

The Nexus of Green HRM and Organizational Performance with a Moderation of Sustainable Leadership: From the Perspective of HR Managers

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Abstract

The study intends to examine the effect of green HRM on organization performance with moderating role sustainable leadership. The population of the study consists of HR managers working in the Small and Medium Enterprises (SMEs) of Khyber Pakhtunkhwa (KP) Pakistan. The sample was calculated using the G-Power sample size formula for unknown population. The Self-administered questionnaires were used for collection of data from HR managers working in SMEs. For the analysis, SPSS Hayes Process was applied for the direct and indirect paths. The findings showed that green T&D, green employee relations, green recruitment and selection, green performance management, and sustainable leadership have a positive impact on organizational performance. The moderating results showed that sustainable leadership moderates the relationship in green training and development, green performance management, green recruitment and selection, green employee relations, and organizational performance. The results further reported that sustainable leadership moderates the above relationships except for the moderating role of sustainable leadership in the association between green compensation and organizational performance. The study has theoretical, methodological, and applied implications for a variety of stakeholders such as regulatory bodies, top management of the SMEs, industry experts and academia to implement green practices specifically in developing countries.

Key words: Sustainable Leadership, Green HRM, Organization performance, Moderation, SMEs

Introduction

In the last couple of decades, the world has been facing many challenges like environmental degradation, global warming, as well as deficiency of resources; therefore, the demand for environmental, social, and governance (ESG) philosophy has increased significantly among stakeholders (Espahbodi et al., 2019). Like other developing countries, Pakistan has been vulnerable to the adverse effects environmental issues specially air pollution. Moreover, Pakistan is ranked as fifth most vulnerable country in the world due to global environmental challenges

over the former two decades (Butt et al., 2021). To handle and diminish the hostile effects of climate change, the government should take green initiatives renovating the energy sector for less polluting and carbon-neutral options. Pakistan has always been welcoming towards sustainability practices and in this regard, it is among the leading countries to embrace and acknowledge the Sustainable Development Goals (SDGs) by United Nations in their development agenda in 2016 (State Bank of Pakistan, 2022).

Green practices have become very important because of the pressure of global warming, therefore, most of the organizations worldwide are trying to reduce carbon emissions and behave ethically and responsibly (Ahmad et al., 2022). In this regard, most of the organizations in Pakistan have started green practices in overall management such as finance, marketing, HR and production (Ur Rehman et al., 2020). The present research is intended to assess that how green HRM effects the organization performance with moderation of sustainable leadership. Green HRM discusses the combination of sustainability principles and practices integrated in the process and strategies of managing human resource within the organization (Li et al., 2023). The main philosophy of green HRM is to enhance the organization's environmental performance which ultimately influences the financial performance positively (Naqvi et al., 2022). Recently, green HRM has an important part in the environmental personnel management systems. Green HRM has been grounded upon environmentally friendly perspectives and its basic objective is to endorse a green culture in the organization to inspire employees, who can perform their activities in a way which influences the environment positively. Furthermore, the focus of green management is to educate the workforce regarding the achievement of environmental goals that may enable the organization to create of a competitive environment based on environmental reflections (Mittal & Kaur, 2023).

Similarly, leadership is the process of influencing subordinates positively and motivating them to work for the betterment of the organization. Leadership is effective if the participation of the subordinates is ensured by the leader (Lo et al., 2015), hence the participative leadership style is mostly applicable in most organizations. Sustainable leadership (SL) has been considered as a moderating variable in the nexus of green HRM and financial performance. After the development of SDGs, importance of sustainable leadership has increased. Sustainable leadership is an approach emphasizing on the long-term oriented approach related to the sustainability of environmental, social, and economic. Sustainable leadership is an emerging philosophy which explains that a leader is not supposed to focus only on short-term objectives such as maximization of revenues and profits, but to make such policies which have a broader influence environmentally, socially and ethically (Naqvi et al., 2022). This leadership style merges long-term objectives with environmentally friendly activities and working for low carbon emissions. This is a novel work and may have a useful contribution to the existing literature, as there is limited evidence available of the same study before.

Green HRM is the most significant dimension of the current research and it is described in various studies that green HRM has a direct association with the behavior of the workforce specifically after Covid-19 (Li et al., 2023). In traditional times individuals and organizations had a reactive approach to addressing different issues, but in modern times, there is a need to follow the proactive approach to minimize the impact of environmental adverse effects, hence, green

HRM is one of the determining factors environmental sustainability within the organization (O'Donohue & Torugsa, 2016). It is usually assumed that green HRM helps firms promote their environmental performance, but there has not been sufficient empirical work done so far in this area (Ren et al., 2020). Due to diverse environmental and climate change challenges, there has been a need to address and respond to these challenges through sustainable practices including green human resource management initiatives (Mittal & Kaur, 2023). Furthermore, the studies identified that the role of sustainable leadership is important for achieving green HRM and organizational performance (Jan et al., 2023). Likewise, the studies identified that the leadership commitment towards green practices also enhances organizational performance (Cahyadi & Szab, 2022; Javed et al., 2019). However, keeping in view the above gap there was a paucity of research to investigate the above relationships. Therefore, it is imperative to assess the role of green HRM in the enhancement of environmental performance. In the present study, green HRM has been determined through green recruitment and selection (GRS), green commitment (GC), green employee relations (GER), green training and development (GTD), and green performance management (GPM). Furthermore, to fill the exhibited gaps the study investigates the moderating role of sustainable leadership in the relationships of green HRM practices and organizational performance. Given the above problem statement and gap, the study answers the following research objectives.

1. To assess the influence of green HRM on organizational performance, and
2. To examine the moderating role of sustainable leadership in the nexus of green HRM and organizational performance.

To fulfill the aforementioned research objectives, the study encompasses various theoretical, methodological, and practical implications for the variety of stakeholders such as regulatory bodies, top management of the SMEs, industry experts, and academia to implement green practices specifically in developing countries.

Theory and Hypotheses Development

Stakeholder theory

The stakeholder theory asserts that business organizations are not only responsible to maximize the shareholder value, they are accountable to all the stakeholders who has a stake in the organization in different capacities such as owners, employees, customer, regulators and society at large (Naqvi et al., 2022). This theory is unlike shareholder theory which focuses only on the interest and value maximization of shareholders. The stakeholder theory suggests that the business organizations have to fulfill the expectations of all the stakeholders as per the adherence of laws and norms. Stakeholder theory is based on the belief that the organizations may work for the betterment of the people or institutions engaged with them and are influenced by the decisions made by the organization (i.e., customers, suppliers, employees, communities). The aim is to create value for them which results in a sustainable environment addressing the transparency of internal and external affairs (Kivits & Sawang, 2019). The stakeholder theory has an association with the current study as firstly, the sustainable leadership role has been examined and secondly, the green HRM and its influence has been investigated on organization performance.

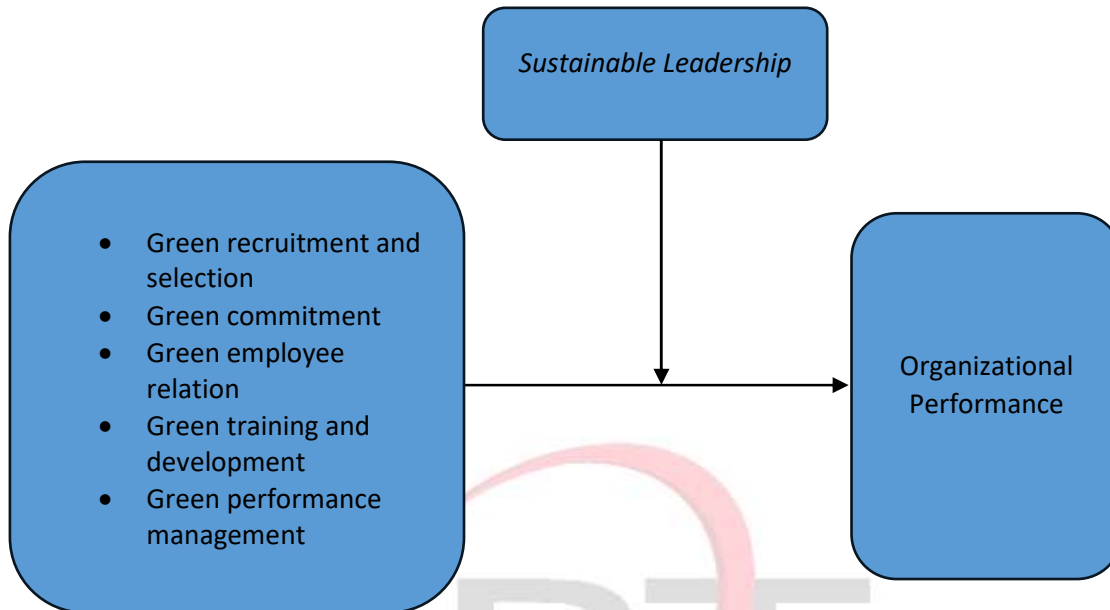
Hypotheses development

The organizations worldwide have been facing various issues including hotel industry, therefore, it is the need of the time to address and respond to those challenges by employing sustainable approaches such as green HRM practices. Thus, it is proved that green HRM influence environmental performance of hotel industry with mediation of environmental awareness (Mittal & Kaur, 2023). To encourage the green initiatives within the organization, the leader play a significant role and in this regard, a positive moderating role was found in the association of green HRM and green commitment (Ren et al., 2020). The green HRM practices enhances the organization efficiency (Mahmood et al., 2023). Green HRM is an evolving area looking forward to advance organizational performance by reassessing green practices regarding HR to make them more efficient and greener which may have positive influence on the environmental efficiency along with reduction of cost. The involvement of organization employees in sustainable strategies may be the ultimate goal green initiatives, hence, it a positively effects the green behavior of the employees within the organization (Li et al., 2023). There are numerous important constituents of green HRM such as GTD, GC and GRS, which might influence the organization positively to build its image in the eyes of stakeholders (Guerci & Carollo, 2016). According to Rawashdeh (2018), green HRM has a direct and substantial effect on the organization performance. As discussed earlier that sustainable leadership moderates the relationship between green HRM and organizational performance (Cahyadi & Szab, 2022; Javed et al., 2019).

Based on the above discussion, these hypotheses have been developed.

- H1 GRS have a positive impact on organizational performance.
 - H2 Higher level of GC enhances organization's performance.
 - H3 GER has a positively affects company performance.
 - H4 GTD has a positive impact on organizational performance.
 - H5 GPM has a positive impact on company performance.
 - H6 Sustainable leadership (SL) moderates the nexus of GRS and organizational performance.
 - H7 SL moderates the relationship between GC and organization performance.
 - H8 SL moderates the relationship between GER and organization performance.
 - H9 SL moderates the relationship between GTD and organizational performance.
 - H10 SL moderates the relationship between GPM and organization performance.
- The conceptual framework shown in Figure 1 highlights the hypotheses of the study.

Conceptual framework



(Figure 1. Conceptual framework)

Methods

The study population contained HR employees at work in the different departments of SMEs. The sample size was determined through a G*Power software as total population could not be assessed. The minimum sample size was calculated using the F-tests recommended for leaner multiple regression techniques. The G*Power analysis suggested a minimum sample size of 220. However, keeping in view the non-response rate, missing values, and outliers the study relies on collecting the data from 242 respondents. After distributing the questionnaires to 242 potential respondents the returned usable questionnaires were 228 and hence the response rate is 94.21% which is quite reasonable in HRM-related research. The questionnaire items were derived from the existing studies and added to a five-point Likert scale ranging from 1 to 5 (strongly disagree to strongly agree). The items of the green HRM were adopted from (Jamal et al., 2021; Rashid & Alam, 2020; Shah, 2019; Tang et al., 2018), sustainable leadership from (Pham et al., 2019; Roscoe et al., 2019), and organizational performance from (El-Kassar & Kumar, 2018).

Findings

The participants of the study consisted of different educational and experiences. The participants of the study hold experience in the field of HRM and working in the HR departments. Respondents' profile is presented in Table 1 below.

Table 1: Demographic Profile

		Count	Column N %
Gender	Male	214	93.9%
	Female	14	6.1%
Age in Years	20 or less	16	7.0%
	21 to 30	107	46.9%
	31 to 40	60	26.3%
	41 to 50	37	16.2%
	50 and above	8	3.5%
Education	Bachelor	137	60.1%
	Master Degree	80	35.1%
	MPhil	7	3.1%
	Ph.D. or Above	4	1.8%
Experience in Years	Below 01	24	10.5%
	1 to 5	77	33.8%
	6 to 10	72	31.6%
	11 to 15	26	11.4%
	16 to 20	20	8.8%
	21 to 25	9	3.9%

In the study participants, 214 respondents 93.9% of respondents were male while 6.1% represented female respondents. The ratio of female respondents was lower as reported by the previous studies due to less job orientation of females particularly in the industrial sector of Pakistan. The outcomes further elaborate that the age slab of the respondents is mostly from 21 to 40 years of age and holds more than more than 73% of it. Similarly, most of the respondents had master's and bachelor's qualifications. The experience of the respondents is also diverse from 1 to 25 years. In the experience, the respondents have it from 2 to 15 years.

Table 2: Descriptive Statistics

	Reliability	Min	Max	Mean	SD
OP	.820	1.17	5.00	3.7697	.828
GRS	.706	1.00	5.00	3.2558	.95843
GTD	.738	1.00	5.00	3.5471	.91952
GPM	.778	1.33	5.00	3.4285	.83527
GC	.787	1.40	5.00	3.3167	.928
GER	.734	1.00	5.00	3.3626	1.005
SL	.915	1.23	5.00	3.7458	.65059

Table 2 reports the reliability and descriptive statistics of the collected data. The reliability of the scales is above the recommended values of 0.70 and hence fit for further analysis. The mean values of the scales are also above the mid value.

Table 3: Regression Analysis (Direct Path)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	F	R ²	Adj. R ²
	B	Std. Error	Beta	t				
(Constant)	2.569	.385		6.676	.000	5.939**	.139	.115
GRS	.105	.023	.121	4.565	.000			
GTD	.581	.080	.650	7.262	.000			
1 GPM	.339	.104	.342	3.275	.001			
GC	.061	.076	.068	0.797	.426			
GER	.196	.065	.238	3.016	.003			
SL	.373	.080	.057	4.662	.000			

Table 3 reports the direct path of the hypotheses. The R-Square value reported 13.9% showing the adequate explanatory power of the model. The F value is 5.939 which is significant at 0.000 and hence the model is fit for further hypothesis testing.

The regression table above shows that green recruitment and selection positively affect organization performance ($\beta = 0.121$, t -value = 4.565, $p < 0.001$), therefore, the first hypothesis is supported. These results are similar with the preceding studies where the same positive influence were found on organizational performance (Bhutto & Phil, 2016; Gupta, 2018). Furthermore, the results exhibit that GTD has direct influence the organization performance ($\beta = 0.650$, t -value = 7.262, $p < 0.001$). The results assist the postulations of the previous authors who found similar results (Naqvi et al., 2022).

The results further support that green performance management positively affect the organization performance ($\beta = 0.342$, t -value = 3.275, $p < 0.001$). The results support the postulations of the previous authors who found that GPM has a direct impact on organizational performance (Naqvi et al., 2022).

The results further noted that green employee relation ($\beta = 0.238$, t -value = 3.016, $p < 0.001$) and sustainable leadership ($\beta = 0.057$, t -value = 4.662, $p < 0.001$) positively influence organization performance respectively. The results support the suppositions of the previous authors who found that green employee relations and sustainable leadership positively influence organizational performance (Jan et al., 2023).

However, the results did not support that the effect of green compensation on organization performance ($\beta = 0.068$, t -value = 0.797, $p > 0.05$). The results are not similar with the postulations of the previous authors who found that green performance management positively influences organizational performance.

Table 4: Regression Analysis (Moderation Analysis)

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	<i>Sig.</i>	<i>F</i>	<i>R</i> ²	<i>Adj. R</i> ²
	B	Std. Error	Beta						
(Constant)	3.144	.193			16.249	.000	6.089**	.151	.131
GRS_SL	.290	.120	.447		2.416	.001			
GTD_SL	.119	.022	.204		5.409	.000			
GPM_SL	.379	.028	.410		13.535	.000			
GC_SL	.021	.020	.105		1.044	.298			
GER_SL	.058	.018	.306		3.324	.001			

Table 4 reports the moderation of sustainable leadership in the nexus of green HRM practices and organizational performance. The results reported that sustainable leadership has a moderating role between GRS, GTD, GPM, GER, and organization performance. The results of the postulation of the previous authors found that sustainable leadership moderates the above relationship. But, as per the results, the moderating role of SL is not significant for relationship between GC and organizational performance. Therefore, the respective hypotheses (H7) is not substantiated.

Conclusion and the way forward

The study's objectives were to scrutinize the impact of green HRM and organizational performance. Further, the study aimed to investigate the moderating role of sustainable leadership in the above relationship. The data was collected from 228 HR employees through a self-administered questionnaire working various SMEs. The Andrew F. Hayes moderating analysis method in the SPSS software package was applied in the study to test the hypotheses. The results of regression analysis (direct path) show that GRS, GTD, GPM, GER and sustainable leadership have a positive and significant influence on organizational performance, while no significant influence of green engagement was found on the Organization performance. The results reported that sustainable leadership moderated the relationship in GRS, GTD, GPM, GER, and organizational performance. The results of the postulation of the previous authors found that sustainable leadership moderates the above relationship. However, the results did not support the moderating role of sustainable leadership in the relationship between green compensation and organization performance.

The findings postulate the idea of stakeholder theory application and provide an absolute advantage to the firms implementing green HRM practices to improve overall organization performance such as promoting sustainability, reducing environmental adverse effects, increasing employee well-being and creating a positive corporate image. The findings have numerous contributions. Firstly, the study has theoretical implications by using stakeholder theory to examine how an organization fulfils the expectations of stakeholders regarding environmental sustainability through green HRM. Moreover, the moderation of sustainable leadership adds value to promote green HRM policies. Secondly, the strategies of green HRM brings awareness and engagement of the employees with green practices, furthermore, it has a practical contribution for organization, regulators, and policymakers to include green practices in their policy making. Thirdly, the study has a contextual contribution as Pakistan is vulnerable to

climate change and other environmental challenges, hence studies related to green initiatives are vital in the context of Pakistan.

Limitations of the study

Regardless of many implications, the study is not free of limitations. First, the present study has relied upon national and international journals, excluding dissertations, books and chapters. Second, only primary data has been used in the present study, it will be interesting to use secondary data to observe the contribution of green HRM quantitatively. Third, a single variable has been used as a moderating variable such as sustainable leadership, there can be more variables considered as moderating/mediating such as organization strategy, workplace culture and employee characteristics. Fourth, a low sample size has been used, therefore, the results may not be generalizable to different regions, cultures and organizations.

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