

## THE IMPACT OF GREEN HUMAN RESOURCE MANAGEMENT TO GAIN ENTERPRISE SUSTAINABILITY

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**Abstract:** The prime objective of the present study is to examine the role of Green HRM, training and development and Eco- Friendly policies on Environmental Sustainability. Moreover the mediating role of green behavior of employees and moderating role of individual green values is examined as well. The data is collected from the employees who are associated with the mining sector of Indonesia. For analysis, PLS-SEM 3.0 is used because this is latest software helps in graphical path modeling of unobserved constructs in a simultaneous way. The total useable questionnaires are 385 and the response rate is 70.90. The findings of the study revealed that Green training and development are not important predictor of environmental sustainability. Rest of the all hypothesis are proved significant. The findings of the study bridge the limited knowledge of environmental sustainability

**Keywords:** Green HRM, Green training and development, , Eco-friendly policies, Environmental sustainability, Mining Industry, Indonesia

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### Introduction

Organizations which have strong policies regarding the environment have the benefit in terms of increase in profit as well as improvement in the image of the organization (Yang, Hong, & Modi, 2011). Moreover, it has impact on the employee performance as well. Within the organization employees who are working in the organization implement the green policies of the organization therefore, employees must adopt policies which can promote such behavior of employees to adopt green policies. In recent past, organizations are increasing initiatives related to green human resource management also known as green HRM. Basically green HRM is the green initiative of organization related to HRM

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(Renwick, Redman, & Maguire, 2013). Researchers have defined Green HRM as the initiatives related to HRM taken by the organization so the green behavior of the workers within organization can be promoted so the environmental outcomes of the organization can be promoted. Past literature has established the relationship among the organizational outcomes and green HRM policies is not explored empirically at full extent.

They also have to take these initiatives by keeping in view the economic and financial status of the organization. The organizations are giving more priority to the issue of sustainability by taking initiatives related to the green strategy at the corporate level. In last two decades the pressure on organizations is mounting regarding the green management activities (Prakash, 2002). The purpose of current study is to explore individual green values as a significant moderator of Green behavior of employee and Green HRM. As well as Green behavior of employee is examined as a mediator for Green training and development, Green HRM, Eco-friendly policies and Environmental sustainability.

### **Literature Review**

Employee's sustainability related motivation, behavior and attitude is influenced and measured by the HR suggested by Boudreau and Ramstad (2005). Hence, for the delivery environmentally sustainable and effective policies the organizations can use HRM. Green HRM practices are identified in range by the existing studies. Green five taxonomy is developed in order to identify green behavior of employee in which the working sustainability is included, Avoiding taking imitative, influencing other, Harm and Conserving and it is mentioned as a critical incident methodology result. Working sustainably represents behaviors that help work processes and products to be more sustainable and it includes four categories such as Choosing Responsible Alternatives, Changing How Work is Done, Creating Sustainable Products and Processes, and Embracing Innovation for Sustainability (Dilchert & Ones, 2012).

H1: Employee's green behavior impact significantly on environmental sustainability.

In contemporary corporate world concepts like sustainability and Go green are recurrently being used, demanding benchmark practices from every company to follow the best 'eco-friendly' and 'resource-efficient' (Mandip, 2012).

The preservation of knowledge capital and environment friendly HR are the two major elements in green HR essentially. The basic foundation in any kind of organization of business the system of the organization and human resource are the

two major parts either it is sustainable business or financial business (Mandip, 2012). To create green atmosphere, they are ones which are responsible. Going green is particularly a hard nut to crack without the sustainable policies implementation and human resource facilitating.

H2: Eco-friendly policies impact significantly on employee's green behavior.

Because green behavior of employees has significant impact on environmental sustainability and Eco-friendly policies are related to Employee's green behavior. Thus, it is hypothesized:

H3: Employee's green behavior mediates between eco-friendly policies and environmental sustainability

The skills of the employees are enhanced by the training and development of the employees. Green HRM practices are of crucial importance in creating, practicing and maintaining environmental related employees' innovative behaviors along right attitude of greening (Dumont, Shen, & Deng, 2017).

H4: Green training & development practices impact significantly on employee's green behavior.

Because green behavior of employees has significant impact on environmental sustainability and Green training & development policies are related to Employee's green behavior. Thus, it is hypothesized:

H5: Employee's green behavior mediates between Green training & development and environmental sustainability.

Practices and policies of the HRM policies are related to the pro environmental level behavior of individual shown by the Empirical studies, such as (Harvey, Williams, & Probert, 2013). Organization green practices are bound to be affected by the behavior of the employee. In order for the employees to carry out relevant practices firmly and smoothly related research holds that it is necessary to raise the environmental awareness. Organizational personal work and environmental management is promoted by this integration. In the human resource management concept green human resource management is the sustainable concept for the implementation of the concept of environmental management and sustainable development. Participation, incentive system, performance management, selection and recruitment are the major five aspects of the GHRM generally (O'Donohue & Torugsa, 2016).

H6: Green HRM practices impact significantly on environmental sustainability.

Because green behavior of employees has significant impact on environmental sustainability and Green HRM policies are related to Employee's green behavior. Thus, it is hypothesized:

H7: Employee's green behavior mediates between Green HRM practices and employee's green behavior.

Individual green values; Relationship with Green HRM and Employee's green behavior

In explaining the behavior and attitude of the individual the value of individual is underscored by contemporary values literature (Davidov, Schmidt, & Schwartz, 2008) supplies-values fit theory. The behavior of the individuals is affected largely underpin the ways in which individuals. The positive effect will be seen on the behavior and the work attitude of the employees if personal values are congruent with those supplied by the organization the theory posits. Optimal outcomes of the employee such as strengthening the meaning of work positive behavior and attitude to the work is aligned by a shared ideology for individual values. Green HRM practices reflect the result of employees' judgments of the organization's green values. Hence, individual green values will moderate the effects of green HRM and psychological green climate on workplace green behavior. Thus, it is discussed that individual green values of employees are linked to green HRM policies and green behavior of employees. Hence, it is proposed that:

H8: Individual green values moderate the relationship between green HRM and employee's green behavior.

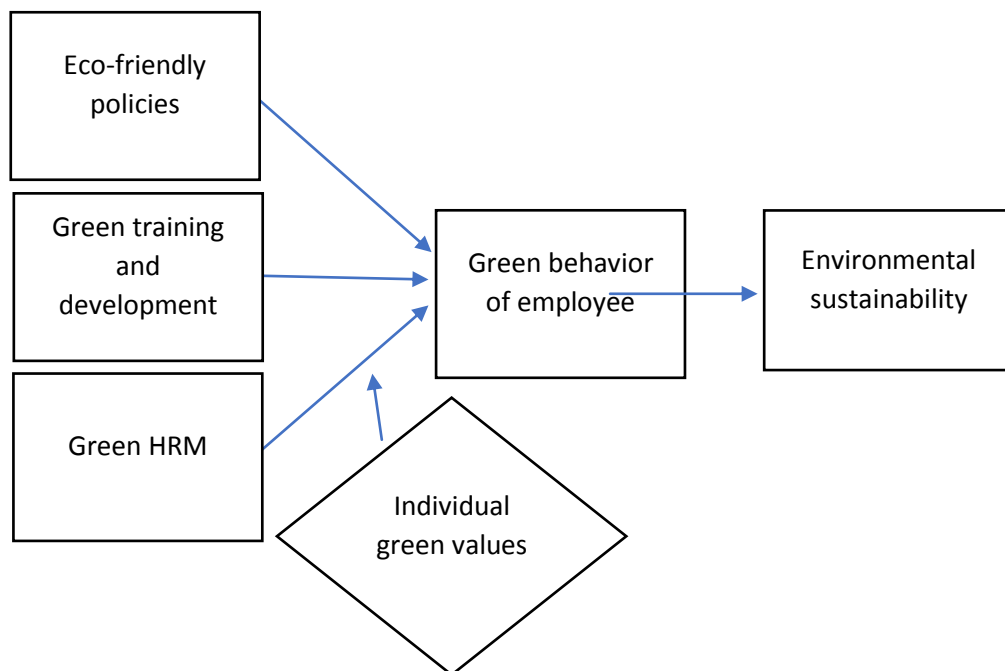


Figure 1. Research Framework

## Methodology

The quantitative research approach has been used in this study along with positivistic philosophy of research. The basic purpose of this research approach is to identify variables related to the problem for the formulation of hypotheses. The relationships among the variables are tested under the light of specific theories and use of observations for evidence and statistical data. In the quantitative research approach, hypotheses are tested against the theoretical statements regarding the variables. In this research approach, generally random sampling method is used to eliminate the risk of biasness in responses, data collection, and sampling method. PLS method is considered as an effective technique to its superiority over other approaches. This method helps in data analysis, which is not distributed normally. The method is non-parametric method of statistics and can work on both small and large size of sample (Hair, Ringle, & Sarstedt, 2013). The model estimation will be done through use of Smart PLS 3.0 software. This latest software helps in graphical path modeling of unobserved constructs in a simultaneous way. The total useable questionnaires are 385 and the response rate is 70.90.

## Results

The measurement model is assessed by using discriminant validity, convergent validity, content validity, internal consistency reliability, and individual item reliability (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). The outer loadings of measure of every construct are measured in determining the individual item reliability. The items with value of loadings in the range 0.50-0.70 are retained and items with lesser value are eliminated (F. Hair Jr et al., 2014). The level with which same concept is measured by all the items on a specific scale is referred as internal consistency reliability. The common methods used for measuring internal reliability consistency include coefficient of composite reliability and Cronbach's alpha coefficient. In order to ensure the internal consistency reliability of adopted measures, coefficient of composite reliability has been used in this study. The adoption of composite reliability coefficient is based on two reasons. It gives less biased estimates as compared with the Cronbach's alpha coefficient. It is assumed in Cronbach's alpha coefficient that every item has equal contribution to the construct without realizing their real contribution.

Moreover, the value of Cronbach's alpha can give under or over estimation of the reliability scale. However, the fact that different loadings are possessed by the indicators is taken into account by the composite reliability coefficient.

**Table 1: Outer Loadings**

	ECOF	ENS	GBE	GHRM	GRTD	IGV
ECOF1	0.898					
ECOF2	0.835					
ECOF3	0.907					
ECOF4	0.920					
ENS1		0.913				
ENS3		0.913				
ENS4		0.895				
ENS5		0.853				
GBE1			0.898			
GBE2			0.861			
GBE4			0.914			
GBE5			0.932			
GHRM2				0.895		
GHRM3				0.901		
GHRM4				0.886		
GHRM5				0.927		
GRTD4					0.909	
GTRD1					0.924	
GTRD2					0.883	
GTRD3					0.932	
IGV3						0.926
IGV4						0.900
IGV5						0.881
IGV6						0.893
IGV7						0.839
<b>GHRM1</b>				<b>0.893</b>		

The coefficient of composite reliability is interpreted similar to the Cronbach's  $\alpha$ . The value of internal consistency reliability should be greater than 0.98 to .91 for being sufficient. This standard rule was given by (Hair et al., 2013). According to the researcher, the value of reliability should be equal or greater than 0.70. It has been shown in Table that the requirement given by (Hair et al., 2013) has been fulfilled in the present study.

**Table 2: Reliability**

	Alpha	rho_A	CR	(AVE)
<b>ECOF</b>	0.913	0.916	0.939	0.793
<b>ENS</b>	0.916	0.920	0.941	0.799
<b>GBE</b>	0.923	0.925	0.945	0.813
<b>GHRM</b>	0.942	0.944	0.955	0.811
<b>GRTD</b>	0.933	0.937	0.952	0.832
<b>IGV</b>	0.933	0.935	0.949	0.789

The level with which the intentional unobserved construct is represented by the items is referred as convergent validity. The items are also correlated with other measures of the similar unobserved variable. The AVE value has been used for determining convergent validity for every unobserved construct (Hair et al., 2013). The value of AVE must be equal or greater than 0.50. It has been shown in Table 4.4 that the extracted convergence variance is greater than 0.50. This reflects sufficient level of convergent validity.

**Table 3: Validity**

	ECOF	ENS	GBE	GHRM	GRTD	IGV
<b>ECOF</b>	0.891					
<b>ENS</b>	0.700	0.894				
<b>GBE</b>	0.732	0.892	0.901			
<b>GHRM</b>	0.805	0.666	0.668	0.901		
<b>GRTD</b>	0.886	0.678	0.658	0.881	0.912	
<b>IGV</b>	0.692	0.876	0.811	0.692	0.643	0.888

The level with which there is difference between a specific construct from other unobserved constructs is referred as Discriminant validity. AVE value has been used to determine discriminate validity in this research. The correlation between the unobserved constructs has been compared with the AVE square root value. Moreover, the recommendation of Chin (1998) has been used to determine discriminate validity for making comparison of item indicator loadings with

reflective indicators. This comparison is done in the table of cross-loadings. The value of AVE should be equal or greater than 0.5.

The structural model has been assessed after ensuring the determination of outer model. The method of standard bootstrapping has been used with 385 cases and 500-5000 bootstrap samples to determine the path coefficient significance.

**Table 4: Direct relationships**

	(O)	S.D.	t-values	P Values
ECOF -> ENS	0.323	0.077	4.196	0.000
ECOF -> GBE	0.362	0.087	4.166	0.000
GBE -> ENS	0.892	0.022	40.653	0.000
GHRM -> ENS	-0.207	0.074	2.812	0.002
GHRM -> GBE	-0.232	0.083	2.813	0.002
GRTD -> ENS	0.018	0.067	0.275	0.392
GRTD -> GBE	0.021	0.075	0.276	0.391
IGV -> ENS	0.747	0.047	15.823	0.000
IGV -> GBE	0.837	0.046	18.398	0.000
Moderating Effect 1 -> ENS	0.032	0.016	1.967	0.025
Moderating Effect 1 -> GBE	0.036	0.018	1.969	0.024

All the mediation paths except GRTD -> GBE -> ENS are accepted at p value less than 0.05.

**Table 5: Mediation**

	(O)	S.D.	t-values	P Values
ECOF -> GBE -> ENS	0.323	0.077	4.196	0.000
GHRM -> GBE -> ENS	-0.207	0.074	2.812	0.002
GRTD -> GBE -> ENS	0.018	0.067	0.275	0.392

## Discussions

The findings indicated that eco-friendly policies, HRM practices, green training and development and green behavior increase the environmental sustainability because these all elements enhance the behavior of the employees towards the sustainability by motivating and training them. The findings are similar with Wright (2002) results of the study on environmental sustainability. In addition, the outcomes show that the green behavior increase the impact of eco-friendly policies, HRM practices, green training and development on the environmental sustainability. These output also match with Moldan, Janoušková, and Hák (2012) who also found same results. Finally, individual green values moderate the link



among the eco-friendly policies, HRM practices, green training and development and green behavior.

### Conclusion

The employees are the asset of the organization because they play important role in getting the sustainability. Now a days organizations are under pressure to adopt green practices. Therefore, the objective of the present study is to examine the role of Green HRM, training and development and Eco- Friendly policies on Environmental Sustainability. Moreover the mediating role of green behavior of employees and moderating role of individual green values is examined as well. The data is collected from the 385 employees who are associated with the mining sector of Indonesia. For analysis, PLS-SEM 3.0 is used because this is latest software helps in graphical path modeling of unobserved constructs in a simultaneous way. The findings of the study revealed that Green training and development are not important predictor of environmental sustainability. Rest of the all hypothesis are proved significant. The findings of the study bridge the limited knowledge of environmental sustainability.

This study recommended and guided to the regulators that they must put critical intentions on the eco-friendly policies, HRM practices, green training and development and green behavior that enhance the environmental sustainability. The current study also have some limitation like individual green values take as moderator and future studies may use it as mediator in their studies.

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#### WPLYW ZIELONEGO ZARZĄDZANIA ZASOBAMI LUDZKIMI NA ZYSK ZRÓWNOWAŻONEGO PRZEDSIĘBIORSTWA

**Streszczenie:** Głównym celem niniejszego badania jest zbadanie roli Zielonego HRM, szkoleń i rozwoju oraz ekologicznych polityk w zakresie zrównoważonego rozwoju środowiska. Ponadto badana jest także mediacyjna rola zielonych zachowań pracowników i moderująca rola poszczególnych zielonych wartości. Dane są gromadzone od pracowników związanych z sektorem wydobywczym Indonezji. Do analizy wykorzystywany jest PLS-SEM 3.0, ponieważ jest to najnowsze oprogramowanie, które pomaga w graficznym modelowaniu ścieżki nieobserwowanych konstrukcji równocześnie. Całkowita liczba ankieta wynosi 385, a wskaźnik odpowiedzi wynosi 70,90%. Wyniki badania wykazały, że zielone szkolenia i rozwój nie są ważnym predykatorem zrównoważonego rozwoju środowiska. Reszta wszystkich hipotez okazała się znacząca. Wyniki badania wypełniają ograniczoną wiedzę na temat zrównoważonego rozwoju środowiska

**Słowa kluczowe:** Zielony HRM, Zielone szkolenia i rozwój, Polityki ekologiczne, Zrównoważony rozwój, Przemysł wydobywczy, Indonezja

### 绿色人力资源管理对企业可持续发展的影响

**摘要:**本研究的主要目的是检验绿色人力资源管理, 培训与发展以及环境友好性对环境可持续性政策的作用。此外, 还研究了员工绿色行为的中介作用和个人绿色价值的调节作用。数据是从与印尼采矿业相关的员工那里收集的。为了进行分析, 使用PLS-SEM3.0, 因为这是最新的软件, 可以同时从未观察到的结构进行图形路径建模。可用问卷总数为385, 答复率为70.90。研究结果表明, 绿色培训和发展并不是环境可持续性的重要预测指标。所有假设的其余部分都被证明是有意义的。研究结果弥补了对环境可持续性的有限了解

**关键字:**绿色人力资源管理, 绿色培训和发展, 生态友好政策, 环境可持续性, 矿业, 印度尼西亚