# The Effect of Green Human Resource Management Practices on Organization Sustainability with the Moderating Influence of Stakeholder Environmental Demand in Healthcare Services in Peshawar

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## Abstract

Businesses are becoming more sensitive to the environment in which they are operating to cope with the diminishing supply of natural resources. Environmentally conscious HR practices involve implementing policies for eco-friendly resource management to achieve sustainability goals. Literature highlights a growing interest in the link between eco-friendly HR practices and business sustainability in emerging and developing nations. Recognizing its importance, current research explores the moderating role of stakeholder environmental demand in promoting green practices for achieving organizational sustainability. This exploration aims to provide valuable insights into the contextual constraints shaping the effectiveness of environmentally conscious HR practices in driving organizational sustainability. The study adopts an explanatory approach, aiming to establish a causal link between GHRM and corporate sustainability while exploring the moderating effect of stakeholder environmental demand in private healthcare organizations. The collected data from 240 employees was analyzed through SEM-PLS. The outcomes reveal that the green HR practices have statistically considerable and beneficial effects on organization sustainability, both directly and when moderated by stakeholder environmental demand. The research leads to the identification of best practices and tailored strategies for implementing GHRM in the healthcare sector, considering the unique environmental and socio-economic factors of the region. Moreover, the moderating role of stakeholder environmental demand underlines the necessity of synchronizing GHRM practices with the specific demands and expectations of stakeholders. The study also offers a framework for managers and policy makers to promote eco-friendly practices, reducing waste and fostering sustainability in their organizations.

*Keywords:* Green human resource management (GHRM), green recruitment and selection (GRS), green training and development (GTD), green performance management (GPM), green compensation (GC), organization sustainability (OS), stakeholder environmental demand (SHD)

# Background

In today's context, the conservation of natural resources through sustainable practices has become an imperative. Organizations are facing an emerging managerial challenge to adopt greening practices, aiming to protect natural resources, minimize their environmental impact, and improve overall sustainable performance.

The growing influence of the global environmental sustainability movement has spurred organizations to adopt "green HR practices". As environmental concerns gain traction on a global scale, organizations are increasingly adopting GHRM practices to tailor their

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The Effect of Green Human Resource Management Practices Zainab, Fayaz, Sonia human capital strategies with sustainable and environmentally friendly approaches. In the pursuit of a more sustainable corporate management approach, organizations are embracing "green human resource management" practices. Carrying out "green human resource management" practices reflects the organization's alignment with ecological sustainability objective and reinforces its commitment to conducting operations in an environmentally responsible manner. To attain the ecological pillar of long-term viability, organizations must adopt an environmentally conscious culture that goes beyond just shaping their strategies. This cultural shift encompasses the beliefs, values, and behaviors of everyone who works within the organization, aligning them with environmentally friendly practices and principles. Green HRM practices are crucial during this reorientation and organizational transition since they have an impact on workers' beliefs and actions towards their intended sustainability objectives (Guerci, M., & Pedrini, M. 2014).

Human capital is regarded as exclusive resources of a company since they are difficult for rivals to imitate and have the potential to give businesses a distinct edge over their competitors. For this reason, it is recommended that the alignment of eco-friendly HR practices with sustainability initiatives can yield beneficial outcomes for organizations (Yong et al, 2020). But among the primary hurdles confronting HR experts in the current scenario, is the proficient amalgamation of sustainable development within HR strategy. Based on (Li, H., Li, Y., Sarfarz, M., & Ozturk, I. 2023), businesses are prioritizing the development of innovative products to promote ecological sustainability. Nevertheless, the idea of eco-friendly HRM has not garnered substantial focus within the realm of research with researchers mainly exploring it theoretically in isolation (Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. 2010), (Massoud, J. A., Daily, B. F., & Bishop, J. W. 2008), (Berrone, P., & Gomez-Mejia, L. R. 2009). Moreover, the practical application of GHRM or empirical evidence supporting its effectiveness is not yet fully convincing (González-Benito, J., & González-Benito, Ó. 2006), (Daily, B. F., Bishop, J. W., & Massoud, J. A.2012).

The widespread recognition of sustainability's significance has driven scholars and practitioners to explore human capital as a valuable asset for fostering environmental practices within organizations, thereby contributing to the betterment of the economy and community as a whole Benevene, P., & Buonomo, I. (2020).Senior executives and human resources professional bear the added duty of integrating green standard and practices, such as the notion of GHRM, within the company's purpose and vision statement considering the current epoch of modernization Amjad et al., (2021). Moreover, human resource methods also play a significant role in positively impacting an organization's economic growth. By aligning green human resource strategies with sustainability principles, companies can effectively balance both quick financial targets synchronized with enduring sustainability aspirations, leading to overall success and growth Wagner, M., (2013).

Scholars have highlighted the paucity of in-depth studies on GHRM in Asian and underdeveloped nations (Shahriari, B., Hassanpoor, A., Navehebrahim, A., & Jafarinia, S. 2019). This The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniaknowledge gap presents a compelling call to action for researchers andpolicymakers to scrutinize closely the application of eco-friendly HRapproaches in these regions.

According to (Ramasamy, A. 2017) the prevalent focus in existing research on eco-friendly HR practices predominantly revolves around western developed environments. There exists an evident gap in exploring the complete capabilities of eco-friendly HR practices in fostering sustainable strategies and behaviors across diverse organizational settings and cultural contexts, warranting further research and investigation to uncover its comprehensive impact Liu, J., Gao, X., Cao, Y., Mushtaq, N., Chen, J., & Wan, L. (2022).

Specifically, the study centers its attention on Pakistan, where GHRM research is limited despite the high demand for green organizations. Thus, there is a pressing need to study GHRM in Pakistan to address the research gap in this domain. Furthermore, there is a specific call for research in the healthcare services sector, therefore this research focuses on evaluating the prolonged effectiveness of the service industry in the ascending economy through the lens of environmentally conscious HR Practices (AlJaberi, O. A., Hussain, M., & Drake, P. R. 2017) & (Faheem, A., Nawaz, Z., Ahmed, M., Haddad, H., & Al-Ramahi, N. M. 2023).

Indeed, GHRM practices serve as crucial building blocks for fostering organizational sustainability (Ramasamy *et al.*, 2017). Given this significance, prior research conducted by (Zhu, J., Tang, W., Wang, H., & Chen, Y. 2021) advocates for further exploration of the moderating role of stakeholder environmental demand. Understanding how stakeholder environmental demand influences the mechanisms of Green HR practices in diverse contexts can offer meaningful understanding into the boundary conditions of environmentally conscious HR practices that impact organizational sustainability.

According to (Haleem, F., Farooq, S., Cheng, Y., & Waehrens, B. V. 2022) the literature on managing sustainably has a tendency to group together the environmental concerns that an organization encounters into one specific problem, such as waste, polluting substances, forest degradation, or global warming. Such kind of approach overlooks the multifaceted nature of sustainability and prevents a comprehensive understanding regarding how the issue links to organizational goals and the stakeholders with whom an organization needs to collaborate in order to accomplish those goals.

The study will emphasize the moderating impact of stakeholder environmental demand on the association between GHRM and organizational sustainability. It would be beneficial for managers to consider stakeholder expectations and respond to their pressure on environmental concerns when making decisions about the adoption and investments of green HRM. The research will help in comprehending eco-friendly HRM practices and its relevance to organizational sustainability, especially considering the situation of emerging economies.

#### Objectives of the Study

Employees' dedication and engagement in sustainable practices is encouraged by GHRM, which may boost their sense of belonging and esteem, inspiring workers to contribute more. The Effect of Green Human Resource Management PracticesZainab, Fayaz, SoniaRecognizing GHRM as a critical component in the execution of a<br/>successful organizational sustainability strategy therefore, the research<br/>objectives are:

- To examine how environmentally friendly HR practices affect the sustainability of organization.
- To investigate and establish the moderating influence of stakeholders' environmental demand on the association with environmentally friendly HR practices and sustainability of organization.

# **Literature Review**

GHRM is used mainly for expressing the concerns of employees and managers in establishing ways and techniques for increased corporate environmental strategy (Shafaei, et al., 2020).

The fundamental principle that guides GHRM is to not only transform the organization's operations but also its workforce into environmentally conscious and responsible individuals. This refers to all the ways that laws, rules, and procedures are made to encourage employees to act in a way that is more environmentally friendly that is beneficial for the preservation of natural resources, and in line with society expectations (Uddin, M. M., & Islam, R. 2015).

While many workers may believe that it isn't their obligation to improve the environment while they are on duty, the new millennial workforce tends to be more environmentally conscious and automatically gravitates towards environmentally responsible superiors (Nagarajan, S. 2020).

Human resource management plays critical roles in advancing organizational rules and procedures that are fundamental to an organization's sustainability via recruiting, hiring, coaching, growth, evaluation of performance, incentives, compensation planning, and employees termination policies, and also by means of the transmission of values and organizational culture (Renwick, et al. 2013). To establish a sustainable culture inside organizations, green initiatives will be implemented into all human resource operations e.g recruiting, development programs, and remuneration (Chang, T. W., & Hung, C. Z. 2021).

According to (Yong, et al 2020) provides important insights about the favorable effect of eco-conscious HR strategies in company's sustainability, and reached the finding that eco-friendly human resource practices can aid organizations in harmonizing their corporate strategies with ecological concerns.

According to (Sharma, R., & Gupta, N. 2015), Green HR practices involve the application of efficient resource utilization promotion through HRM strategies within the organization. This, in turn, contributes to environmental sustainability and fosters employee awareness of environmental protection.

As concluded by (Mishra, R. K., Sarkar, S., & Kiranmai, J. 2014) GHRM encourages sustainable behaviors by enhancing staff dedication and understanding of sustainable development challenges. This claim was backed up by (Bombiak, E., and Marciniuk-Kluska's 2018) providing evidence that organizations are far more inclined towards implementing eco HR practices when they understand its significance for achieving firm sustainability. In addition, (Sudin,

The Effect of Green Human Resource Management PracticesZainab, Fayaz, SoniaSaad, & Kamaluddin 2018) discovered that proactive environmental<br/>management is demonstrated through several HRM practices, which<br/>are evident in the firms' various processes and programs aimed at<br/>employee well-being.

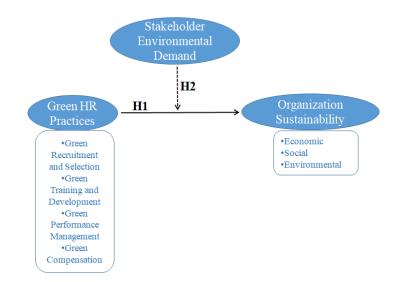
Operations carried out by businesses have social, economic, and environmental influence on people. As a result, corporate stakeholders today want greater understanding of how economic, social, and environmental aspects are taken into account when making company goals and choices. They also demand compliance with reporting requirements for day-to-day operations (Amran, A., & Ooi, S. K. 2014). Stakeholders make demands on corporations to conserve and maintain the environment. In theory, stakeholders have demonstrated the ability to demand business policy in order to fulfill their social duties (Wood, D. J. 1991); (Hoogendoorn, S., Oosterbeek, H., & Van Praag, M. 2013). Stakeholder groups have a substantial impact upon a company's strategy and environmental policies.

To increase the efficacy of corporate sustainability strategies and address the sustainability demands of stakeholders, it is necessary to evaluate challenges and possibilities to corporate sustainability plans as well as solutions to limit corporate risks and obstacles, (Wijethilake, C. 2017).

Concerns over how businesses handle stakeholder pressure have emerged as a key issue when adopting environmental initiatives (Hofer, C., Cantor, D. E., & Dai, J. 2012), (Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. 2010).

Enterprises' response to stakeholder demands facilitates the mobilization and sharing of resources, information, and technical expertise among stakeholders (Leonidou, E., Christofi, M., Vrontis, D., & Thrassou, A. 2020). Fostering the development of specialized eco-friendly and societal competencies, simultaneously assisting businesses in forming strategic collaborations with stakeholders and by doing so, businesses may enhance their sustainable performance and lower the cost of tackling challenges related to sustainable development (Silva, L. M. D., Bitencourt, C. C., Faccin, K., & Iakovleva, T. 2019).

Theoretical Framework



Study Hypotheses

- H1: Green HR practice has a positive effect on organization sustainability.
- H2: Stakeholders environmental demand moderates the association between green HR practices and organization sustainability.

# Methodology

This study intends to investigate the influence of eco-friendly HR practices in private healthcare institutions situated within the Peshawar region. The current research can be classified as explanatory in nature as it aims to explore and establish a causal association between eco-friendly HRM approaches and corporate sustainability in healthcare organizations. Additionally, the investigation also delves into the potential moderating effect of stakeholder environmental demand on this association.

Quantitative research methods concentrate on gathering and analyzing numerical data to derive meaningful outcomes. This strategy encompasses the application of statistical methods and techniques to process the information obtained from a sample of the targeted population (Saunders, et al 2016). By employing the quantitative technique, the study aims to measure and quantify specific variables related to the research topic.

The study focuses on the private healthcare sector in Peshawar as its target population. To identify the participants, a comprehensive list of registered hospitals was obtained from the Health Regulatory Authority KP. From this data, a total of sixty private sector hospitals in Peshawar were identified and selected for the study. Given the relatively small target population and the possibility of a low response rate from the respondents, (Sekaran & Bougie, 2016), the researchers chose the Census method to capture the entire population, as it is renowned for delivering precise, convincing, and reliable data within the realm of workforce management (Shamout, M., Elayan, M., Rawashdeh, A., Kurdi, B., & Alshurideh, M.2022).

Data for this investigation was gathered via a structured questionnaire, that participants filled independently.

Each item was designed to measure specific aspects of sustainability and GHRM practices, allowing for a holistic assessment of the organization's ecological effectiveness and its approach to integrating green initiatives into HR processes.

To assess the sustainability of the organization, a 20-item scale was adapted from (Balasubramanian, N., & Balaji, M. 2022). This scale was carefully chosen to capture different facets of sustainability, encompassing ecological, societal, and financial dimensions, and was considered appropriate for the objectives of this study. Therefore 15 items were selected from the mentioned questionnaire.

To assess ecological HR aspects, which encompass environmentally conscious recruitment and selection; sustainable performance management, eco-friendly compensation, and environmentally responsible training and development, 36 items were The Effect of Green Human Resource Management Practices Zainab, Fayaz, Sonia adapted from the research conducted by (Saeed et al. 2019). In which seventeen items were considered to be most relevant to the current study. These items were specifically tailored to assess the organization's efforts in implementing environmentally friendly HR methods that correspond to the sustainability principles.

The survey tool used in this research to assess stakeholder environmental demands was adapted from the Union for the Mediterranean (UfM) website. Originally designed for the Mediterranean region, the questionnaire was modified to align with the specific perspective and focus of our study.

Participants employed a 5-point Likert-type scale to score each question, with options extending from 1 to 5, with 1 representing "strongly disagree," and 5 representing "strongly agree". The research utilized Smart PLS version 3 Software to conduct variance-based structural equation modeling for the inferential statistical analysis.

# Analysis

Prior to conducting an in-depth analysis of the study variables, the researchers applied a data cleaning approach to refine the data. Data cleanliness is crucial in SEM analysis to prevent issues with existing methodologies (Schumacker & Lomax, 2004). Researchers conducted descriptive stats, checked variable correlations, assessed data distribution and linearity, and identified outliers. These analyses ensured data quality and reliability for subsequent interpretation. Demographic Profiles

Table 1 shows a substantial portion (58%) of participants aged 31-40, followed by 30% aged 41-50. The young adult group (21-30) comprises 8%, and the elderly (50+) accounts for 2% of participants. 55.5% respondents had a graduate degree, 34% held an undergraduate degree, and 10% had MS/ M.Phil. qualifications, and high qualifications are relatively low in number. In terms of experience, most of the respondents (80%) have experience of 1-10 years, while the next greatest category of respondents (16%) has the experience of 11-20 years.

# Table1

#### Participants Profile

Demographic Variables	Category	Frequency	Percentage
Gender	Male	183	76
	Female	45	11
Age (Years)	21-30	19	8
	31-40	141	58
	41-50	74	30
	51-60	6	2
Education	Bachelor	80	34
	Master	131	55.5
	MPhil/MS	24	10
	PhD	4	2
Experience (Years)	1-10	194	80
	11-20	42	16
	21-30	4	2

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Table 2
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Descriptive	Statu	stics					
Constructs	Ν	Range	Min	Max	Mean	SD	Var
GRS	240	3.00	2.00	5.00	3.6608	.57900	.335
GTD	240	2.81	1.99	4.80	3.6772	.51875	.269
GPM	240	2.90	1.90	4.80	3.6834	.50487	.255
GC	240	3.10	1.90	5.00	3.7091	.52399	.275
OS	240	3.50	1.50	5.00	3.8061	.55866	.312
SHD	240	3.20	1.80	5.00	3.6900	.55826	.312

Table 2 exhibits that the mean of all variables ranges from 2.81 to 3.50, which is all more than the average values. All variables' standard deviation measurements are within an acceptable threshold, ranging from 0.504 to 0. 579. Thus, it can be seen that the respondents' responses in this study's clearly correspond to an adequate degree of implementation of all variables in this regard.

## Evaluation of Correlation

As depicted in table 3, there exists a meaningful correlation between the Predictor variables, namely green recruitment and selection (GRS), green training and development (GTD), green performance management (GPM), and green compensation (GC), and the dependent variable, organization sustainability, with correlation coefficients of r = 0.270, r = 0.243, r = 0.196, and r = 0.254, respectively. This suggests that the independent and dependent variables are positively associated. Additionally, the moderating variable stakeholder environmental demand (SHD) has a r = 0.195correlation with the dependent variable organization sustainability (OS).

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<b>Bivariate Con</b>	rrelations				
Constructs	GRS	GTD	GPM	GC	SHD
SHD	.033	.015	.057	.039	
OS					
	.279**	.243**	.196**	.254**	.195**

# Measurement Model

Utilizing Smart PLS Software, the measurement model, commonly referred to as the outer model, was analyzed to evaluate the appropriateness of the items' loadings on their specific constructs. The outer model is evaluated so as to validate that the indicators accurately measure the relevant constructs, and consequently reliability should be established.

This examination encompassed an assessment of indicators' loadings, as well as an evaluation of Cronbach's Alpha, Composite Reliability, Convergent Validity, and Discriminant Validity. Regarding the lower-order constructs expressed reflectively, the analysis delved into the measurement model validity and reliability. The results for the lower order constructs of the measurement model are presented in figure 2.

Individual item dependability was tested by assessing the loadings of indicators with respect to associated constructs using the PLS Algorithm, and T statistics and p values were obtained using Bootstrapping. As stated by Hair et al., (2017) and Ringle et al., (2020), at least 50% of the variation of each item should be described by the latent construct. As shown in table 4, all of the item loadings on their respective constructs are substantially over the threshold value of 0.70 and statistically significant.

# Table 4

Loadings on Constructs Indicators with their corresponding t-Statistics and p-Values

Constructs	Indicators	Loadings	SD	T Stats	P Values
	C1	0.756	0.039	18.417	0.000
GC	C2	0.669	0.046	15.968	0.000
	C3	0.741	0.040	18.538	0.000
	C4	0.755	0.042	17.642	0.000
	OS1	0.721	0.025	28.901	0.000
	OS2	0.713	0.023	30.581	0.000
	OS3	0.715	0.026	27.268	0.000
	OS4	0.733	0.020	36.699	0.000
	OS5	0.753	0.021	36.069	0.000
	OS6	0.718	0.024	29.494	0.000
OS	OS7	0.765	0.022	35.278	0.000
	OS8	0.738	0.021	35.295	0.000
	OS9	0.771	0.020	38.473	0.000
	OS10	0.759	0.025	30.600	0.000
	OS11	0.741	0.025	29.061	0.000
	OS12	0.764	0.025	30.650	0.000
	OS13	0.717	0.022	31.912	0.000
	OS14	0.728	0.025	29.126	0.000
	TD1	0.732	0.041	17.650	0.000
	TD2	0.746	0.038	19.117	0.000
GTD	TD3	0.739	0.037	20.214	0.000
	TD4	0.735	0.034	22.179	0.000
	TD5	0.727	0.033	22.047	0.000
	RS1	0.733	0.034	21.944	0.000
GRS	RS2	0.770	0.038	19.943	0.000
	RS3	0.792	0.037	20.683	0.000
	RS4	0.756	0.034	22.422	0.000
	PM1	0.766	0.049	15.320	0.000
	PM2	0.730	0.044	16.268	0.000
GPM	PM3	0.737	0.043	17.466	0.000
	PM4	0.766	0.043	17.248	0.000
	PM5	0.749	0.040	19.031	0.000

The Effect of Green	Zainab, Fayaz, Sonia				
	SHD1	0.734	0.037	19.789	0.000
	SHD2	0.725	0.041	17.497	0.000
SHD	SHD3	0.721	0.039	18.864	0.000
	SHD4	0.732	0.038	20.182	0.000
	SHD5	0.758	0.037	20.075	0.000
	SHD6	0.740	0.041	17.928	0.000

# The Reliability Analysis

Table 5 explains the outcome of the constructs reliability estimation using Composite Reliability (CR) and Cronbach's Alpha (CA). The CR values, ranging from 0.823 to 0.944, indicate that the constructs have good internal consistency, suggesting that the measurement items are reliable in measuring their respective constructs. All of the constructs' CA values fall within a range that is acceptable.

# Table 5

Constructs Reliability Analysis (Cronbach's Alpha and Composite Reliability)

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Constructs	Cronbach's Alpha	Composite Reliability
GRS	0.761	0.847
GTD	0.788	0.855
GPM	0.806	0.865
GC	0.714	0.823
OS	0.936	0.944
SHD	0.832	0.876

# Convergent Validity

The estimation of convergent validity frequently entails employing the Average Variance Extracted (AVE) method. It calculates the mean proportion of variability covered by the indicators that are related to the construct. The constructs' AVE values vary between 0.537 and 0.581 as shown in table 6.

## Table 6

Convergent Validity Average Variance Extracted (AVE)

	8 2 8	
	Constructs	Average Variance Extracted (AVE)
	GRS	0.581
	GTD	0.541
	GPM	0.561
	GC	0.537
	OS	0.546
_	SHD	0.541

# Discriminant Validity (Fornell and Larcker Criterion)

The Fornell-Larcker test is specifically designed to assess multi-item constructs and may not be suitable for single-item constructs. The AVE square root values in table 7 for each construct is beyond the minimum acceptable range of 0.72 and are in a secure The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniaposition.Consequently, in accordance with this criterion, thediscriminant validity has been created for additional investigation.

Table 7							
Discriminant Validity (Fornell and Larcker Criterion)							
Constructs	GC	GPM	GRS	GTD	OS	SHD	
GC	0.733						
GPM	-0.019	0.749					
GRS	0.057	0.096	0.762				
GTD	0.080	-0.059	0.097	0.735			
OS	0.255	0.195	0.286	0.246	0.739		
SHD	0.041	-0.051	0.041	0.013	0.203	0.735	

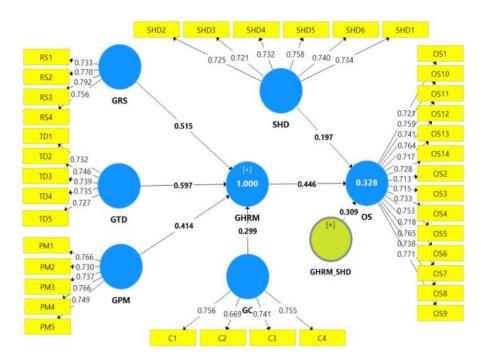


Figure 2: Measurement Model PLS

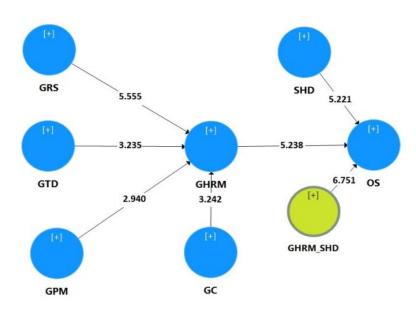


Figure 3: Structural Model (Bootstrapping)

#### Assessment of Structural Model

In this study, the hypothesized relationships between the variables were examined using the structural model. Various measures were employed to evaluate the effectiveness of green HRM practices on organization sustainability. These measures included the strength of the connections between variables (path coefficient or  $\beta$  value), the extent to which variables explain variations in one another (coefficient of determination or R2), the range within which true population values are likely to fall (bias-corrected Confidence Interval or CI), the magnitude of the impact of certain variables on others (effect size or f2), the predictive relevance of the model (Stone-Geisser's predictive relevance or Q<sup>2</sup>).

# Path Coefficients ( $\beta$ values) **Table 8:**

				001111001	ce Intervals Corrected
Paths	Paths Coefficients	T Stats	P Values	2.5%	97.5%
GHRM -> OS	0.446	5.238	0.000	0.298	0.529
GHRM_SHD -> OS	0.309	6.751	0.000	0.414	0.319
SHD -> OS	0.197	5.221	0.000	0.118	0.257
GRS -> GHRM	0.515	5.555	0.000	0.404	0.609
GTD -> GHRM	0.597	3.235	0.001	0.201	0.847
GPM -> GHRM	0.414	2.940	0.011	0.010	0.806
GC -> GHRM	0.299	3.242	0.001	0.073	0.430

Values of Path Coefficients

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The study employed the bootstrapping method with 5,000 subsamples and two-tailed analysis to assess the path coefficient of eco-friendly HR practices on organizational sustainability. The results revealed a strong and favorable path coefficient ( $\beta$ =0.446, t=5.238, p=0.000) between the adoption of green HRM strategies and organization sustainability, indicating a robust involvement of sustainable business performance and the eco-friendly HR approaches implementation.

The results from table 8 further reveal positive associations between eco-friendly HRM and various aspects of sustainable HR approaches. Specifically, eco-friendly HRM is positively linked with green recruitment and selection ( $\beta$ =0.515, t=5.555, p=0.000), sustainable training and development ( $\beta$ =0.597, t=3.235, p=0.000), environmentally conscious performance management ( $\beta$ =0.414, t=2.940, p= 0.011), and green compensation ( $\beta$ =0.299, t=3.242, p=0.001).

Moreover, the study findings demonstrate a strong correlation between stakeholder environmental demand and organization sustainability ( $\beta$ =0.197, t=5.221, p=0.000). This indicates that stakeholder environmental demand favorably contributes in influencing organizational sustainability.

The findings from Table 8 indicate that stakeholder environmental demand is of utmost importance in positively influencing the link between eco-friendly HR practices and organization sustainability ( $\beta$ =0.309, t=6.751, p=0.000). This means that when organizations adopt eco-friendly HRM practices and aligns them with stakeholder environmental expectations; it can lead to better sustainability outcomes.

Additionally, the bias-corrected Confidence Interval (CI) results further support the strong linkage between sustainable business practices and environmentally conscious HRM.

# *Model's Coefficient of Determination (R2)*

The R-squared value associated with the dependent variable within the model assesses how well the model's predictions match the actual values of the dependent variable.

	R <sup>2</sup> Asses	ssment						
	R Square			R Squared Adjusted				
Constructs	R2	SD	T Stats	P Values	R2	SD	T Stats	P Values
OS	0.328	0.085	5.238	0.000	0.324	0.059	5.194	0.000
GHRM	1.000	0.000	3972.922	0.000	1.000	0.000	3939.741	0.000

Table	9
$D^2 A$	

The results in the table 9 indicated that the model's predictive power was strong, with an adequate coefficient of determination (R2=0.328) for organization sustainability. This means that ecofriendly HR practices and the moderating impact of stakeholder environmental demand (SHD) accounted for 32.8% of the variation in the sustainability of the organization. The model successfully The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniaexplained a significant portion of the relationship between thesevariables, making it a reliable predictor of organizationalsustainability.

# *The Effect Size* $F^2$

Within the framework of Structural Equation Modeling (SEM), an essential test to consider is the effect size (f2). It measures how the predicted variable is impacted when a predictor variable is removed from the model. As per Cohen et al., (1988), effect size values for an independent latent variable of up to 0.02 indicate a small level of importance, values up to 0.15 reflect a moderate influence, and values up to 0.35 suggest a substantial effect.

## Table10

Table 11

Paths	F Square	SD	T Stats	P Values
GHRM -> OS	0.296	0.085	5.238	0.000
GHRM_SHD -> OS	0.132	0.046	6.751	0.000
SHD -> OS	0.058	0.038	5.221	0.000

Organization sustainability is significantly impacted by GHRM with value of ( $f^2=0.296$ ), and a sizable impact of environmentally conscious HR practices was found ( $f^2=0.132$ ), with the moderating effect of stakeholder environmental demand.

# Predictive Relevance (Q2) of the Model

(Hair, et al., 2010) recommend that researchers evaluate the quality of the PLS-SEM model by relying on methodologies that assess its predictive accuracy.

Predictive Relevance (Q2)					
Constructs	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)		
GHRM	8160.000	6871.954	0.158		
OS	6720.000	5632.617	0.162		

Table 11 illustrates that the Q2 values of GHRM (0.158), OS (0.162) are more than zero, indicates the model predictive relevance of dependent variable.



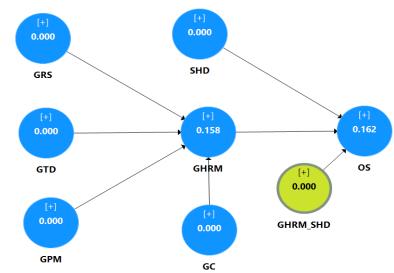


Figure 4: Structural Model Blindfold

## Moderation Analysis

Stakeholder Environmental Demand (SHD) moderates the association within Organization Sustainability (OS) and Green Human Resource Management (GHRM).

Based on the results obtained from the bootstrapping method table 8, indicate a marked contribution from stakeholder environmental demand as a moderating variable on the association between eco-friendly HR practices and organization sustainability. The analysis reveals that stakeholder environmental demand has a substantial and statistically substantial impact on the link between eco-friendly HR practices and organization sustainability ( $\beta$ =0.309, t=6.751, p=0.000).

The total size effect  $f^2$  table 10 indicates that the association linking environmentally responsible HR with organization sustainability is considerably moderated at a medium level by stakeholder environmental demand (SHD)  $f^2=0.132$ .

#### Hypotheses Testing

*Hypothesis 1: Green Human Resource Management (GHRM) Association with Organization Sustainability (OS)* 

The path coefficient table 8 obtained through the bootstrapping procedure (5,000 subsamples, two-tailed) for the entire dataset indicated a significant positive effect of environmentally conscious HR practices on organization sustainable performance ( $\beta$ =0.446, t=5.238, p=0.000). The bias-corrected Confidence Interval (CI) values further supported a strong positive link between eco-friendly HR practices and organization sustainability. Organization sustainability (OS) was found to have a predictive strength factor (R2) of 0.328, which means that the independent variable environmentally friendly HR practices and the moderating influence of stakeholder environmental demand (SHD) together explained 32.8% of the variance in the outcome variable, organization sustainability (OS), as shown in figure 2 and table 9. The effect size (f2) findings presented

The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniain table 10 emphasize the meaningful contribution of green HRPractices on company sustainability.

The Stone-Geisser Q2 value, presented in table 11, demonstrated that the structural model had positive predictability for endogenous construct. Consequently, a significant positive association was observed within green HR practices and organization sustainability, resulting in the acceptance of hypotheses 1.

*Hypothesis 2: Green Human Resource Management (GHRM) and Organization Sustainability (OS) relationship, moderated by Stakeholder Environmental Demand (SHD).* 

Stakeholder environmental demand (SHD) has a moderating influence on the association with green human resource management (GHRM) and organizational sustainability (OS), according to the path coefficient analysis in table 8 ( $\beta$ =0.309, t=6.751, p=0.000). The Confidence Interval (CI) values provide additional evidence for a substantial beneficial association among stakeholder environmental demand, long term sustainable organization performance and eco-friendly HR practices.

Moreover, the effect size analysis in table 10 shows that stakeholder environmental demand (SHD) has a substantial effectiveness upon the association between green HR practices and organization sustainability. This indicates that stakeholder environmental demand (SHD) considerably contributes to strengthening the association between GHRM and OS. These findings support hypothesis 2.

# **Discussion and Conclusion**

The outcome revealed that GHRM had a highly noteworthy and favorable influence on enhancing sustainability of organization. Moreover, the investigation identified that the enhancement of performance through GHRM practices acted as a predictor for the overall improvement of organizational sustainability, particularly in the healthcare field. These outcomes indicate the vital role of GHRM practices in positively impacting the sustainability outcomes of organizations in the healthcare sector.

The study's findings align with previous research carried out by (Mousa et al. 2020), (Qureshi et al. 2020), and (Pellegrini et al. 2018). The results of this current study also bear the notion that GHRM can be considered a valuable asset, akin to other types of resources, as highlighted in the mentioned studies. This further emphasizes the favorable influence of eco-friendly HR practices on sustainability of organization in health services organizations. This convergence of findings across multiple research works strengthens the verification for the strategic significance of GHRM practices in contributing to organizational sustainability and underscores its implication as a valuable resource in enhancing overall performance and sustainability outcomes. This reinforces the relevance of environmentally conscious HR practices in boosting organizational sustainability in the healthcare field.

The study by (Jamal, et al., 2021) also supports the notion that environmentally conscious HR practices are vital factors for the goal of corporate sustainability. Moreover, the research findings presented The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniaby Zahrani, et al., (2022) Yasin, R., Huseynova, A., & Atif, M. (2023),Dwivedi, P., Chaturvedi, V., & Vashist, J. K. (2023), Wagner, et al.,(2013) align with the present study outcomes, demonstrating abeneficial association between eco-friendly HR Practices and thefinancial, societal, and ecological aspects of organizationalsustainability.

The results indicated that Stakeholder environmental demand positively influenced the association among eco-friendly (hiring, developing skills, and appraising performance) on corporate sustainability performance in the healthcare services organizations. several studies highlight instances where stakeholder environmental demand had a direct effect on the variables under investigation, confirming its independent impact on the association between the variables, (Jakhar, et al., 2017) provided a more comprehensive and detailed understanding of the reasons behind the diverse and varied organizational responses to stakeholder demand for the adoption of sustainable practices. (Góes, H. A. D. A., Fatima, G., Santos Jhunior, R. D. O., & Boaventura, J. M. G. 2023) conducted a research on gaining environmental sustainability while managing stakeholders, their findings revealed that businesses might improve stakeholder relationships by using open communication and aggressive environmental measures.

## Theoretical Implications

Grounded in stakeholder theory, this research delves into corporate sustainability within the healthcare sector, specifically focusing on Green Human Resource Management (GHRM). By aligning with stakeholders' demands, it seeks to identify tailored strategies and best practices, considering environmental and socioeconomic factors. This approach prioritizes meeting multifaceted expectations, fostering long-term success, and promoting responsible business practices.

Furthermore, research adds to the theory of Resource-Based View (RBV) by emphasizing the importance of human capital, particularly eco-friendly HR practices, as distinctive and valuable assets competent in applying a positive influence on organizational sustainability. It showcases how the effective management of green HR practices aligns with sustainable practices, leading to superior organizational effectiveness.

# Practical and Managerial Implications

The study has successfully developed a comprehensive framework to assist healthcare sector managers in promoting ecofriendly practices that aim to reduce waste production and foster a culture of sustainability within their organizations. Furthermore, the framework highlights the linkages between environmentally conscious strategic policies and HR practices, ultimately bolstering the performance of organizational sustainability. By aligning HR practices, such as eco-friendly hiring, skill-building, and performance evaluation, with the organization's sustainability objective, healthcare organizations can create a holistic approach to sustainability that permeates every level of the organization.

Policy makers should encourage and support the adoption of eco-friendly HR practices and initiatives in organizations. Besides,

The Effect of Green Human Resource Management PracticesZainab, Fayaz, Soniabusinesses should ensure compliance with environmental regulationsand standards set by the government and other regulatory authorities.This will bolster the organization's status and credibility amongstakeholders.

# Constraints and Future Research

Like any empirical study, this analysis has limitations. Data gathering utilized self-administered questionnaires, assuming honest responses, but lacked explicit handling of social desirability bias. Absence of mechanisms to verify conditions may lead to response bias. The non-experimental design and cross-sectional nature limit establishing definitive causal relationships. To enhance validity, future research should employ longitudinal data collection methods. Private sector sample restricts generalizability. Including public sector allows valuable comparison, offering insights into eco-friendly HR practices' variation and effectiveness, enhancing research applicability.

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