Impact of Green Human Resources Management Practices on Sustainable Development: Evidence from Ma'aden Company (Waadalshamal)

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Abstract

Purpose – This article aims to examine the impact of the green human resources management on sustainable development. It addresses different practices of green human resources management and sustainable development. As the protection of individuals and organization is a priority for different mining companies contrary employees are highly vulnerable to the risks of environmental pollution therefore green human resources management practices are essential for the creation of safe green environment.

Design/methodology/approach – The study used descriptive methodology to get more information about the green human resources practices, and sustainable development that are closely linked to the problem and variables of the study. This study used quantitative technique, to collect data about the impact of green human resources on sustainable development in Saudi Arabia Ma'aden Company, where Measures were adapted from an extensive review of relevant literature. A questionnaire survey with valid responses from 80 employees and managers was conducted in (Ma'aden Company) in 2022. PLS-SEM method was used to analyze the data. The exploratory, descriptive, and explanatory methodology was used to explore the nature of green human resources management and sustainable development.

Findings –The results of this study reaveled a positive relationship between five green human resources management practices and Sustainable development.

Originality/value – The study of impact of green human resources management on sustainable was considered as the first study to be conducted in the company. Moreover, the findings of the study will support sustainability and green practices in the company.

***Keywords**: Sustainable Development, Green Human Resources Management, Sustainability.*

Introduction

Green human resource management (GHRM) practices contribute substantially to the sustainability of organization's environment and employees' health, wellness and well-being in addition to the attainment of economic development sustainability and environmental equilibrium (Amrutha & Geetha, 2022). GHRM practices concern with the environment awarenessthat might be incorporated into the human resources management (HRM) functions of recruiting, hiring, training, rewarding, safety and security besides developing a green environment within workforce that encourages green values, practices, and initiatives (Anwar et al., 2020).

The notion of environment-friendly behavior of employees is becoming essential for all organizations and sectors whether public or private (Rayner & Morgan, 2017). As long as the green human resource management

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(GHRM), is seen as a process of involvement of employees of a business to support the green environment objectives of the management. Consequently job description and job analysis would be designed accrediting to the GHRM practices. Moreover, firmsengaged in green planning while hiring new employees by identifying specific skills and quality related to environmental friendly tasks to support the GHRM. Also, the firms are involved in the training programs to support the GHRM practices to raise GHRM awareness among employees. Last but not least, organizations are evaluating the employees' performance according to the targeted GHRM standards whereas the green rewards for green practices are set for employees (Arulrajah et al., 2015). Putting the above mentioned GHRM practices in the consideration, afirm would help in reducing pollution emissions by reducing lesser energy consumption at whole or by promoting green energy consumption practices and maintaining the sustainability as the case of the Ma'aden company in the Northern Border Region of Saudi Arabia. This company is the branch of the Ma'aden Company which is headquartered in Riyadh of Saudi Arabia and it is known as fastest-growing mining companies in the world and the largest multi-commodity mining and Metals Company in the Middle East. It is ranked among the top 10 global mining companies based on market capitalization. The company has diversified minerals to produce. As gold, aluminum, industrial minerals and copper producing company with risk of pollution and environmental damage that may harm employees therefore a high GHRM practices are highly required to sustain a green environment for the organization, protecting the employees and guarantee that the HRM functions are abide by the green practices. Hence, the statement of the problem for this study can be formulated in a form of a question what is the impact of green human resources management on the sustainable development in Ma'aden Company?

The present study aims to examine the impact of green human resources management on sustainable developmentby addressing different components of green human resources management functions and sustainable development. The study is conducted in a mining company of Ma'aden which manufactures phosphates, phosphoric acid, aluminum fluoride, chemical salts and others such chemical productions require Green human resources management (GHRM) practices to protect the workers, employees, management and the surrounding. To preserve sustainable development a GHRM should be practiced especially in such mining company like Ma'aden that may has impact on the environment. Furthermore, the study focuses on GHRM practices and its impact on sustainable development in Ma'aden Company. Hence, the study is significant from different sides including that there is no study that has so far explored the impact of GHRM practices on sustainable development in Ma'aden Company according to the best of our knowledge. Additionally, the study Provides empirical evidence from Saudi Arabia on the GHRM practices and sustainability framework and theoretical model in this study. Finally, the study supports decision makers and academicians with relevant data on GHRM practices in Saudi Arabia.

What distinguishes this study is that it provides empirical evidence on the effectiveness of GHRM practices in promoting sustainable development within a specific company. This study adds to the growing body of literature on GHRM practices and their potential to contribute to sustainable development in Saudi Arabia. Moreover, the study offers practical implications for companies seeking to implement GHRM practices.

As well as. The study highlights the importance of employee involvement and engagement in the implementation of GHRM practices for companies seeking to adopt GHRM practices to promote sustainability.

Literature Review

People and organizations all around the world have been interested in the sustainability and protected environment free from pollution, carbon and gas emission. The successful organizations concern with the environmental issues because they have an impact on the performance of employees and organization productivity.

A number of organizations perceived that their business activities have little impact on environmental performance, or resources reduction and pollution of environment (Malik etal., 2020). Absence of

strong green practices in the manufacturing sectors leads to the industrial pollution and creates in turn environmental hazards (Ahmad, 2015)

Several organizations start to concern with the environmental issues that impact the internal and external elements of organizations. On the same way the green human resources management (GHRM) has been referred as an indicator for successful management which includes environmental management and sustainable performance to support organizational performance. This is to say that organizations attempt to reduce the negative impact of organizations activities on environment, while at the same time improving sustainable performance (Ahmad, 2015). Moreover, Dubey and Gupta (2018) figured out that the role of GHRM in improving sustainability can be done through raising employee's awareness about environmental issues and sustainable practices.

Previous studies have showed that GHRM practices have many benefits for organizations including employee welfare, excellent employee recruitment, job description, health and safety may contributes to employees' health and safety improvement. Furthermore, training on GHRM practices tends to reduce negative environmental impact on individuals of organization of as important factor in improving environmental performance of organizations from different.

Environmental Sustainability

Sustainability concept is defined in the World Commission on Environment and Development's 1987 Brandt and report ´Our Common Future`. And since then, it has become widely used in different organizational settings with administrative, development and leadership meanings. Environmental sustainability can be understood as a balance in which human beings are allowed to satisfy or achieving their current needs by using natural resources without violating the ability of future generations to satisfy their comprehensive needs. Environmental sustainability is a conscious effort and responsive interplay with the environment with a view to preserving natural resources through the development of alternative power sources, reducing pollution or any negative impact that may erode environmental quality (Fapohundaetal., 2022).

Sustainable Development

Sustainability is associated with the ability to sustain the three dimensions which are environment, economic and social performance. Environmental performance is seen as protection of natural resources and prevent the damage to the environment, while economic performance is associated with financial performance, lastly, social performance is linked with beneficiaries interest and well-being including safe working environment, job security, health and safety and fair employment contract and salary, (Yusliza etal., 2020). Therefore, it is important to achieve sustainability to fulfill the future needs and to respond to the challenges in the manufacturing companies as these companies have highest contribution to environmental issues. Moreover, environmental sustainability is closely linked with green practices that are proposed by HR professionals such as reduction in industrial waste, waste resources, energy consumption, carbon dioxide emissions, and produce green related products (Ahmad, 2015).

The environmental degradation, global warms and climate changehave become key challenge leads to kinking on how to achieve a balanced sustainable development. Consequently, efforts must be coordinated towards the preservation of environment and resources. Sustainable development as terms was first launched in the 1992 Earth Summit in Rio de Janeiro. In 2015 the United Nations General Assembly (UNGA) adopted the Sustainable Development Goals (2015 to 2030) and explained how the goals are integrated to achieve sustainable development at the global level (Purvis etal., 2019). Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987).

Green HRM Functions

According to (Young et al., 2020) GHRM has been attracted the interest of researchers since 2007 and intensive publications in GHRM began in 2016 and continued until the present time. Extensive research in GRHM has found European countries due to rigid government policies and regulations for waste management and environmental protection (Amrutha & Gheetha, 2021).

The term green has different meanings for different people and for different things, but in this study the term green is used for something relevant to nature or natural environment including natural workplace without pollution. Subsequently, there is a growing consciousness inside organizations of the importance of "green" issues. In order to achieve environmental sustainability goals, most organizations can use suitable human resources management practices to stimulate their employees. The key component of Green HRM implementation is environmental protection, renewable energy, waste reduction and energy saving training (Hosain & Rahman, 2016). GHRM has linked closely with traditional functions of human resources management therefore various organizations use job descriptions as a tool to describe environmental issues and tasks that are connected with duties and responsibilities of the work being announced (Renwick et al., 2008).Job descriptions refers to the inclusion of environmental, social, personal, and technical requirements during job specifications for the organizations (Arulrajah etal., 2015). On the other hand, green recruitment includes the process of recruiting new candidates who are aware of sustainable process, environmental system and familiar with terms of conservation and sustainable environment (Bangwal & Tiwari, 2015).Green recruitment and selection is process of attracting and selecting candidates that have an interest in environmental concerns and are committed to resolving the issues related to the environment including workplace environment (Saeed et al., Citation2018). The study of Guerci et al., (2015) confirmed that the good green position is in the organization is positively associated with the attraction of candidates for the job. The function of green training is centered on the idea of developing skills, knowledge and attitudes of employees who are environmentally friendly. In other words it refers to a system of environmental protection activities and putting in consideration the environmental problems while achieving the organization's environmental goals (Jabbour, 2015).

Green Compensation and Rewards are potential tools that companies use as both financial and non-financial reward systems that aim to attract, retain and motivate employees to contribute to the company's environment. Green performance and appraisal or assessment indicates to a set of green standards for all employees in performance appraisals, which contain environmental incidents, responsibility and reduction of carbon emissions, as well as how communicate environmental concerns and policies (Wulandari Nawangsari, 2021).

Green health and safety management is concern with the traditional health and safety management and some more aspects of environmental management of an organization. In order to improve health and safety of employees, some organizations have really initiated strategies to maintain a conducive environment to prevent various health problems (Arulrajahetal., 2015).

Hypotheses of the Study

To fulfill the main purpose, of this study in Ma'aden Company. The following hypotheses are formulated:

- **H1: There is a significant effect of GHRM practices on sustainable development in Ma'aden 'Company.**

This hypothesis is divided into six sub-hypotheses based on of human resourcses management practices and as follow:

- H1-A: Job analysis and design is one of the HR practices that have an impact on the sustainable development in Ma'aden Company.

- H1-B: Training is one of the HR practices that have an impact on sustainable development in Ma'aden Company.
- H1-C Performance evaluation is one of the HR practices that have an impact on sustainable development in Ma'aden Company.
- H1-D: Recruitment is one of the HR practices that have an impact on sustainable development in Ma'aden Company.
- H1-E Incentives and rewards is one of HR practices that have an impact on sustainable development in Ma'aden Company.
- H1-F: Safety and security is one of the HR practices that have an impact on sustainable development in MA 'Aden Company.

Research Methodology

The study uses Exploratory, Descriptive, and Explanatory methodologies to explore the basic knowledge about GHRM, and sustainable developmentbackground related to the problem and variables of this study. This study used the quantitative technique, questionnaire, to collect data about the influence GHRM and sustainable development in Saudi Arabia (Ma'aden Company), where Measures were adapted from an extensive review of relevant literature. Finally, we used the Partial Least Squares tool (PLS-SEM) to analyse the data resulted from the questionnaires.

Research Population & Sample

(Hair, Black, Babin, & Anderson, 2010) affirmed that performing the nature of the data analyses is an important consideration when determining sample size. In the case of this study, specifically the use of PLS-SEM, there is guidance from a procedural and empirical perspective. Procedurally PLS-SEM is recognized as a limited information estimation technique, owing to its assumed ability to deal with smaller sample sizes (Marcoulides & Saunders, 2006). In other cases, (Rigdon, 2016) mentioned that the population itself, as the population of this study, might be countably limited. As a result, the nature of the population will justify the small sample size and not the small sample size that justifies the choice of PLS path modeling. Whether PLS-SEM achieves better than other approaches in the analysis of data from finite populations is a little-explored research area.

In the case of this study, the researcher depends on the method of (Hair J. J.; Hult, Ringle & Sarstedt, 2014:21) for its easiness application and it takes consideration the minimum sample size requirements necessary to identify minimum R2 values of 0.10, 0.25, 0.50 and 0.75 for variables in the Structural Model for significance levels of 1%, 5%, and 10%. This method is based on the frequently used Statistical Power level of 80% and the level of complexity of the PLS path model. The study questionnaire targeted managers and employees at MA 'Aden Company. It measured the relationship between six independent variables, GHRM practices (Job analysis, Training, Performance evaluation, Recruitment, Incentives and rewards, Safety and security) and one dependent variable, sustainable development. There is a maximum of six arrows pointing at a single variable, to realize a Statistical Power of 80%for R2 values at least 0.25 (with a 5%Probability of Error), the sample size at least 75 employees would be required.

Data Collection

In carrying out the investigation, the dimensions of GHR practices and sustainable development were examined from the perspective of the employees of (Ma'aden Company). A survey comprising of a structured questionnaire was mainly utilized for data collection as it is the optimum method available to observe the attitudes of (Ma'aden Company) employees, and their perspective in regards to GHR practices of (Ma'aden Company) employees.The questionnaires were launched on first of October, 2022 for two months.

To assess content validity, the items are refined through experts review and pre-test. Their recommendations were used to modify, delete or improve the wording of items, and back translation was done from English to Arabic and from Arabic to English in turn. All constructs were measured using multi-item, 5-point Likert-type scales anchored from '1'= strongly disagree to '5'= strongly agree.

Data analysis and Findings

Initially, the Descriptive Statistics were performed in order to expose the main feature of the data in this study. At that point, the data was explored for missing values, Outliers, Normality Distribution, and Data Errors. It is obvious from this analysis that the distribution of data might be non-normal, but there no missing or Duplicate Cases were found, and also, there is no sharp deviations between mean and trimmed mean for all variables in this study. In this study, all questionnaires were distributed handleand electronically. Moreover, respondents were shortly informed about the objectives of the study by holding many seminars for them, According to (Field, 2009), the researcher did not assumea big effect of Outliers in advance.

Otherwise, PLS-SEM is robust for Non-normal Distributions, so the researchers did not make any attempt to transform data to meet the Normality assumption. On another hand, the researcher runs the Bootstrapping technique at Smart PLS, by generating 5000 samples to approximate the Normality of data. This procedure will be illustrated in detail at the next section to meet the requirement of assessing the Structural Model at PLS-SEM.(Hair J. J., Hult, Ringle, & Sarstedt, 2014)

Following the guidelines of (Hair, Black, Babin, & Anderson, 2010), the initially proposed model was evaluated through Measurement and Structural Model Analysis.

Assessment of the Measurement Model

Indicates to the systematic approach to validate the measurement model by evaluating its Reliability and Validity as follows:

Evaluaiting the Reliability of Measurement Model:

This study conducted three iterations to assess the Reliability of Measurement Model to achieve satisfactory measurement values for Cronbach alpha's,Composite Reliability,andAVE. PLS Algorithm should be performed again by discarding weak indicators PE12, PE13, RE17, RE19, SC29, SC30, SD31, SD33, and SD34 to reach to 0.707 thresholds of Factor Loading as shown in Table 1, and Figure 1.

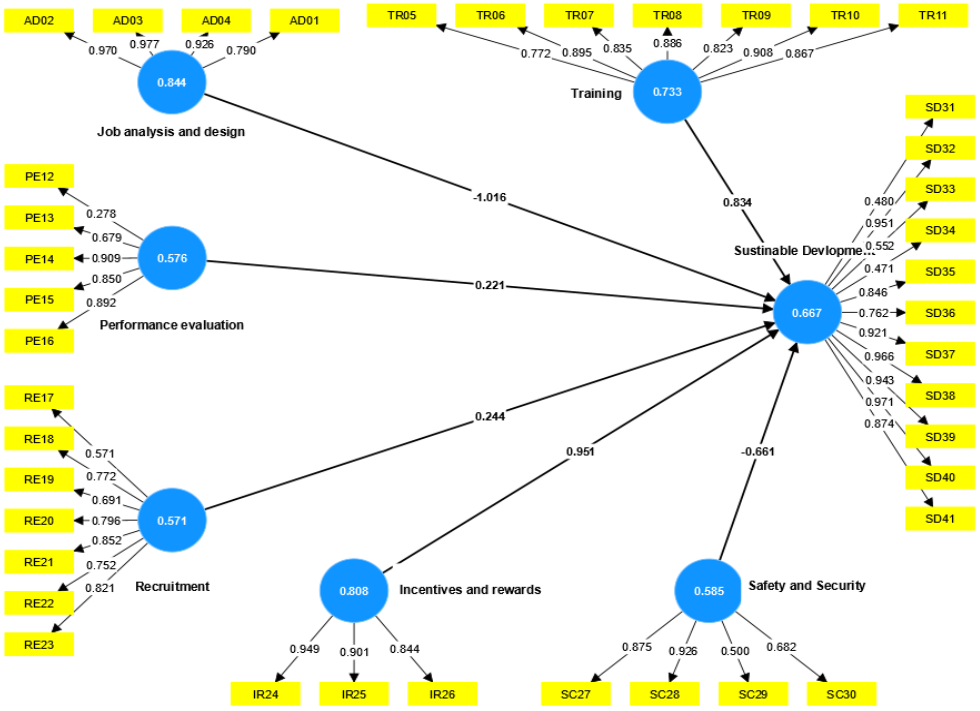
The data of Table 1, and Figure 1show that allAVE values of the variables and indicators

Table 1: Validity and reliability of measurement model

Var.	Ind.	Loadings	Cronbach's alpha	Composite Reliability (rho-c)	(AVE)
Job analysis and design	AD01	0.783	0.953	0.955	0.841
	AD02	0.969			
	AD03	0.978			
	AD04	0.924			
Training	TR05	0.764	0.945	0.950	0.729
	TR06	0.894			
	TR07	0.828			
	TR08	0.882			
	TR09	0.832			
	TR10	0.905			
	TR11	0.864			
Performance evaluation	PE14	0.897	0.863	0.916	0.785
	PE15	0.851			
	PE16	0.908			
Recruitment	RE18	0.792	0.862	0.894	0.631
	RE20	0.815			
	RE21	0.904			
	RE22	0.701			
	RE23	0.744			
Incentives and rewards	IR24	0.948	0.880	0.926	0.808
	IR25	0.899			
	IR26	0.847			
Safety and Security	SC27	0.867	0.776	0.897	0.813
	SC28	0.935			
Sustainable development	SD32	0.937	0.970	0.975	0.828
	SD35	0.850			
	SD36	0.792			
	SD37	0.933			
	SD38	0.975			
	SD39	0.960			
	SD40	0.964			
	SD41	0.851			

Source: Outputs of Smart PLS 4.0

are exceeded the required value 0.5, all variableshave the Composite Reliability values, and Cronbach's Alphaabove 0.7, and indicator loadings are above 0.707 thresholds. Subsequently, the Indicator Reliability, Composite Reliability,and Convergent Validity ofthe Measurement Modelare approved.Once the iteration process completed, the final Measurement Modelshould be checked for Discriminant Validity based on Fornell-LarckerCriterion, andCross Loading values generated from the Third Iteration.



Source: Outputs of Smart PLS 4.0

Figure 1: The Measurement Model

Evaluaiting the Validity of Measurement Model:

The Discriminant Validity means that the indicators forming up a variable should be distinguished from indicators of another variable. According to (Hair J. J., Hult, Ringle, & Sarstedt, 2014), it is calculated by using Fornell-LarckerCriterionwhich is based on the square root of AVE should be much larger than the correlations of the variable to all the other variables

Table 2 shows the correlations among variables and the square root of AVE value for each variable on the diagonal and BLUE cells. The square root of AVE value for each variable is much greater than the correlation between a selected variable and all others. Accordingly, the Discriminant Validity of the Measurement Model is confirmed.

Table 2: Test result of Fornell-Larcker Criterion

	IR	AD	PE	RE	SC	SD	TR
IR	0.899						
AD	0.405	**0.917**					
PE	0.853	0.302	0.886				
RE	0.660	0.469	0.778	**0.794**			
SC	0.697	0.060	0.710	0.464	**0.902**		
SD	0.829	0.270	0.870	0.792	0.454	**0.910**	
TR	0.533	0.916	0.525	0.613	0.299	0.474	**0.854**

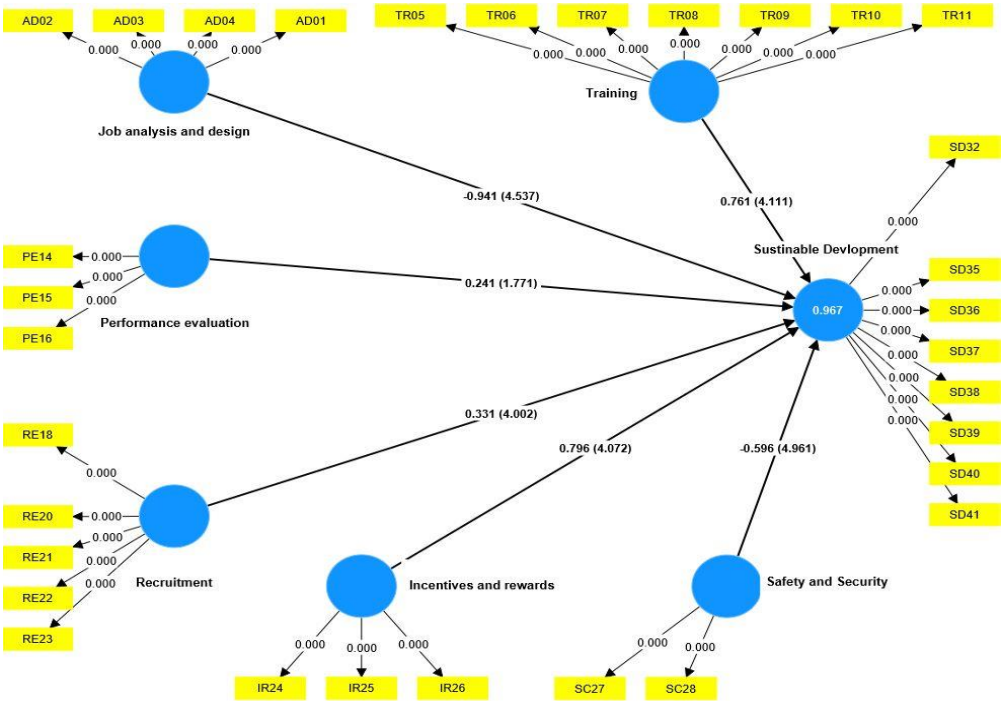
Source: Outputs of Smart PLS 4.0

Assessment of the Structural Model

The Structural Model applies structural theory by specifying which variables are related to each other and the nature of the relationship. These relationships can be expressed as regression coefficients. The results of this model fit allow us to contrast theory against reality in terms of the data collected from the target population. For testing the structural theory, structural parameter estimates should be statistically significant in the predicted direction. The next stages of validating the Structural Model were performed in the following order: (Hair, Black, Babin & Anderson, 2010).

Assessing the significance and relevance of the model relationships

The Path Coefficients test was conducted to test the hypothesized relationships. As suggested by (Kwong & Wong, 2013), and (Hair J. J., Hult, Ringle & Sarstedt, 2014),in this study, the Bootstrapping generated 5000 samples and these samples areused to compute t-values at significancelevel= 5% with test type two-tailed.In Table3, and Figur 2 below, the Path Coefficients, as well as their respective t-values, are provided.



Source: Outputs of Smart PLS 4.0

Figure 2: PLS Bootstrapping (t-values) for the study model

As shown in Table 3, and Figure 2, all Path Coefficients of the sample of this study are significant except path of $H_{1\text{-}C}$, the Bootstrapping resultsconfirmed that all Path Coefficients are significant, thet-statistics for each path arelarger than1.96 at 5% significance level.

As presented in Table 3 and Fig. 2, a positive relationship among Sustainable development and GHRM practiceswith fiveof its components is concluded. In $H_{1\text{-}A}$, results revealed that the proposed relationship between Sustainable development and sub-hypotheses of GHRM practices (Incentives and rewards) $H_{1\text{-}A}$was supported (t-Statistics = 4.072, p=0.000) because t-statistic is greater than 1.96 and P-Value is less than 0.05. Furthermore, we observed highly significant relationship between Sustainable development and sub-hypotheses of GHRM practices (Job analysis and design).$H_{1\text{-}B}$ was supported (t-Statistics = 4.537, p=0.000) because t-statistic is greater than 1.96 and P-Value is less than 0.05. Moreover, when testing Hypothesis $H_{1\text{-}C}$ (i.e., H2), this study found there is no significant asso-

Table 3: Hypothesis Testing

Path	Hypothesis	Direct Effect				
		Confidence Interval 95% 2.5%	97.5%	t	P Value	Hypothesis Supported
ADàSD	$H_{1\text{-}A}$	-1.273	-0.699	4.537	0.000	Supported
TRàSD	$H_{1\text{-}B}$	0.425	1.016	4.111	0.000	Supported
PEàSD	$H_{1\text{-}C}$	-0.098	0.466	1.771	0.077	Not Supported
REàSD	$H_{1\text{-}D}$	0.099	0.454	4.002	0.000	Supported
IRàSD	$H_{1\text{-}F}$	0.474	1.350	4.072	0.000	Supported
SCàSD	$H_{1\text{-}F}$	-0.786	-0.387	4.961	0.000	Supported

Source: Outputs of Smart PLS 4.0

ciation between Sustainable development and Performance evaluation (t-Statistics = 1.771, p = 0.077) because t-statistic is less than 1.96. It indicates that Performance evaluation does not have significant association with Sustainable development. Therefore, hypothesis $H_{1\text{-}C}$ is not supported. There is significant relationship between Sustainable development and sub-hypotheses of GHRM practices (Recruitment) $H_{1\text{-}D}$ was supported (t-Statistics = 4.002, p=0.000) because t-statistic is greater than 1.96 and P-Value is less than 0.05. Furthermore, we observed highly significant relationship between Sustainable development and sub-hypotheses of GHRM practices (Safety and Security) $H_{1\text{-}E}$ was supported (t-Statistics = 4.961, p=0.000) because t-statistic is greater than 1.96 and P-Value is less than 0.05. Moreover, we observed significant relationship between Sustainable development and sub-hypotheses of GHRM practices (Training) $H_{1\text{-}F}$ was supported (t-Statistics = 4.111, p=0.000) because t-statistic is greater than 1.96 and P-Value is less than 0.05.

Coefficient of Determination R2

The Coefficient of Determination or R^2 provides an indication of the predictive accuracy of the model. It is calculated as the squared correlation between a specific endogenous variable's actual and predicted values.(Hair J. J., Hult, Ringle, & Sarstedt, 2014). The outpus of Smart PLS indicated that R^2 of study model equal 0.967, It is obvious that study modelis capable of explaining the variance at independentvariable hence, it has a high predictive accuracy.

EffectSize F^2

In examining the strength and impact of exogenous latent variable on endogenous latent variable, the effect size (f2) can be implemented. Based on the value obtained for effect size, values higher than 0.02, 0.15 and 0.35 would represent small, medium and large effect sizes respectively (Garson 2016). The following table show Effect size F^2 of each dependent variable on independent variable:

Table 4:Effect Size F2

Dependent variable " Independent variable	Sustainable Development
AD"SD	2.183
TR "SD	1.307
PE "SD	0.233
RE "SD	1.082
IR"SD	3.613
SC "SD	3.806

Source: Outputs of Smart PLS 4.0

With this, Incentives and rewards, Job analysis and design, Trains ing, Recruitment has a large effect size on Sustainable Development (f^2=3.613, 2.183, 1.307, 1.082) respectively. The Safety and Securih ty gave the largest effect size with a value of (f^2=3.806). On the other hand, the Performance evaluation has a medium effect size on Sustaina able Development (f^2=0.233).

Goodness of Fit (GOF)

It measures the extent to which the standard and structural model of the study can be relied upon and can be calculated mathematically by combining both according to the following equation:

$$\mathbf{GOF} = \sqrt{R^2 \times AVE} = \sqrt{0.967 \times 0.828} = \mathbf{0.898}$$

By applying the equation, we find that the Goodness of Fit (GOF) of the study model reached 0.75, which is higher than the required minimum, which is 0.404, which is a high value indicating that the model is suitable for the study.

Conclusion

The adoption of green human resource practices inside businesses is still in its infancy. Environmental concerns compel firms to develop environmentally friendly green policies. These behaviors' effects require ongoing monitoring since they take many different forms. Recycling, double-sided printing, and other human resource policies are included in GHRM. The results of this study will aid organizations in reducing environmental pollution to create a safer and cleaner planet. Five of the six hypotheses indicated asignificant

association with sustainable development; however the relationship between Performance evaluation and sustainable developments was negligible (Yong 2020). There was a significant association to sustainable development for each ofJob analysis and design, Training, RecruitmentIncentives and rewards, Safety and Security (Yong 2020)(Saeed 2019)(Malik 2021).

There may be some possible limitations in this study. The study primarily concerns with the impact of green human resources management practices on sustainable development of Ma'aden Company "Waadalshamal," found in Saudi Arabia. The study confronted with challenge of findings generalization due to the small sample size. Additionally, the study relied on employees perceptions, that may be affected by subjectivity and bias thus examining the impact of green human resources management practices on sustainable development in the company accurately is challenging.

Furthermore, due to the time constraint the study has not measured all variables that impact sustainable development, such as the company's environmental impact and financial performance. Therefore, the study's findings should be interpreted with caution and further research may be required explain the relationship between green human resources management practices and sustainable development

Recommendations

The authors recommend further shedding light on Ma'aden's GHRM practices, and complementing perceptions about green environmental practices. The job description, duties and responsibilities must also reflect the company's interests, environmental objectives, social responsibilities and the accelerating global trends in the field of sustainable environment. Training as one of the green human resource practices must take into account the environmental dimension, and be given priority compared to other types of training in Ma'aden. Serious actions and continuous work should also be increased to raise the environmental awareness. Because the main goal is to protect the environment, and to achieve this, plans must be put in place to evaluate performance and link the system of incentives and rewards with environmental standards and green practices through setting up a performance appraisal form and formulating green goals, using the results of opinion polls and taking the results of scientific research on an ongoing basis with the aim of achieving sustainable development at the level of companies in Arab countries to keep pace with global trends and keep pace with international companies in this regard.

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