of 9 statements, so that all coefficient values in each variable can be said to be reliable because the coefficient value is more than 0.6.

Classic Assumption Testing
Normality Testing

The calculation of the normality test in this study was calculated using the Kolmogorov Smirnov test where if the probability value is greater than the confidence level of 0.05, the study is declared normal.

It can be seen that the workload normality test (X1) and *Green Human Resource Management* (X2) Against Employee Performance (Y), obtain a probability value of 2.00 so that it can be declared normal because it exceeds the confidence value of 0.05

Multicollinearity Testing

In this multicolonarity test, the VIF (Variance Infation Factor) value obtained must be the same or 0.1, then in the regression model in a study there is no multicollinearity.

Results from the mulitcollinearity test between the workload-independent variable (X1) and *Green human resource management* (X2) each of the variables has a VIF value of 1.217 and a Tolerance Value of 0.822 where the VIF value is less than 10 and the Tolerance value is more than 0.1. This means that between the Workload variable and *Green Human Resource Magement* There is no linear relationship.

Autocorrelation Testing

Autocorrelation testing aims to know when in research with this regression model changes the sample over time. This test was carried out using the SPPS 23 software application and compared with the Du value on the durbin-watson table.

The results of the autocorrelation test with a durbin-watson value of 2,022, while the Du value was found in the durbin-watson table listed in the attachment based on the sum of independent variables (k = 2) and the total number of samples (n = 31), then the Du value = 1,563.

Hetereskedasticity Testing

In this test, there are criteria to be able to determine whether heteroscedasticity occurs in this study or not, namely if the significance value is less than 0.05, it can be concluded that heteroscedasticity occurs and vice versa, if the significance value exceeds 0.05, it can be concluded that heteroscedasticity does not occur

It is known that the significance value of the workload variable is 0.712 and the significance value of the variable *Green Human Resource Management* 0.995, this shows that both have a significance value that exceeds 0.05.

Linearity Test

The linearity test was carried out in the study to find out if there was a linear relationship between independent variables (workload and *Green Human Resource Management* with a dependent variable (employee performance).

The results of the linearity test on the workload on employee performance showed a Deviation from linearity value of 0.175 and the results of the linearity test on *Green Human Resource Management* on employee performance shows a value of deviation from linearity of 0.186, therefore the relationship between variable X1 Against Y and X2 to Y has a linear relationship because the significance value is more than 0.05.

Data Analysis Test
Double Correlation Test Results

The double correlation test aims to determine the relationship between two or more independent variables with one dependent variable and show the strength of the relationship with other variables. The results of the calculations that can be obtained can then be given an intervention on the strength of the relationship by using the Correlation Coefficient guideline of the Guilfor criterion.

Table 4. Double Correlation Test Results

Model Summary

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	DF2	Sig. F Change
1	.719a	.516	.482	3.73730	.516	14.952	2	28	.000

Source: Questionnaire Data Processing Results, 2024

Based on the table above, it is known that the value of the linear relationship between the workload variable and the *Green Human Resource Management* to employee performance is 0.719. Therefore, the resulting value lies in a strong criterion, meaning that the workload variable and *Green Human Resource Management* to employee performance empirically has a strong linear relationship.

Determination Coefficient Test Results

Table 5. Determination Coefficient Test Results
Model Summary

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719a	.516	.482	3.73730

Source: Questionnaire Test Results, 2024

Based on the table above, it can be seen that the value of the linear relationship between the workload variable and the *Green Human Resource Management* to employee performance is 0.516. This shows the large contribution of the workload *and Green Human Resource Management* to employee performance of 51.6% and KD close to the value of 1 which means that the independent variable is declared strong.

Multiple Linear Regression Test Results

Table 6. Multiple Liner Regression Test Results

Coefficientsa

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	38.334	7.504		5.109	.000
Workload	.223	.102	.318	2.194	.037
GHRM	.181	.050	.524	3.613	.001

Source: Questionnaire Test Results, 2024

Based on Table 4.16, it can be seen that the value of the multiple linear regression equation in this study is obtained for two predictors (workload and employee performance), namely: $Y^* = 38.344 + 0.223 X_1 + 0.181 X_2$. From the multiple linear regression equation above, it can be concluded:

1. A constant value of 38,344 means that if the workload variable and *green human resource management* have a value of (0), then the employee's performance is 38,344.
2. If the workload has an increase or increase of (1) unit assuming the green human resource management variable is fixed, then the workload will increase by 0.223.
3. 3. If *green human resource management* increases or increases by (1) units assuming the workload variable is fixed, then *green human resource management* will increase by 0.181.

Hypothesis Testing
Simultaneous Significant Test (Test f)

This study was conducted to find out how much the workload and *Green Human Resource Management* on employee performance. The test results are:

Table 7. Simultaneous Results

ANOVAa

	Type	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	417.686	2	208.843	14.952	.000b
	Residual	391.088	28	13.967		
	Total	808.774	30			

Source: Questionnaire Data Processing Results, 2024

Based on the calculation above, the results of the calculation f calculate the workload variable and *Green Human Resource Management* on employee performance of $0.000 < 0.05$ and the value of F is calculated as 14,952. Then the value of F is calculated compared to the value of F of the table with the numerator (n-k-1) and the error rate applied is 5% which means that the numerator = 2 and the denominator = 28, the value of the F table = 3.34 can be obtained. Therefore, it can be concluded that X_1, X2 on Y exerts a significant influence on

Partial Hypothesis Test (t-Test)

The results of the first hypothesis test of the research (t-test) calculated using the SPPS 23 application are as follows:

Table 8. Partial Test Results

Coefficientsa

	Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.334	7.504		5.109	.000
	Workload	.223	.102	.318	2.194	.037
	GHRM	.181	.050	.524	3.613	.001

Source: Questionnaire Data Processing Results, 2024

Based on the table above, it can be seen that the T value shows 2,194. then compared to the value of T on the basis of dk billing = k and dk denominator = (n-1) or dk = (31-1) = 1, with an error rate of 5% or 0.05. So the value of the table T of 2.042 is obtained, from this description it can be known that the calculation T is smaller than the table T which is $2.194 < 2.042$. It was concluded that the workload had a significant effect on the performance of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor.

Based on the table above, it can be seen that the T value shows 2,194. The calculated t value is compared with the T value of the table on the basis of dk billing = k and dk denominator = (n-1) or dk = (31-1) = 1, with an error rate of 5% or 0.05. So the value of the T of the table is 2.042, from this description it can be known that the T calculation is smaller than the T of the table which is $3.613 > 2$. It is concluded that *Green Human Resource Management* has a significant effect on the performance of employees of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor.

CONCLUSION

Based on the results and discussion of the workload and *Green Human Resource Management* on the performance of employees of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi-Bogor. Then the following conclusions can be obtained:

1. Workload and *Green human resource management* at PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor has an impact on employee performance, because both can be felt by employees who are shown by the company managing to balance and reduce which can ultimately reduce the workload. As well as through the implementation of green human resource management applied to employees of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor can be seen from employees who care about the environment which makes them more comfortable at work.

2. There is a positive and significant influence between workload and employee performance which means that by reducing the workload can improve the performance of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor. This result is evidenced by the value on the results of the hypothesis test which shows that the calculation is greater than the table,

this means that H0 is rejected and H1 is accepted which states "There is an effect of workload on employee performance". Accepted based on hypothesis assumptions in this study

3. There is a positive and significant influence between *the variables of green human resource management* on the performance of employees of PT. ASTRA INTERNATIONAL Tbk Isuzu Sukabumi - Bogor. This is evidenced by the value in the results of the hypothesis test which shows that the calculation is greater than the t table, this means that H0 is rejected and H1 is accepted which states that "There is an influence *of green human resource management* on employee performance" is accepted based on the assumptions of the hypothesis in this study.

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