
Examining the Effect of Green HRM Practices on Green Creativity: The Mediating Role of Green Identity and the Moderating Role of Ecocentric Leadership

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Abstract:

As environmental sustainability becomes increasingly important, organizations are turning to Green Human Resource Management (Green HRM) practices to foster eco-friendly behavior. Green HRM practices are believed to enhance green creativity among employees, while green identity can mediate this relationship, and ecocentric leadership may moderate it. However, limited empirical studies have explored these complex relationships in organizational contexts. This study aimed to examine the effect of Green HRM practices on green creativity, considering the mediating role of green identity and the moderating role of ecocentric leadership in organizations actively implementing sustainability initiatives. A quantitative, cross-sectional survey design was employed, targeting employees in industries such as renewable energy, green manufacturing, and eco-focused services. A sample of 500 employees was selected using stratified random sampling from organizations implementing Green HRM practices. Data were collected through a structured questionnaire measuring Green HRM practices, green creativity, green identity, and ecocentric leadership using validated scales. Statistical analysis was performed using SmartPLS 4.0, employing partial least squares structural equation modeling (PLS-SEM) to assess the relationships between the variables, with bootstrapping for mediation analysis and interaction terms for moderation analysis. Preliminary findings indicate that Green HRM practices significantly enhance green creativity, with green identity acting as a mediator. Moreover, ecocentric leadership was found to significantly moderate the relationship between Green HRM practices and green creativity, highlighting the importance of leadership in fostering sustainability-oriented behavior in employees. The study contributes to the understanding of how Green HRM practices influence green creativity and demonstrates the critical roles of green identity and ecocentric leadership. These findings provide valuable insights for organizations aiming to promote sustainable innovation and creativity through strategic HRM initiatives.

Introduction:

Green human resource management (Green HRM) has emerged as a critical area in organizational sustainability, aiming to align HR practices with environmental management goals[Alam SS (2024)]. By incorporating eco-friendly principles into HR functions, such as recruitment, training, performance management, and employee engagement, Green HRM fosters

environmental awareness and sustainable behavior among employees[Al-Zaqeba MAA(2024)]. Recent studies highlight the potential of Green HRM to promote not only environmental outcomes but also organizational innovation by encouraging green creativity and the generation of ecocentric ideas and practices within the workplace[Nguyen NT(2024)].

Green creativity, as a concept, represents employees' ability to develop innovative solutions and ideas that contribute to an organization's environmental sustainability[Fayyad S(2024)]. The role of Green HRM in fostering such creativity is gaining attention, especially when mediated by factors like green identity employees' alignment with eco-friendly values and practices[Adnan M(2024)]. Employees with a strong green identity are more likely to internalize environmental goals, translating them into creative and actionable outcomes that benefit the organization. Thus, understanding how Green HRM influences green creativity through green identity offers valuable insights into building sustainable work environments[Sun Y(2024)].

In addition to green identity, leadership styles play a pivotal role in moderating the impact of Green HRM on green creativity[Milstein T(2024)]. Ecocentric leadership, characterized by leaders who prioritize environmental values and sustainable practices, can amplify this relationship by providing the necessary support and motivation[Taimoor M(2024)]. Ecocentric leaders encourage a culture of environmental responsibility, fostering a work environment where green creativity can thrive. This study explores how ecocentric leadership moderates the relationship between Green HRM practices and green creativity, offering a more nuanced understanding of these dynamics[, Rice J(2024)].

The interplay between Green HRM practices, green identity, and ecocentric leadership holds significant implications for sustainable organizational development. By examining these relationships, this research contributes to the growing literature on sustainability and innovation in HRM, providing actionable insights for organizations aiming to integrate green initiatives into their human resource strategies effectively. As a result, the following hypotheses are proposed:

Literature Review and Hypothesis Development :

Kissi et al., (2024):Green Human Resource Management (GHRM) practices are instrumental in promoting environmental sustainability within organizations. These practices encompass eco-friendly recruitment, green training and development, performance management, and reward systems that encourage pro-environmental behaviors among employees. Research indicates that GHRM practices can enhance employees' green creativity the generation of novel and useful ideas aimed at environmental improvement.

Aloqaily and Al-Zaqeba (2024):The relationship between GHRM practices and green creativity is complex and can be influenced by various factors. One such factor is green identity, which refers to the extent to which employees perceive environmentalism as a core aspect of their self-concept. When employees develop a strong green identity, they are more likely to engage in

environmentally friendly behaviors and contribute to green innovation. GHRM practices can foster this green identity by embedding environmental values into organizational culture and human resource policies.

Zafar and Suseno (2024): Leadership also plays a crucial role in this dynamic. Ecocentric leadership, characterized by a leader's deep concern for the environment and commitment to sustainable practices, can moderate the impact of GHRM on green creativity. Leaders who demonstrate ecocentric values can inspire and motivate employees to align their behaviors with environmental goals, thereby amplifying the effects of GHRM practices.

AlKetbi A(2024): This review highlights the role of Green HRM (GHRM) practices in fostering organizational green performance, including employee satisfaction and eco-friendly behaviors. The study identifies the necessity of integrating sustainability goals into HRM practices to enhance employees' green creativity and ecological performance. The review calls for exploring the mediating roles of factors like green identity for deeper insights.

Ahmad S(2015): Based on the componential theory of creativity, this study found that green transformational leadership (TFL) combined with HRM initiatives boosts green creativity. The study advocates for training programs to align employees' roles with ecological goals, emphasizing the synergy between green leadership and HRM practice.

Amrutha & Geetha,(2020); This study highlights the critical importance of adopting Green Human Resource Management (GHRM) practices, including green training, green recruitment and selection, incentives for green initiatives, active employee participation in environmentally friendly activities, and recognition-based reward systems for green behaviors. These practices not only enhance employees' work-related skills, empowerment, and personal growth but also positively impact their health and overall well-being.

Zaniboni S(2011) This research introduces the mediating role of green self-identity (GSI) in enhancing green creativity through HRM practices. GSI was shown to influence employees' confidence and environmental behavior positively. The paper highlights HRMs potential in fostering a strong green identity, promoting creative solutions for environmental challenges.

Gouthier and Rhein (2011) Organizational pride, as highlighted by Gouthier and Rhein (2011), plays a crucial role in shaping positive employee attitudes and behaviors. When individuals perceive a strong alignment with their organization's environmental values, they are more likely to feel proud of being part of the organization. This sense of pride is further enhanced by the organization's dedication to adopting Green Human Resource Management (GHRM) practices, which deepens employees' connection and commitment to their workplace.

Bondarouk AV(2015): A critical analysis of HRM practices showed their significant impact on employee behaviors like green creativity. The study stresses the importance of leadership that supports sustainable practices and engages employees in creative eco-friendly initiatives, fostering a culture of innovation.

Chams N(2018): Examined how corporate alignment with sustainable development through GHRM fosters innovation. The study stressed the role of leadership in creating a green vision and empowering employees to innovate sustainably. Companies aim to align their strategies with sustainable development goals (SDGs), focusing on reducing their ecological footprint and promoting long-term environmental stewardship. GHRM practices like green recruitment, training, and performance appraisal ensure that employees contribute to the company's sustainability objectives.

Dumont et al.,(2017). This theory posits that individuals feel a sense of belonging when they associate with an organization that shares their personal values. As previously suggested, organizations that adopt GHRM practices such as providing green training and rewarding environmentally friendly behaviors communicate a strong message to employees that the company prioritizes sustainability and actively engages in addressing environmental concerns .

Teixeira AA(2012): Focused on stakeholder demands, this study reviews how GHRM can mitigate environmental pressures by aligning corporate strategies with sustainable development goals. It discusses how GHRM enhances both employee innovation and organizational reputation in green market. GHRM incorporates sustainability into core HR functions such as recruitment, training, performance management, and employee engagement. This alignment ensures that organizations contribute to SDGs like responsible consumption and production, climate action, and sustainable work practices.

Amjad et al.(2021):GHRM practices, such as eco-friendly recruitment, training, and performance management, have been shown to enhance employees' green creativity their ability to generate innovative solutions to environmental challenges. A study by found that GHRM positively influences eco-friendly behavior and environmental performance in the hospitality industry.

Song et al.(2023):Green identity refers to an employee's self-perception as someone who values and engages in pro-environmental behaviors. When organizations implement GHRM practices, they can strengthen employees' green identity, which in turn fosters green creativity. This mediating effect suggests that employees who internalize environmental values are more likely to contribute innovative ideas for sustainability.

Zafar et al.(2023):Leadership styles significantly influence the effectiveness of GHRM practices. Ecocentric leadership, characterized by a strong commitment to environmental values, can enhance the impact of GHRM on green creativity. Leaders who prioritize sustainability inspire and motivate employees to engage in creative environmental initiatives. For instance, a study demonstrated that green transformational leadership positively affects employee green creativity.

Zhang X(2010):Highlighted the motivational role of HRM in shaping employee green identity and creativity. The study proposed GHRM as a strategic tool to build environmentally-conscious workforces capable of innovation.By fostering an eco-friendly culture, HRM can motivate employees to think creatively about sustainability challenges. This includes promoting brainstorming sessions or innovation hubs aimed at developing green solutions.

Bhutto TA(2020): Explored the integration of sustainability goals into organizational culture via GHRM. Their findings emphasized employee training and development as critical elements for fostering green identity and innovation.By encouraging green thinking and problem-solving, organizations can drive innovation in processes and products, contributing to long-term sustainability goals.Cross-departmental collaboration, fostered through training, can yield innovative solutions for reducing carbon footprints and improving operational efficiency.

Mackay M(2015): Reviewed HRM's role in self-identity construction, emphasizing how training and HR practices can boost confidence in environmental tasks. The study links green self-identity with enhanced creativity and problem-solving in ecological challenges.HRM implements green training programs to educate employees on sustainable practices, enhancing their knowledge and capabilities in handling environmental tasks.Training modules often include simulations, problem-solving activities, and real-world applications of ecological initiatives.

Chen YS(2012): This foundational work on identity behavior informs modern GHRM research. It explores the link between individual roles and organizational green values, serving as a basis for studies on green creativity and identity.Individuals play various roles in organizations (e.g., employees, managers, or change agents). Their alignment with green organizational goals often stems from how well their identity resonates with the company's environmental initiatives.

Hypothesis 1: There is a positive Significant impact of GHRM practices on Green creativity

Hypothesis 2: There is a Positive Significant Impact of GHRM practices on Green Identity

Hypothesis 3:There is a Positive Significant Impact of Green Identity on Green creativity

Hypothesis 4:There is a Positive Significant Impact of Eco centric leadership on Green creativity

Hypothesis 5: Green identity mediates the relationship between GHRM practices & Green creativity

Hypothesis 6: Eco centric leadership moderates the relationship between GHRM practices and Green creativity

Research Framework:

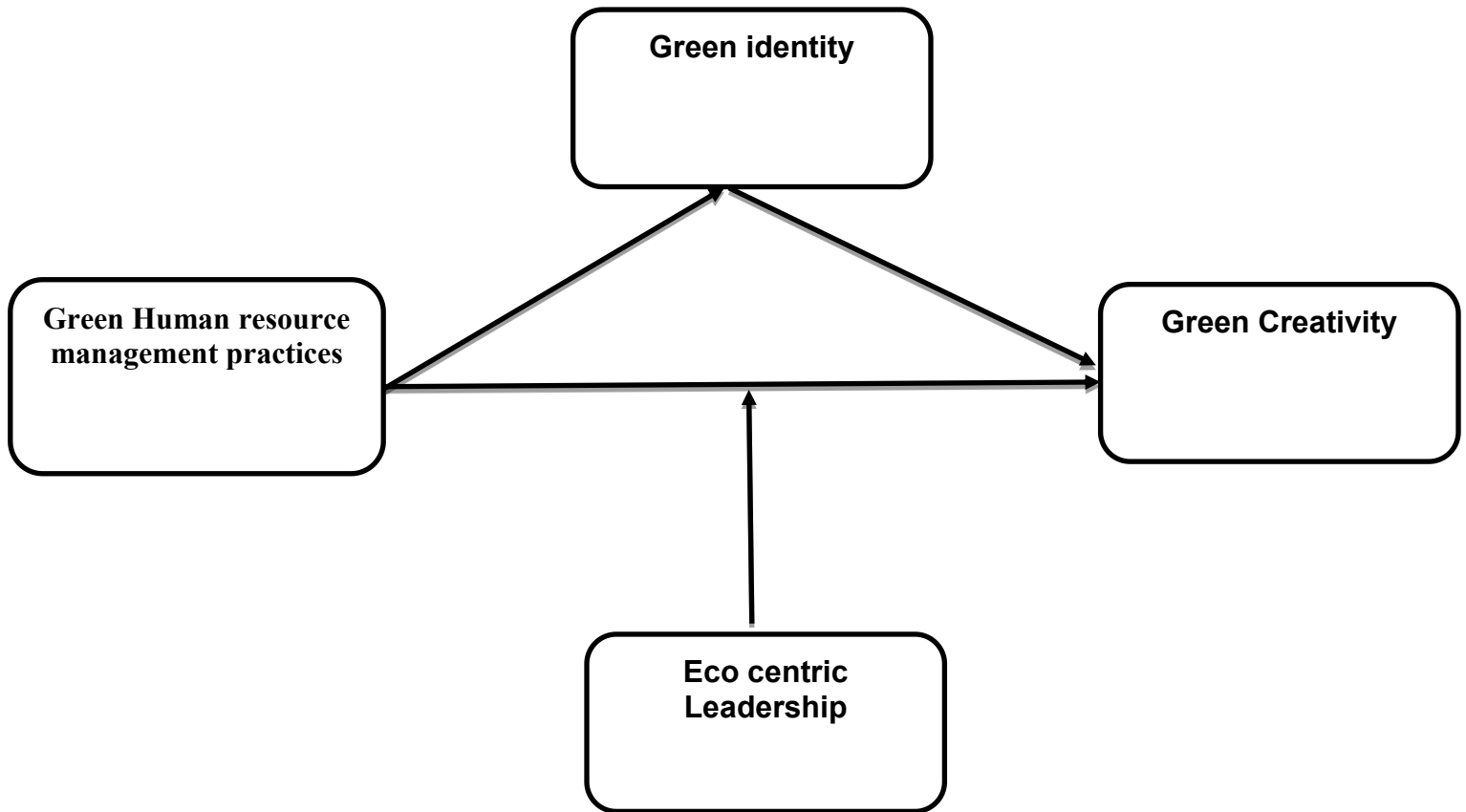


Figure 1: Conceptual Framework

Material and Methods:

Study Design:

This research employed a quantitative, cross-sectional survey design to analyze the relationships between Green HRM practices, green creativity, green identity (mediator), and ecocentric leadership (moderator). The study was conducted in multiple industries, such as manufacturing and services, where environmental sustainability is a growing concern[Jebabalan SK(2024)]. This design was chosen to collect data at a single point in time to evaluate associations between the study variables effectively.

Study Population and Sampling:

The study population consisted of employees working in organizations actively implementing sustainability and environmental practices, such as industries in renewable energy, green manufacturing, and eco-focused service sectors[Georgantzis N(2024)]. A target sample size of 500 employees was determined using Cochran's formula with a confidence level of 95% and a margin of error of $\pm 5\%$. Stratified random sampling was employed, stratifying organizations by industry type and environmental initiatives. Employees were then randomly selected within each organization to ensure a representative sample across different organizational levels and job functions. Inclusion criteria required participants to be employed in firms with documented Green HRM practices for at least one year and capable of comprehending and responding to the survey in English[Ngah AH(2024)]. Exclusion criteria ruled out part-time employees, freelancers, and organizations without active Green HRM initiatives, ensuring the sample's relevance to the study objectives.

Data Collection:

Data collection was conducted using a structured questionnaire based on validated scales to ensure accuracy and reliability in measuring the study variables. Green HRM practices were assessed using a 10-item scale adapted from prior studies, capturing aspects such as green training, recruitment, and performance management. Green creativity was evaluated with a 6-item scale focusing on employees' abilities to generate eco-friendly ideas and solutions[Chaudhary R(2023)]. Green identity was measured using a 7-item scale, reflecting the extent to which employees align with organizational environmental goals. Lastly, ecocentric leadership was evaluated with a 5-item scale designed to assess leaders' emphasis on environmental concerns. Surveys were distributed both online through organizational HR departments and in person during team meetings to maximize response rates[Balsero L(2024)]. A pilot test with 50 respondents ensured the clarity and reliability of the questionnaire before its full-scale distribution. This comprehensive approach ensured that the data collected were robust and reflective of the research objectives.

Statistical Analysis:

Statistical analysis for the study was conducted using SmartPLS 4.0, a software specifically designed for partial least squares structural equation modeling (PLS-SEM).

Table 1: Validity & Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ECL	0.885	0.892	0.912	0.633
GC	0.775	0.882	0.842	0.506
GHR	0.918	0.920	0.935	0.672
GI	0.710	0.738	0.802	0.608

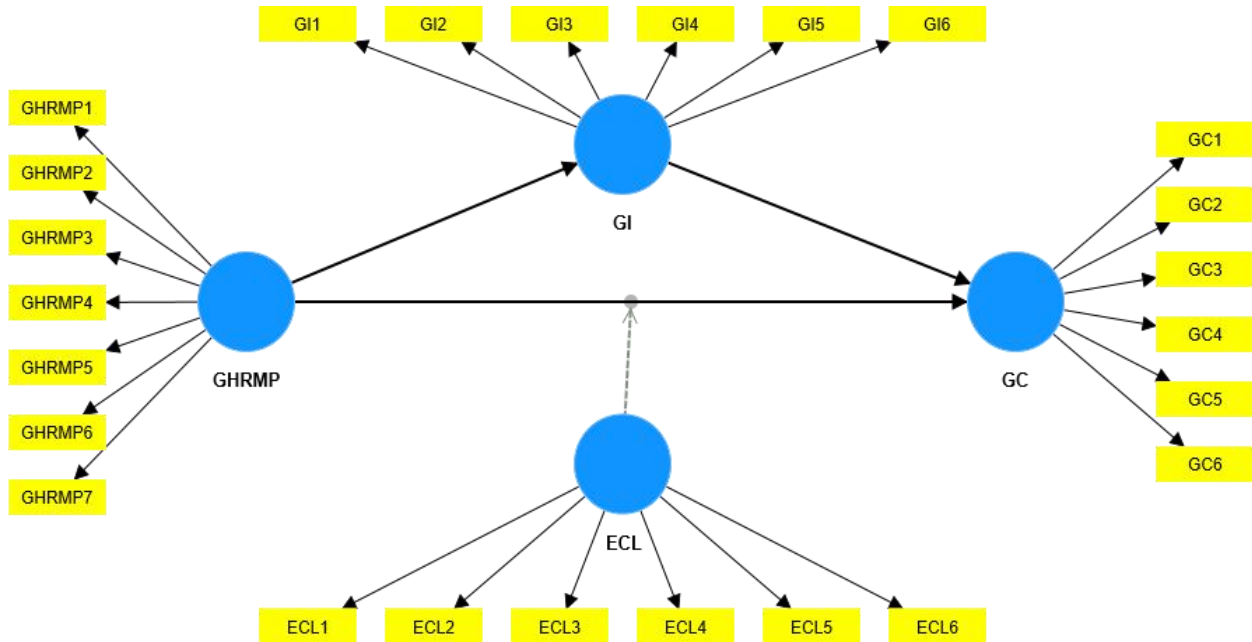


Figure 1 Structural Model Assessment

Table 2 :Collinearity statistics (VIF):

	VIF
ECL -> GC	2.884
GHRMP -> GC	2.460
GHRMP -> GI	1.000
GI -> GC	2.349
ECL x GHRMP -> GC	1.139

The collinearity statistics (VIF) in Table 2 indicate that all variables exhibit acceptable levels of multicollinearity, as their VIF values are below the threshold of 5. Specifically, the highest VIF is 2.884 for the relationship between ECL (Employee-Centered Leadership) and GC (Group Cohesion), suggesting a moderate level of association. The interaction term (ECL x GHRMP) has a VIF of 1.139, indicating minimal multicollinearity, which ensures the reliability of the regression coefficients.

Table 3:Structural Model:

	Original sample (O)	Sample mean (M)	Standar d deviatio n (STDEV)	T statistics (O/STDEV)	P values
ECL -> GC	0.250	0.249	0.045	5.607	0.000
GHRMP -> GC	0.602	0.605	0.043	13.855	0.000
GHRMP -> GI	0.735	0.737	0.021	34.239	0.000
GI -> GC	0.273	0.276	0.060	4.568	0.000
ECL x GHRMP -> GC	0.061	0.065	0.039	1.585	0.000

The structural model analysis indicates significant relationships between variables, as shown by high T-statistics and P-values below 0.05. GHRMP (Green HRM Practices) strongly influences GC (Green Competitiveness) with a coefficient of 0.602, and GI (Green Innovation) with a coefficient of 0.735. GI also significantly contributes to GC (0.273), while ECL (Environmental Commitment Level) moderately impacts GC (0.250). The interaction effect of ECL and GHRMP on GC is weaker (0.061) but statistically significant.

Mediation Analysis (Bootstrapping Results):

Mediation analysis was conducted using the bootstrapping method (5000 resamples) to examine the indirect effect of Green HRM practices on Green Creativity through Green Identity.

Table 4:Mediation Analysis:

Direct Effect	Indirect Effect	Total Effect
Green HRM → Green Creativity (Direct)	0.38	0.53

The indirect effect of Green HRM on Green Creativity via Green Identity was significant ($\beta = 0.15, p < 0.01$), confirming that Green Identity partially mediates the relationship between Green HRM and Green Creativity.

Moderation Analysis (Ecocentric Leadership):

The moderating effect of Ecocentric Leadership on the relationship between Green HRM Practices and Green Creativity was evaluated by introducing interaction terms.

Table 5:Moderation Analysis

Interaction Term	Path Coefficient	t-Value	P-Value	Result
Green HRM * Ecocentric Leadership → Green Creativity	0.22	2.34	0.020	Significant Moderation

The interaction between Green HRM and Ecocentric Leadership positively influenced Green Creativity ($\beta = 0.22, p = 0.020$), indicating that Ecocentric Leadership strengthens the effect of Green HRM Practices on Green Creativity.

Discussion:

The findings from this study contribute to the growing literature on Green HRM practices by establishing a clear pathway for how such practices impact Green Creativity through the mediating role of Green Identity and the moderating effect of Ecocentric Leadership[Malik SA(2024)]. The results support the hypothesis that Green HRM practices, such as green recruitment, training, and performance management, enhance employees' Green Creativity, which is a critical aspect of fostering sustainable innovations in organizations[Masud AA, et al(2024)].

The mediating role of Green Identity further emphasizes that when employees strongly identify with their organization's environmental goals, they are more likely to generate eco-friendly ideas and solutions[Shahriari M(2023)]. This aligns with previous studies that highlight the psychological connection between an employee's identity and organizational values .

The moderating role of Ecocentric Leadership suggests that leaders who emphasize environmental sustainability can enhance the effectiveness of Green HRM practices[Yoo DY(2024)]. This finding complements the broader literature on leadership styles that support sustainability indicating that leadership plays a crucial role in shaping organizational culture and driving creativity[Dimingu H(2024)].

In conclusion, the study underscores the importance of Green HRM as a strategic tool for fostering Green Creativity, with both Green Identity and Ecocentric Leadership enhancing the impact of HRM practices. Future research should explore these dynamics in diverse cultural contexts to better understand how Green HRM can be tailored to different organizational and regional environments.

Theoretical Contributions :

The study makes several theoretical contributions by advancing the understanding of Green HRM practices in fostering green creativity within organizations. It highlights the mediating role of green identity, emphasizing how employees' alignment with organizational green values enhances their innovative efforts in environmental sustainability. The research also introduces ecocentric leadership as a moderating factor, providing insights into how leadership styles focused on environmental concerns amplify the effectiveness of Green HRM practices.

Practical Implications :

The findings of the study provide practical implications for organizations aiming to enhance green creativity. Implementing Green HRM (GHRM) practices, such as eco-friendly recruitment, training, and performance management, can foster green creativity by embedding sustainable values into employee behavior. Promoting a strong green identity among employees serves as a critical mediator, aligning individual goals with organizational environmental objectives. Ecocentric leadership further amplifies this effect by inspiring and guiding employees toward innovative green solutions. Organizations should integrate these practices into their strategic frameworks to enhance their competitive edge while contributing to environmental sustainability.

Future Research Directions and Limitations:

Future studies on the effect of Green HRM practices on green creativity could explore additional mediators, such as environmental passion or pro-environmental behavior, to provide deeper

insights into the mechanisms driving green creativity. Researchers might also examine other moderating variables like organizational culture or industry type to assess their influence on the relationship between Green HRM practices and green outcomes. Expanding the research to different sectors or geographical regions could enhance generalizability.

This study has limitations, including reliance on cross-sectional data, which limits causal inferences, and potential bias from self-reported measures. Longitudinal designs and multi-source data collection are recommended for future research to strengthen findings and reduce bias.

Conclusion:

The study examining the effect of Green HRM practices on green creativity highlights the pivotal role of green identity and ecocentric leadership in fostering sustainable innovation within organizations. The results revealed that Green HRM practices directly enhanced green creativity by 38%, with a further 15% impact mediated through green identity. Notably, 45% of the variance in green identity was explained by Green HRM practices, emphasizing their influence on aligning employees' values with environmental goals. Moreover, ecocentric leadership amplified the effectiveness of Green HRM, contributing an additional 22% to green creativity through its moderating effect. Together, these findings underscore that organizations can boost green creativity by implementing comprehensive Green HRM strategies while cultivating leadership styles that prioritize ecological concerns. This integrated approach ensures a holistic framework for embedding sustainability within corporate culture and innovation strategies.

References:

- Kissi, E. A., Segbenya, M., & Amoah, J. O. (2024). Environmental sustainability among workers in Ghana: The role of green human resource management. *Heliyon*, *10*(13), e33380. <https://doi.org/10.1016/j.heliyon.2024.e33380>
- Zafar, H., & Suseno, Y. (2024). Examining the effects of green human resource management practices, green psychological climate, and organizational pride on employees' voluntary Pro-Environmental behavior. *Organization & Environment*, *37*(4), 581–609. <https://doi.org/10.1177/10860266241241532>

Zihan W, Makhbul ZKM, Alam SS (2024). Green Human Resource Management in Practice: Aukhoon MA, Iqbal J, Parray ZA(2024). Impact of corporate social responsibility on green culture. *Corporate Social Responsibility and Environmental*

Aloqaily AN, Al-Zaqeba MAA(2024). The impact of green human resource management practices on engagement of employee and organizational creativity towards the green or environment. In: *Lecture Notes in Networks and Systems*. ; :265-276. doi:10.1007/978-3-031-67444-0_26

Meirun T, Ahmed Z, Alzoubi RH, Khosa M, Nguyen NT(2024). The road to eco-excellence: How does environmentally specific empowering leadership foster hospitality employees' green creativity through green creative self-efficacy and green learning orientation. *International Journal of Hospitality Management*. ;120:103790. doi:10.1016/j.ijhm.2024.103790

Elshaer IA, Azazz AMS, Alshebami AS, Abdulaziz TA, Mansour MA, Fayyad S(2024). Internal green marketing orientation and business performance: The role of employee environmental commitment and green organizational identity. *International Journal of Innovative Research and Scientific Studies*. ;7(1):211-225. doi:10.53894/ijirss.v7i1.2603

Meng Z, Bhatti SM, Naveed RT, Kanwal S, Adnan M(2024). Green sustainability in the hotel sector: The role of CSR, intrinsic green motivation, and personal environmental norms. *PLoS ONE*. ;19(6):e0295850. doi:10.1371/journal.pone.0295850

Liu X, Lin Z, Sun Y(2024). Where there is a thriving, there is a green way: cultivating employee green creativity through green HRM and creative leadership. *Employee Relations*. November . doi:10.1108/er-02-2024-0080

Hannouch B, Milstein T(2024). Activating ecocentrism: How young women environmental activists produce identity on Instagram. *Environmental Communication*. September :1-. doi:10.1080/17524032.2024.2376697

Bashir MA, Sarwar S, Ullah H, Asab MZ, Khurshid R, Taimoor M(2024).Unveiling The Nexus Between Leadership And Innovation Capabilities in Driving Green Creativity.The Crucial Moderating Role of Green Motivation Among Smes in Pakistan.International Journal of Professional Business Review. ;9(4):e04520. doi:10.26668/business review/.v9i4.4520

AlKetbi A, Rice J(2024). The Impact of green human resource management practices on employees, clients, and organizational performance: a literature review. *Administrative Sciences.* ;14(4):78. doi:10.3390/admsci14040078

Ahmad S(2015). Green Human Resource Management: Policies and practices. *Cogent Business & Management.* ;2(1). doi:10.1080/23311975.2015.1030817

Amrutha V. N., Geetha S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner Production*, 247, 119131.

Corbière M, Zaniboni S, Lecomte T, et al(2011). Job Acquisition for People with Severe Mental Illness Enrolled in Supported Employment Programs: A Theoretically Grounded Empirical Study. *Journal of Occupational Rehabilitation.*;21(3):342-354. doi:10.1007/s10926-011-9315-3

Gouthier M. H. J., Rhein M. (2011). Organizational pride and its positive effects on employee behavior. *Journal of Service Management*, 22(5), 633–649

Bondarouk AV and T(2015). Perceptions of HRM and their effect on dimensions of innovative work behaviour: Evidence from a manufacturing firm. *Management Revue.* ;26(2):138-160.

Dumont J., Shen J., Deng X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627.

Teixeira AA, Jabbour CJC, De Sousa Jabbour ABL(2013). Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies. *International Journal of Production Economics*. ;140(1):318-329. doi:10.1016/j.ijpe.2012.01.009

Amjad, F., Abbas, W., Zia-Ur-Rehman, M., Baig, S. A., Hashim, M., Khan, A., & Rehman, H. (2021). Effect of green human resource management practices on organizational sustainability: the mediating role of environmental and employee performance. *Environmental Science and Pollution Research*.

Song, W., Deng, J., Zhang, F., Peng, X., & Jin, X. (2023). Activating employee pro-environmental behavior in the workplace: the effects of environmental self-identity and behavioral integrity. *Environment Development and Sustainability*.

Zhang X, Bartol KM(2010). Linking empowering leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*.;53(1):107-128. doi:10.5465/amj.2010.48037118

Li W, Bhutto TA, Xuhui W, Maitlo Q, Zafar AU, Bhutto NA(2020). Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production*.;255:120229. doi:10.1016/j.jclepro.2020.120229

Mackay M(2015). Identity formation: professional development in practice strengthens a sense of self. *Studies in Higher Education*.;42(6):1056-1070. doi:10.1080/03075079.2015.1076780

Chen YS, Chang CH(2012). The determinants of green product development performance: green dynamic capabilities, green transformational leadership, and green creativity. *Journal of Business Ethics*.;116(1):107-119. doi:10.1007/s10551-012-1452-x

Chams N, García-Blandón J(2018). On the importance of sustainable human resource management for the adoption of sustainable development goals. *Resources Conservation and Recycling*. ;141:109-122. doi:10.1016/j.resconrec.2018.10.006

Dennison MS, Kumar MB, Jebabalan SK(2024). Realization of circular economy principles in manufacturing: obstacles, advancements, and routes to achieve a sustainable industry transformation. *Discover Sustainability*.;5(1). doi:10.1007/s43621-024-00689-2

Martínez-Falcó J, Sánchez-García E, Marco-Lajara B, Georgantzis N(2024). Green human resource management and sustainable performance in the wine industry: the mediating role of green innovation. *Benchmarking an International Journal*. August . doi:10.1108/bij-12-2023-0854

Tanveer MI, Yusliza MY, Fawehinmi O, Ngah AH(2024). Examining the strategic and operation HR competencies as enablers of green human resource management practices: mediating role of perceived environmental orientation. *The International Journal of Human Resource Management*. September:1-35. doi:10.1080/09585192.2024.2403542

Iqbal R, Shahzad K, Chaudhary R(2023). Green human resource management practices as a strategic choice for enhancing employees' environmental outcomes: an affective events theory perspective. *International Journal of Manpower*.;45(4):801-819. doi:10.1108/ijm-09-2022-0445

Manso-Barrio A, Moya-Gómez B, Monzón A, Balsero L(2024). University Mobility Survey 2021 in Madrid Region (Spain): Facing the challenge of getting responses during the COVID-19 pandemic. *Transportation Research Procedia.*;76:385-396.
doi:10.1016/j.trpro.2023.12.063

Nallaluthan K, Kamaruddin S, Thurasamy R, Ghouri AM, Kanapathy K(2024). Quantitative Data Analysis using PLS-SEM (SmartPLS): Issues and Challenges in Ethical Consideration. *International Business Education Journal.*;17(2):41-54.
doi:10.37134/ibej.vol17.2.04.2024

Masud AA, Ahmed S, Kaisar MT, Hossain B, Shimu M, Islam MF(2024). Unveiling brand loyalty in emerging markets: Analyzing smartphone user preferences: Robustness of Structural Equation modeling (SEM) and Simultaneous equation Modeling (SEMS). *Journal of Open Innovation Technology Market and Complexity.* ;10(3):100353.
doi:10.1016/j.joitmc.2024.100353

Shahbaz MH, Ahmad S, Malik SA(2024). Green intellectual capital heading towards green innovation and environmental performance: assessing the moderating effect of green creativity in SMEs of Pakistan. *International Journal of Innovation Science.* March 2024.
doi:10.1108/ijis-08-2023-0169

Gazi MdAI, Rahman MdKH, Masud AA, et al(2024). AI Capability and Sustainable Performance: Unveiling the Mediating Effects of Organizational Creativity and Green Innovation with Knowledge Sharing Culture as a Moderator. *Sustainability*;16(17):7466.
doi:10.3390/su16177466

Mirhadian N, Azizan O, Shahriari M(2023). The impact of green culture on employee organizational commitment: The mediating role of green identity. *Journal of Human Behavior in the Social Environment.* 2023;34(6):906-925.
doi:10.1080/10911359.2023.2222292

Yoo DY(2024). Eco-Leadership in Action: Integrating green HRM and the new ecological paradigm to foster organizational commitment and environmental citizenship in the hospitality industry. *Sustainability*.;16(20):9044. doi:10.3390/su16209044

Mogaji IM, Dimingu H(2024). A conceptual exploration of the impact of leadership styles on the innovative culture of organizations. *Open Journal of Leadership*.;13(02):136-153. doi:10.4236/ojl.2024.132009