# The Impact Of Green Human Resource Management (GHRM) on Work Productivity Mediated By Environmental Performance<sup>1</sup>

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# ABSTRACT

This study examines the effect of implementing green human resource management on work productivity with environmental performance as a moderating variable. PT. Apsara Tiyasa Sambada, Klaten Regency. This study involved 42 employees of the company's office to be used as respondents using a saturated sample, which involved the entire population as a sample. The data collection tool in this study uses a Google form using a Likert scale as a measure. The data analysis technique used in this study uses the SEM model with the partial least squares (PLS) approach. The results of this study are that green human resource management has a positive and significant effect on work productivity, but environmental performance does not moderate or does not affect green human resource management and work productivity and can be used as input for companies to be able to use green human resource management to increase work productivity.

*Keywords:* Green Human Resource Management, Employee Work Productivity, Environmental Performance

# **1. INTRODUCTION**

In organizational life as well as in companies, humans are the most important factor in every activity. Due to the line of offense or the interaction of individuals in it. This causes dynamics in an organization/company. To carry out operational tasks, the company must have employees to carry out these activities. Activities carried out by employees within the company can show their existence in positive terms, meaning they are able to show good performance in the eyes of outsiders, especially the community. Improved individual employee performance will drive overall performance, which is reflected in increased productivity [1]

Work productivity, allows a big influence on their work activities. So that a conducive environment will

support the work productivity of its employees. Productivity is a measure of production in the form of services or commodities against inputs in the form of labor, capital, modules, or raw materials and equipment. The key factors for the success of work productivity for the company's employees are good work and high morale skills, so they can expect a job with good results [2].

Employee work productivity will increase in a good work environment. Vice versa if the work environment gets worse, then work productivity decreases [3].

Factors that affect work productivity are the atmosphere factor, because the atmosphere factor can affect the level of performance achieved by a person, a supportive atmosphere for example the existence of good business facilities, a quiet room, recognition of the

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comments of other colleagues, leaders who understand the needs of employees and are not authoritarian but democratic. A supportive work system will definitely encourage greater performance achievement than unsupportive working conditions where there are authoritarian leaders, unsatisfactory service, role pressure, will definitely result in low employee performance [4]

Recently in the field of HR, the issue of green human resource management or commonly interpreted as green human resource management has emerged which has identified itself as a new research path as well as a new competitive measure [5].

In today's business world, companies are experiencing new challenges related to their business continuity. Companies are required to function in protecting the environment and improving environmental-based human resource management strategies so that they are always able to survive in the business world. For organizations, green human resource management is a key business strategy [6].

The results of interviews with experts provide a picture that is almost the same as the results of a questionnaire conducted on 42 companies that understand the concept of GHRM. They believe that the implementation of GHRM can increase company productivity, especially for companies that are oriented towards developing products to international markets [7].

Environmental performance reflects results that show how well the company's commitment to protection, environmental performance can be assessed by various indicators such as low environmental emissions, pollution control, waste minimization and recycling activities and can be improved by environmentally friendly human resource management [8]. The quality of the work environment that is good and in accordance with the human condition as a worker will support the performance and productivity of the work produced [9].

In view of the research gap, which is discussed in this study [10] considering the different roles that GHRM practices play in developing environmental performance, the gap in their relevance has been widely recognized by the literature. latest. They acknowledge that most of the existing research on GHRM is focused on the impact of specific GHRM practices on environmental performance, as a consequence they explicitly call for studies that simultaneously consider the different effects of different GHRM practices on environmental performance.

Based on previous research, it can be seen that there is a gap between this study and previous research. This study aims to explore the relationship between GHRM on work productivity and moderated by environmental performance.

# 2. LITERATURE REVIEW AND HYPOTHESIS

# **2.1. Work Productivity**

Employee labor productivity is the ability to maximize the availability of facilities and infrastructure by providing maximum production and input [11]. High productivity is very beneficial for the welfare of both employers and employees. Company owners or employees involved in business should try to be more productive [12].

## 2.2 Green Human Resource Management

Green Human Resources Green Human Resource Management is an eco-friendly initiative towards more effective jobs, lower pay, and greater levels of employee engagement [13]. GHRM plays an important role in the organization to support playing an important position in the organization to support the resolution of problems related to the environment, by mastering management perspectives, HR policies and applications, training people and practicing provisions related to social protection [14].

Based on the statement [7] that GHRM increases productivity positively and significantly, the authors propose the first hypothesis:

H1 : Green human resource management affects work productivity.

## **2.3 Environmental Performance**

Work Environment Organizational environment refers to the organization functions in a way that positively affects the environment. The environment has two main objectives, namely controlling the level of pollution in the environment and increasing the quality of the environment from accepted standards [14]. Increased concern for environmental safety is forcing organizations to accept environmental management practices [15].

H2 : Will environmental performance moderate between GHRM and work productivity?

# **3. RESEARCH METHOD**

In this study the authors used the associative method using a quantitative approach. This study tried to test 42 employees in the company's office. Determination of the sample in this study was carried out with the type of Non Probabability Sampling and the sampling technique used was a saturated sample. The data was obtained in this study through a questionnaire through the Google form and the measurement of these variables was carried out using a Likert scale with 5 variants. This study uses the Partial Least Square (PLS) technique with the calculation process using the SmartPLS 3.0 application program using the evaluation of the outer model and inner model.

# 4. RESULT AND DISCUSSION

### **4.1 Respondent Profile**

We use the respondent profile to identify characteristics obtained from personal data on the first page of the questionnaire, such as gender, age and division.

#### 4.1.1 Characteristics of Respondents Based on Gender

Table 1. Characteristic of respondents based on gender

Gender	Numbers Of Respondents	Precentage
Male	17	40%
Female	25	60%
a :	1	

Source: primary data 2022

From the results of the table, it can be concluded that women prioritize more than men, it can be proven that there are 25 respondents or 60% of women and 17 respondents or 40% of men.

## 4.1.2 Characteristics of Respondents Based on Age

### Table 2. Characteristict Based On Age

Age	Number Of Respondents	Precentage
17	1	2%
19	1	2%
20	3	2%
21	1	8%
22	1	2%
24	2	2%
25	2 3	5%
26	4	8%
27	6	10%
28	4	14%
29	3	10%
30	1	8%
31	1	2%
32	1	2%
33	1	2%
34	1	2%
36	2	5%
37	3	8%
38	1	2%
45	1	2%
52	1	2%

Source: primary data 2022

From these results it can be concluded that respondents aged 28 years and over dominated as much as 6 or 14%, while those aged 17 years were 1 or 2%, aged 19 1 year or 2%, 20 years 1 or 2%, aged 21 years were 3 or 8%, 22 years old 1 or 1%, 24 years 1 or 2%, 25 years 2 or 5%, 26 years 3 or 8%, 27 years old 4 or 10%, 29 years old 4 or 10%, age 30 is 3 or 8%, age 31 is 1 or

2%, age 32 is 1 or equal to 2%, age 33 is 1 or 2%, age 34 is 1 or 2%, age 36 is 2 or 5%, age 37 is 3 or 8%, 38 years is 1 or 2%, 45 years is 1 or 2%, 52 years is 1 or 1%.

4.1.3 Characteristics of Respondents Based on Distribution

Table 3. Characteristics Ba	ased on Distribution
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Division	Number Of Respondents	Precentage
Accounting	9	21
Warehouse	2	5
HRD	2	5
Sales & IT Support	19	46
Tax	1	29
Production	9	21

Source: primary data 2022

From these results it can be concluded that the division of respondents in the company that dominates more is Sales Support and IT Support, which is 19 or 45%, accounting is 9 or 21%, warehouse is 2 or 5%, HRD is 2 or 5%, tax of 1 or 2%, production of 9 or 21%.

#### 4.2 Analysis Results

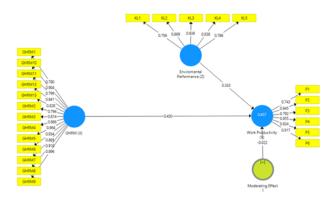


Figure 1. Outer Loading

#### 4.2.1 Convergent Validity

Convergent validity aims to determine the validity of each relationship between indicators and their constructs or latent variables. Reflective measure is said to be high if it correlates more than 0.70 with the construct you want to measure. The loading factor values are explained in table 4 below.

Table 4. Loading Factor Values

Variable	Indicator	Outer Loading
	X1	0.780
	X2	0.794
	X3	0.814
	X4	0.886
	X5	0.864
	X6	0.934
GHRM (X)	X7	0.885
	X8	0.910
	X9	0.896
	X10	0.904
	X11	0.799
	X12	9.841
	X13	0.828
	Z1	0.756
Environmental Performance (Z)	Z2	0.869
	Z3	0.838
	Z4	0.838
	Z5	0.786
	Y1	0.743
	Y2	0.845
Work	Y3	0.792
Productivity	Y4	0.855
(Y)	Y5	0.824
	Y6	0.917

Source: primary data 2022

Based on the outer loading values, table 3 shows that all loading factor values have values above 0.7. This shows that the indicator variables are collectively valid and meet the convergent validity criteria.

## 4.2.2 Discriminant Validity

	GHRM	Work	Env	Mod. Effect
		Prod	Perfm	
GHRM1	0.780			1.334
GHRM2	0.794			
GHRM3	0.814			
GHRM4	0.886			
GHRM5	0.864			
GHRM6	0.934			
GHRM7	0.885			
GHRM8	0.910			
GHRM9	0.896			
GHRM10	0.904			
GHRM11	0.799			
GHRM12	9.841			
GHRM13	0.828			
EP1			0.756	
EP2			0.869	
EP3			0.838	
EP4			0.838	
EP5			0.786	
WP1		0.743		
WP2		0.845		
WP3		0.792		
WP4		0.855		
WP5		0.824		
Wp6		0.917		

Table 5. Cross Loading

Source: primary data 2022

The results of the analysis in table 4 show that the 3 variables in this study are Green Human Resource Management, Work Productivity and Environmental

Performance on each question item that requires each variable to have a loading factor value > 0.7, so it can be stated that each question that represents the variable is valid.

To evaluate the descriptive validity, it can be seen with the AVE (Average Variance Extracted) method for each construct or latent variable. The model has better discriminant validity when the square root of AVE (Average Variance Extracted) for each construct is greater than the correlation between the two constructs in the model.

<b>Table 6.</b> Analysis AVE		
ariable		AVE
1.1.0		0.070

Environmental Perormance0.670GHRM0.736Work Productivity0.691

Source: primary data 2022

Based on table 5, all variable indicators are valid for discriminant validity.

## 4.2.3 Reliability Test

Reliability Measurement of reliability test will reflect how accurate the coherence of respondents' answers with the variables used to determine whether respondents consistently answer research questions using Cronchbach Alpha and composite reliability.

Table 7. Cronbach Alpha and Composite Reliability

	Cronbach Alpha	Composite Reliability
Environmental Performance (Z)	0.877	0.902
GHRM(X)	0.970	0.975
Work Productivity (y)	0.909	0.913

Source: primary data 2022

Based on the test results in Table 6, the composite reliability value generated for each variable is with a composite reliability value and Cronchbach alpha > 0.8 for each variable, indicating that the three variables are reliable.

#### 4.2.4 Multicollinearity Test

Table 8. Multicollinearity Test

Variable	Work Productivity
Environmental Performance (Z)	1.569
GHRM (X)	1.521
Moderating Effect 1	1.039
Work Productivity	

Source: primary data 2022

Based on the test results in table 7 the results of Collinearity Statistics (VIFs) to see the multicollinearity test with the results of each VIF variable < 10 can then be declared free from multicollinearity.

#### 4.2.5 Inner Model Evaluation

The specification of the relationship between latent variables (structural model) can also be called an inner relation, which shows the relationship between latent variables based on the substantive theory of the research.

Table 9. R Square Test				
Variable R <sup>2</sup> Square				
Work Productivity (Y) 0.457				
Source: primary data 2022				

Based on the results of table 8, it shows that the coefficient of determination (R2) on employee work productivity is 0.457 or 45.7%, this means that the effect of green human resource management on employee work productivity is 45.7%. The remaining 54.3% is influenced by factors not examined.

#### 4.2.5 Hypothesis Test

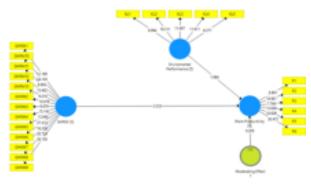


Figure 2. Bootstrapping

From the data collected, the results can be used to answer the hypothesis in this study by looking at the results of t Statistics and P Values. The results of processing the direct effect hypothesis can be seen in the Coefficient Path table in Bootstrapping.

Variable	Original Sample	P Values	T Statistic	Description
EP (Z) -> WP (Y)	0.332	0.048		Positive, Significant
GHRM (X) -> WP (Y)	0.430	0.012	2.523	Significant
Moderating Effect -> WP (Y)		0.838		Not Significant

Table 10. Path Coefficients

Source: primary data 2022

The result of the first hypothesis H1 is that the green human resource management variable has a positive and significant effect on work productivity. This is in line with research conducted by [6] which states that green human resource management has a positive and significant effect on work productivity in 69 companies in East Java and research results [16] introduce the principles of green HRM, one of which is to increase sustainable productivity. Research [8] also said that organizations should develop environmentally friendly capabilities, motivate employees through environmentally friendly rewards and provide opportunities for employees to improve performance which has an impact on increasing productivity.

The result of the second hypothesis H2 is that environmental performance has no potential and does not mediate the relationship between GHRM and work productivity.

## **5. CONCLUSION**

The results of the research above indicate that green human resource management has a positive and significant effect on work productivity, but environmental performance cannot moderate the effect between green human resource management and work productivity.

This research has limitations, namely only done on one company, hopefully in the future it can be done in many companies so that this research can be maximized.

# **AUTHORS' CONTRIBUTIONS**

Evin Nabilla, Ahmad Mardalis and Nur Ahcmad who did the data collection and discussion and then brought the research results. Minhayati Saleh contributed to the writing of the publication's manuscript.

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