Greening the Garment Industry: GHRM in Driving Green Innovation and the Role of Environmental Values

Green Innovation

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Abstract

Green innovation is critical for addressing the sustainability challenges faced by the garment industry. As Green Human Resource Management (GHRM) plays a crucial role in nurturing such innovation, this study investigates the influence of GHRM practices on green innovation, with a special emphasis on the moderating role of environmental values within the garment industry of Sri Lankan. GHRM, defined as activities aimed at fostering environmentally conscious employees, is crucial for the sustainability of industries like the garment sector, which significantly contributes to Sri Lanka's GDP and employment. The study addressed a research gap by investigating the underexplored interactions between GHRM practices and environmental values, an area frequently overlooked in existing literature. Employing a positivist paradigm and hypothetical-deductive approach, data collected from 268 HR professionals in five leading Sri Lankan garment factories in the Western Province. The analysis, conducted using SPSS, to confirm the normality, validity, and reliability of the collected data. Accordingly, the study suggests implementing comprehensive GHRM practices and development of a strong environmental culture is essential for promoting green innovation. Further, future research could examine other moderating variables as well as the long-term influences of GHRM on performance of organization and sustainability of organization.

Keywords: Environmental values, Green human resource management, Green HRM practices, and Green innovation.

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Introduction

Green innovation is highly needed for transforming garment industry into sustainable industrial operation. Greening garment industry is a long-standing requirement of the world, where several reports and surveys indicate the sustainability issues of garment industry. A report published by McKinsey Consulting & Company indicates that the global garment industry should work on reducing the greenhouse-gas emissions (Berg et al., 2020). Another report by International Labour Office (ILO), indicate that the carbon emissions of 2% recorded in the year of 2015 is expected to increase up to 26% by 2050 (ILO, 2020, p.10). The report also indicates that around 98 million Tonnes resources consumed by the fashion business in the year of 2015 is expected to raise to 300 million Tonnes. Further the report also predicts that around 22 million tonnes of Micro fibre wastage will be dumped into the ocean in-between the year of 2015 - 2050. Beyond this the garment industry also has issues such as deprived working conditions, violence at work, hazardous workplaces, gender inequality, restricted freedom of association, child labour and forced labour. These leads to dearth of decent work (ILO, 2020, p.15). All these indicate the dearth of sustainability in action in the garment industry, which calls for urgent attention on Green Innovation (GI).

The Sri Lankan garment industry being a significant contributor of the economy faces significant sustainability issues. This industry significantly contributing to Gross Domestic Production and increase of present employment (ILO, 2020). This includes USD 5 Bn worth of experts, which is around 42% of national export revenue (Sri Lankan Export Development Board, n.d.). Further, the industry contributes for nearly 350000 direct employment and considerable amount of indirect employment including larger share of women and men (ILO, 2020; Sri Lankan Export Development Board, n.d.). This shows that apparel sector in Sri Lanka is characterised by being heavily labour-intensive. In addition, as indicating above this industry records significant resource consumption and hazardous disposal into the environment (ILO, 2020, p.10). Due to these negative impacts on human and natural resources, the economically significant garment industry is encountering escalating pressure to implement sustainable practices.

This calls for the enforcement of practices relating to green human resource management. Further, the global shifts towards ecological sustainability have urged industries to integrate green practices not only in operations but also in HRM frameworks (Makumbe, 2024; Mustafa et al., 2023; ILO, 2020). Opatha (2013, p.28) defines it as "encompassing all activities involved in developing and maintaining systems aimed at making environmentally conscious employees within an organization." The existing body of work emphasis that the green initiatives may not prosper without the integrating people management practices devoted to environmental performance, including green innovation (Makumbe, 2024; Paillé et al., 2020).These were several previous studies found that the GHRM impacts on GI (Irani & Kilic, 2022; Malik et al., 2021; Shah & Soomro, 2023; Singh et al., 2020; Sobaih et al., 2020). Even though several studies discovered that there is relationship between Green Human Resource Management and Green Innovation, limited attention is given in understanding the intervening variables (Makumbe, 2024). In addition, literature also suggests that an employees' environmental values are crucial in deciding that employees' green behaviour and thus green outcomes such as green innovation

(Norton et al., 2014). Thus, the existing study attempts to answer how does Green Human Resource Management impacts on Green Innovation. Further, how does environmental values influence the association between Green Human Resource Management and Green Innovation. Accordingly, this study intends to investigate the impact of GHRM practices on green innovation and the moderating impacts of environmental values within the Sri Lankan garment industry.

The authors identify a research gap where existing studies predominantly focus on the direct link between GHRM practices and organizational performance outcomes, often neglecting the nuanced interactions with individual and organizational values. There is a paucity of research exploring how environmental values moderate the association between GHRM practices and green innovation (Makumbe, 2024). To the best of researchers' knowledge particularly within the garment sector of developing economies like Sri Lanka this is under explored. Addressing this gap is crucial for gaining an in-depth understanding of effectively implementing GHRM practices to drive green innovation.

Understanding the interplay amongst GHRM practices and green innovation, moderated by environmental values, carries noteworthy ramifications for both theoretical foundation and professional practice. For practitioners, insights from this study offer the insights in relation to the designing of effective HRM strategies that promote environmental sustainability while enhancing innovation capabilities. For academics, this research contributes to the broader discourse on sustainable management practices, offering a nuanced perspective that bridges HRM, innovation, and environmental sustainability.

Most scholar around the world have highlighted the growing importance of the sustainability within the corporate world. In that garment industries have significant impact to the environment. The research on green human resource management repeatedly revealed that executing human resource practices could result substantial influence on organizational sustainability outcomes, including the promotion of green innovation (Renwick et al., 2013). According to the different statistics available in Sri Lankan economy, the garment industry is a key contributor to the national economy, however it also substantially harms the environment (ILO, 2020). Although majority of the studies were carried out in developed economies leaving a gap on regarding how green human resource management performs in emerging economies likes Sri Lanka specially in industries with high influence like the apparel industry. The research studies examining the association between the green innovation and green human resource practices in this context is limited. A culture of innovation and sustainability be reinforced by environmentally friendly HR practices like green recruitment, training and performance management according to earlier research (e.g., Jabbour & Santos, 2008; Zoogah, 2011). A few researches have focused on the moderating effects of environmental values (e.g., Kim et al., 2019) indicating that organization with deep environmental values are more inclined to benefit from green human resources management practices with regard to innovation. This research is expected to justify the remedies to fill the gaps identify in the existing literature. This research study anticipates offering significant findings for both academia and industry through examining the association between the green human resource management practices and green innovation and evaluating the moderating effects on environmental values.

In this study, researchers expected to achieve following objectives:

1. To determine the association between Green HRM practices and green innovation within the Sri Lankan garment industry.
2. To analyze the impact of specific Green HRM practices to promote sustainable innovation in the garment industry.
3. To evaluate the moderating effects of environmental values on the association between Green HRM practices and green innovation in Sri Lankan garment industry.
4. To assess the role of organizational environmental values in influencing how effectively Green HRM practices drive green innovation.
5. To assess the extent to which Green HRM practices are currently implemented in the leading garments in Sri Lanka

Literature Review

Green HRM Practices

Green Human Resource Management encompasses HRM practices designed to impact a firm's environmental and ecological impact. It is closely connected to the company's environmental strategy and promotes eco-friendly behaviors among employees (Jabbour, 2013; Opatha & Arulrajah, 2014; Renwick et al., 2013). Chaudhary (2019) investigated a phenomenon to comprehend the function of GHRM in enhancing employees' environmental performance. This study assessed the effect of GHRM on employee green behaviour through HRM practices such as green involvement, green training process, green performance management, green rewards and green recruitment and selection. Most researchers have adopted the similar approach, and assessed the GHRM based on green involvement, green compensation or rewards, green training, green performance management, green recruitment and selection, green job analysis and description, and other HR functions (Amrutha & Geetha, 2020; Chaudhary, 2019; Haddock-Millar et al., 2016; Ojo et al., 2022; Ren et al., 2018; Yong et al., 2020). Nevertheless, very few researchers evaluated GHRM practices on the basis of AMO (Ability, Motivation, Opportunity) theory (Singh, 2020; Sobaih et al., 2020). Singh (2020) concluded that business institutions could adopt GHRM practices to enhance capacity (ability), motivate employees, and offer opportunities for green human resources, thereby harnessing their potential for green process innovation and green product innovation. This is well supported according to the tenets of the AMO theory, which states that GHRM practices can promote ability, motivation and opportunity to enhance green performance outcomes, such as green innovation (Bahmani et al., 2023; Renwick et al., 2013). Accordingly, this theoretical lens shows how HRM practices result in green innovation. Further, this is considered to a prominent theory which was adopted by scholars in explaining the sustainability related phenomena such as green performance outcomes (Tanova et al., 2022 as cited in Makumbe, 2024). Thus, this study adopts AMO theory in conceptualizing the study.

AMO Theory

Irani and Kilic (2022) mentioned that the AMO theory is extensively utilized across various fields, especially within the context of HRM. This study utilizes AMO theoretical base to anticipate the connection between GHRM practices and enterprise green innovation. Studies have demonstrated that effective HRM practices have a promotive influence on both employee performance and organizational performance (Appelbaum et al., 2000; Bos-Nehles et al., 2013; Irani & Kilic, 2022). However, research frequently employs AMO theory to investigate HRM practices in relation to abilities of employees, motivations, and available opportunities, with the objective of foretelling employees' attitudes, behaviors, and job performance, as well as their effects on enterprise performance and green innovation (Gerhart, 2005; Sobaih et al., 2020). Therefore, this study examines green HRM practices through the lens of AMO theory, focusing on managers in leading apparel industries in Sri Lanka. The study of Sobaih et al., (2020) furthers the application of AMO theory by exploring how the green ability, green motivation, and green opportunity of owner-managers influence the green innovation together with environmental performance. Singh (2020) recommended that the company develop and implement Green Human Resource Management practices to facilitate attraction, development, motivation, and retention of environmentally conscious workers, thereby enhancing green innovation.

Green HRM and Green Innovation

Green innovation involves the formation of environmentally sustainable products and processes (Albort-Morant et al., 2017; Cepeda-Carrión, 2016) by implementing organizational practices such as using greener raw materials, minimizing material usage through eco-design principles in product design, and striving to reduce emissions as well as the use of electricity, consumption of water, and other raw materials.

Owner-managers should prioritize and invest more in GHRM practices, particularly in enhancing green abilities, as these have a substantial effect on product/service green innovation and the enterprise's performance in relation to environment (Sobaih et al., 2020). Irani and Kilic (2022) suggested that GHRM practices are instrumental in reducing pollution, enhancing product/service quality, as well as enhancing the organization's brand image. In other words, they implied that GHRM practices bolster the organizational objectives with regard to environmental management through the application of GI. Further, few researchers have suggested that GHRM practices effect on green innovation (Malik et al., 2021; Shah & Soomro, 2023; Singh et al., 2020; Sobaih et al., 2020).

Findings of previous studies indicates that there is a momentous linkage amongst GHRM and GI, with deviations in the strength of correlation across country context. For example, a study conducted in Small and Medium Enterprises in Zimbabwe, collecting data from 364 found that the GHRM had a statistically significant positive relationship with the green performance ($\beta = 0.467$, $p = 0.00$) and green innovation ($\beta = 0.303$, $p = 0.00$) (Makumbe, 2024). This shows a moderate effect of GHRM on green innovation, with slightly strong effect on green performance. In addition, this study emphasises that GHRM promotes innovation, particularly when they foster green knowledge sharing amongst employees, thus, calls for knowledge management activities in African context. On the other hand, another study conducted amongst 223

professionals in manufacturing enterprises in Pakistan shows that GHRM practices significantly contribute for both green process innovation ($\beta = 0.579$, $p < .01$) and green product innovation ($\beta = 0.547$, $p < .01$) (Mustafa et al., 2023). These results emphasizes that structured HRM systems relating to green aspects could promote the innovation outcomes, primarily through green creativity. Further, a study conducted amongst 187 teachers and administrators employed at Small Island Universities in Northern Cyprus empirically proved that the GHRM practices leads to green innovations and thus green performance (Bahmani et al., 2023). In addition, a survey of 437 employees employed in multiple industries in Pakistan found that Green HRM has statistically significant association with green innovation (Malik et al., 2021). Beyond that another investigation conducted with the data from 143 firms in China found the exitance of a significant indirect effect of GHRM on green innovation (Shah & Soomro, 2023). In addition, another study which investigated around 309 responses of small and medium-sized enterprises belonging to manufacturing sector revealed a similar finding. This study found that the green motivation, green ability and green opportunity, all three has statistically significant direct relationship with green innovation (Singh et al., 2020). Further the same study discovered that green motivation, green opportunity, and green ability all three has statistically significant indirect relationship green innovation (Singh et al., 2020). The above findings proves that there is a significant impact of GRM on GI. This association between GHRM and GI can be explained based on AMO theory. The theory indicates that performance, including the green innovation, is driven by the ability, motivation and opportunity (Appelbaum et al., 2000; Bos-Nehles et al., 2013; Gerhart, 2005; Irani & Kilic, 2022; Singh, 2020; Sobaih et al., 2020). Based on the above theory and previous findings the study formulated hypotheses to comprehend the impact of GHRM practices on green innovation as follows.

H1: There is a significant impact of green HRM practices on green innovation.

H1a: There is a significant impact of green ability on green innovation.

H1b: There is a significant impact of green motivation on green innovation.

H1c: There is a significant impact of green opportunities on green innovation.

Singh et al., (2020) did not incorporate employee-level constructs such as environmental values and beliefs to examine their intervening effect on performance outcomes. Consequently, they suggested that future research should enhance the research framework by including both the environmental beliefs and environmental values of employees as moderators to investigate the influence of green HRM on green innovation. Song et al., (2020) anticipates enhancing their framework with the influences of environmental values on the association between green HRM practices and green innovation. Even though, empirical studies show importance of values in understanding the association between GHRM and green performance outcomes, very few studies have been conducted in Asian context, for example China (Chun, 2009 as cited in Renwick et al., 2013). Further many studies on antecedence of green performance outcomes are empirically tested in Western world and developed economies (Renwick et al., 2013). This emphasizes the gap in understanding the role of values in Green Human Resource Management, particularly within developing countries, where contextual factors differ notably, as stated by previous scholars (Schultz et al., 2005). This means it is vital to study the impacts of

environmental values to understand the relationship between green HRM practices on green innovation. With the above-mentioned rationales, researchers aimed to enrich the conceptual framework by incorporating environmental values as a moderator for the impact of green human resource management practices on green innovation. This was exemplified by studying managers from leading companies in the apparel industries.

Environmental Values, Green HRM, and Green Innovation

Employees engaged in green innovation were driven by their love, values, and passion for the environment, leading to increased involvement in green innovative and creative procsss (Al-Hawari et al., 2021). A previous study discoveries offered a fresh viewpoint on how green HR practices impact green innovation, thereby contributing to corporate environmental management and sustainable development (Song et al., 2020). Hence, future research should delve deeper into this relationship's mechanism and explore additional constructs such as environmental knowledge, pro-environmental values, shareholder pressure, and green culture of the organization. These additions could enhance comprehension of how GHRM influences mechanisms through which GHRM influences green innovation. GHRM encompasses practices aimed at instilling pro-environmental values and behaviors within the company's workforce, ultimately cultivating employees capable of advocating for green performance (Muisyo & Qin, 2021). Based on these evidences, researchers formulated fifth hypothesis;

H2: Environmental values moderate the association between green HRM and green innovation

The conceptual framework, depicted in Figure 1, presents green innovation as the dependent variable and green human resource management (GHRM) practices as the independent variables. Based on the AMO theory, GHRM practices are conceptualized through three components: green ability, green motivation, and green opportunity. Additionally, environmental values are incorporated as a moderating variable that influences the relationship between GHRM practices and green innovation.

Methodology

The present study follows a positivist paradigm to examine the impact of GHRM practices on green innovation among HR professionals employed in Sri Lanka, particularly in the Western Province. Researchers selected five leading garment factories in the apparel industry for this study. Existing study adopted a hypothetico-deductive approach the study empirically tested the proposed variables and stated hypotheses within a real-world context.

The questionnaire consisted of mainly two sections (demographic information and variables related questions). Further, the items in relation to variables were adopted from validated measurement scales from the existing literature. Accordingly, the 05 items scale was adopted to measure the of environmental values (CR - 0.941; Cronbach's α – 0.938) (Qazi et al., 2020, p.10). Further, 07 items scale of green innovation was adopted which consisted of 04 items of green product innovation (CR - 0.885; Cronbach's α – 0.884) and 03 items related to green process innovation (CR - 0.844; Cronbach's α – 0.842) (Chen et al., 2006, as cited in Singh et al., 2020, p.8).

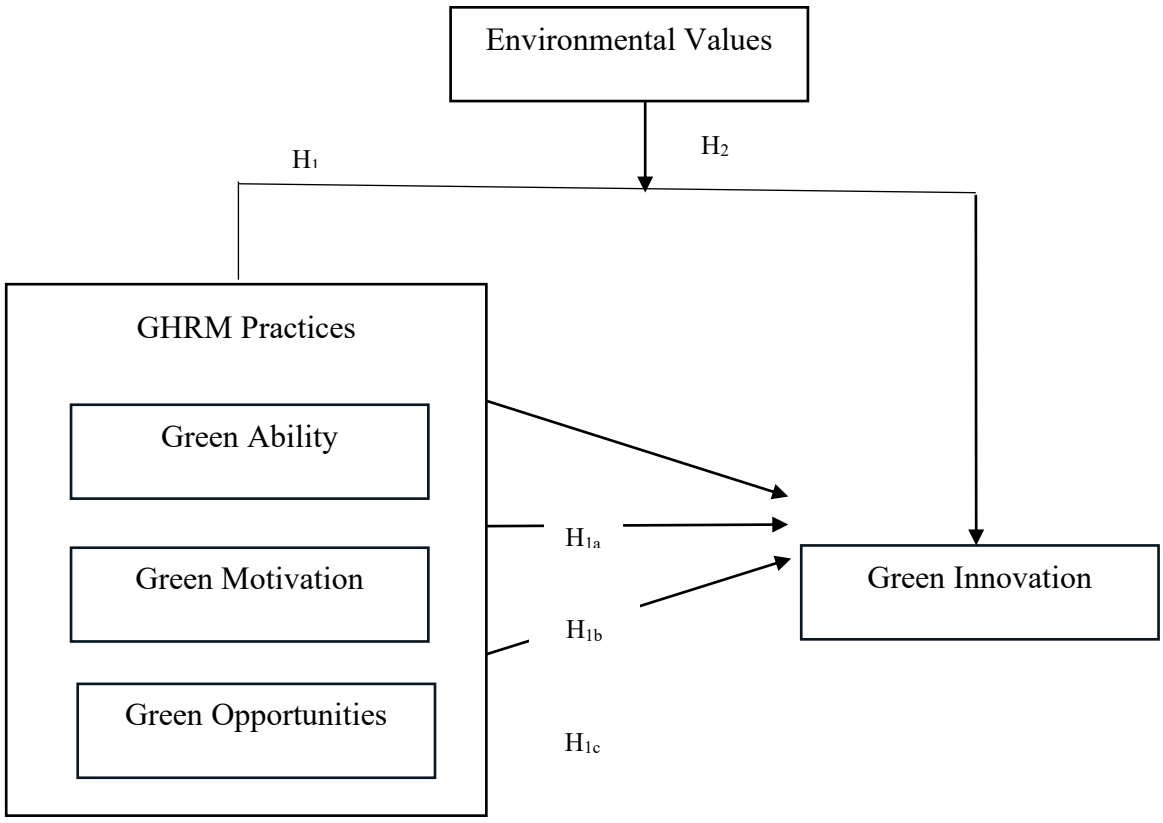

Figure 01: Conceptual framework

Source: Authors' presentation

In addition, GHRM was measured using 13 items scale which consisted of 06 items of green ability (CR - 0.956; Cronbach's α – 0.958), 04 items of green motivation (CR - 0.959; Cronbach's α – 0.957) and 03 items of green opportunities (CR - 0.939; Cronbach's α – 0.935) (Sobaih et al., 2020, p.6). All these validated scales were rated on 5-point Likert scale.

The population considered under this study consisted of HR professionals at the executive level and above in leading companies within the Sri Lankan apparel industry. Due to the absence of a population list, the study employed a convenience sampling method. The researcher personally administered the structured questionnaire and collected complete responses from 268 participants, which is 89.3% response rate. Consequently, the final analysis was performed based on 268 complete responses.

SPSS version 26 was adopted to perform the data analysis of the study, which include hypothesis testing and demographic evaluation. Prior to the analysis, data appropriateness was carefully assessed for missing data, outliers, and input errors. Following that, univariate together with multivariate assumptions, including multicollinearity, normality, and linearity, were performed to warrant the data applicability and accuracy. These data analysis procedures resulted in a solid foundation for comprehending the association amongst GHRM practices and green innovation from the point of HR professionals in the leading garment factories in the apparel industry in Sri Lanka.

Results and Findings

Researchers used SPSS 26.0 to analyze the data. Researchers distributed questionnaires to three hundred participants and received responses from 268 participants. This results in a response rate of 89.3%, which is considered acceptable according to social researchers. Thus, researchers analyzed data from 268 respondents to draw conclusions for this study.

Initially, they tested the validity of the data set by ensuring normality assumptions. Social research indicates that skewness and kurtosis values between -2 and +2 are within an acceptable range. In this study, Table 1 displayed statistics related to skewness and kurtosis for green innovation, green ability, green motivation, green opportunity, and environmental values. These values fell within the acceptable range of -2 to +2. Therefore, the data set in this study was considered normally distributed, allowing the researchers to proceed with confidence.

Table 01. Skewness and Kurtosis

Statistics						
		Green Innovation	**Green Ability**	**Green Motivation**	**Green Opportunity**	**Environmental Values**
N	Valid	268	268	268	268	268
	Missing	0	0	0	0	0
Mean		3.9307	3.9129	3.8759	3.9527	4.0231
Skewness		-1.141	-1.077	-1.068	-1.131	-1.302
Std. Error of Skewness		.149	.149	.149	.149	.149
Kurtosis		.373	.158	.079	.333	.863
Std. Error of Kurtosis		.297	.297	.297	.297	.297

Source: Authors' computation, 2025

The validity of the data set was ensured by the Kaiser-Meyer-Olkin (KMO) measurement and Bartlett's test, with an accepted value of more than 0.7 (Sekaran, 2003). Table 2 presents the KMO test results for all variables, indicating a KMO value greater than 0.7 and a significant value of 0.000 ($p < 0.05$). The validity coefficients for green innovation, green ability, green motivation, green opportunity, and environmental values are 0.898, 0.878, 0.741, 0.782, and 0.891, respectively. Therefore, the validity of this data set in the study was confirmed.

Table 02. Validity Test

KMO and Bartlett's Test		**Green Innovation**	**Green Ability**	**Green Motivation**	**Green Opportunity**	**Environmental Values**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.898	.878	.741	.782	.891
Bartlett's Test of Sphericity	Approx. Chi-Square	4596.336	3913.582	2519.991	1580.304	3704.880
	Df	21	15	6	3	10
	Sig.	.000	.000	.000	.000	.000

Source: Authors' computation, 2025

Reliability, as measured by Cronbach's Alpha based on Nunnally (1978), demonstrated values exceeding 0.7, thus ensuring reliability. Table 3 presents the Cronbach's Alpha test results for all variables, indicating an Alpha value greater than 0.7. The reliability coefficients for green innovation, green ability, green motivation, green opportunity, and environmental values are0.992, 0.991, 0.991, 0.989, and 0.994, respectively. Therefore, the validity of this data set in the study was confirmed.

Table 03. Reliability Statistics

Construct	Reliability Statistics	
	Cronbach's Alpha	Number of Items
Green Innovation	0.992	7
Green Ability	0.991	6
Green Motivation	0.991	4
Green Opportunity	0.989	3
Environmental Values	0.994	5

Source: Authors' computation, 2025

The Variance Inflation Factor (VIF) values are relatively high, ranging from 12.678 to 37.482, indicating the presence of multicollinearity among the independent variables. This suggests that some predictors (such as Green Ability, Green Motivation, and Green Opportunity) may be strongly correlated with one another. However, since these constructs conceptually represent interrelated dimensions of Green Human Resource Management (GHRM) practices, such relationships are theoretically justifiable (Renwick et al., 2013). The study aims to examine their combined influence on Green Innovation, and therefore, these interdependencies are an inherent part of the research model rather than a methodological flaw. As noted by O'Brien (2007), multicollinearity does not necessarily invalidate a regression model if the variables are theoretically meaningful and contribute to explaining the dependent construct. Furthermore, when constructs are conceptually linked and form parts of a broader theoretical framework, moderate to high correlations can be acceptable in social science research (Hair et al., 2019). Therefore, despite the elevated VIF values, the inclusion of all predictors is justified to capture the comprehensive effect of GHRM dimensions on Green Innovation.

After confirming the normality of all variables, the researcher employed Pearson correlation with a two-tailed test of significance to examine the strength of the relationships between green innovation, green HRM practices (green ability, green motivation, green opportunity), and environmental values. Karl Pearson's coefficient of correlation is the most widely used method for correlation analysis (Kothari, 1990). Table 4 presents the correlation statistics for all variables. The results indicated a strong positive correlation between green innovation and green HRM practices (green ability, green motivation, and green opportunity), as well as the moderating variable of environmental values.

Table 04. Correlations

Correlations						
		Green Innovation	**Green Ability**	**Green Motivation**	**Green Opportunity**	**Environmental Values**
Green Innovation	Pearson Correlation	1	.973**	.960**	.974**	.960**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	268	268	268	268	268
Green Ability	Pearson Correlation	.973**	1	.984**	.967**	.938**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	268	268	268	268	268
Green Motivation	Pearson Correlation	.960**	.984**	1	.966**	.927**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	268	268	268	268	268
Green Opportunity	Pearson Correlation	.974**	.967**	.966**	1	.958**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	268	268	268	268	268
Environmental Values	Pearson Correlation	.960**	.938**	.927**	.958**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	268	268	268	268	268

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' computation, 2025

The research hypotheses and the significance of the model were tested using simple linear regression analysis. Table 5 shows that green ability has a statistically significant and 94.7% positive impact on green innovation, thus H_{1a} is accepted. Similarly, green motivation has a statistically significant and 92.2% positive impact on green innovation, leading to the acceptance of H_{1b}. Additionally, green opportunity has a statistically significant and 94.8% positive impact on green innovation, resulting in the acceptance of H_{1c}. Consequently, since green ability, green motivation, and green opportunity comprise green HRM practices, H_1 is also accepted.

Table 05. Simple Linear Regression Analysis

Path	**Unstandardized**	**Standardized**	**T**	**R^2**	**Adj.**	**F**	**Sig.**

	Coefficients B	Coefficients B		R^2			
GA ⟶ GI	0.966	0.973	68.677	0.947	0.946	4716.542	0.000
GM ⟶ GI	0.916	0.960	56.065	0.922	0.922	3143.240	0.000
GO ⟶ GI	0.981	0.974	69.585	0.948	0.948	4842.084	0.000

Note: GI-Green Innovation, GA-Green Ability, GM-Green Motivation, GO-Green Opportunity

Source: Authors' computation, 2025

The moderation analysis was conducted using Hayes' PROCESS macro (Model 1) to test the moderating effect of environmental values on the relationship between Green HRM practices and Green Innovation. The overall model was significant ($R^2 = 0.9664$, $F(3,264) = 2530.07$, $p < 0.001$), indicating that the predictors collectively explain 96.64% of the variance in Green Innovation. Both Green HRM practices ($\beta = 0.6719$, $p < 0.001$) and Environmental Values ($\beta = 0.3487$, $p < 0.001$) had significant positive effects on Green Innovation. However, the interaction term (Green HRM × Environmental Values) was not significant ($\beta = –0.0040$, $p = 0.6867$, 95% CI [–0.0233, 0.0154]), suggesting that environmental values do not significantly moderate the relationship between Green HRM practices and Green Innovation.

Table 06. Model Summary

R	R-sq	MSE	F	dfl	df2	p
.9831	.9664	.0453	2530.0667	3.0000	264.0000	.0000

Model						
	Coeff	**Se**	**t**	**P**	**LLCI**	**ULCI**
Constant	-0.324	.1003	-.3236	.7465	-.2299	.1650
	.6719	.0572	11.7511	.0000	.5593	.7845
	.3487	.0405	8.6081	.0000	.2689	.4285
	-.0040	.0098	-.4038	.6867	-.0233	.0154

Source: Author's computation

Conclusion

The present research study investigated to compelling evidence that green HRM practices are pivotal in driving green innovation within organizations. By enhancing green ability, green motivation, and green opportunity, organizations achieved substantial advancements in their green innovation initiatives. This wished to show strong positive correlations and high impact percentages underscore the effectiveness of these practices.

Although environmental values were found to have a significant positive direct effect on green innovation, the moderating effect of environmental values on the relationship between green HRM practices and green innovation was not statistically significant. This indicates that while environmental values independently contribute to enhancing green innovation, they do not significantly strengthen the impact of green HRM practices on green innovation. Therefore,

fostering environmental values among HR professionals remains important, but their influence operates more as a direct driver rather than a conditional (moderating) factor in promoting green innovation.

In conclusion, organizations aiming to enhance their green innovation should focus on developing comprehensive green HRM practices and fostering a strong environmental culture. This dual approach may not only promote sustainability but also drives significant innovation, positioning organizations as leaders in the green economy. Future research will be exploring additional moderating variables and examine the long-standing effects of green HRM practices on organizational performance and environmental sustainability.

Conflict of interest

Authors declare no conflict of interest

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