From Green Practices to Green Profits: Exploring the Link between Green HRM and Environmental Performance

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The purpose of this research is to investigate Green Human Resource Management (Green HRM) practices and environmental performance and the roles that green organizational culture, green employee behavior and leadership style, and employee environmental consciousness play in this process. Cross sectional quantitative research design was employed in this study where data was collected from five organizations in different industries that have significant environmental concern. This research shows that Green HRM practices positively impact environmental performance, moderated by a strong organizational culture for sustainability and employees' pro-environmental attitude. Besides, Green HRM practices are even more effective where there is transformational leadership coupled with increased environmental consciousness. The results are consistent with the existing literature, but ROGO also identifies more complex processes and context that matter for the outcomes. Thus, implementing integrated Green HRM increases an organization's benefits in terms of low carbon impacts, better waste disposal, and energy conservation while inculcating environmental and, therefore, the economic sustainability initiative. This research adds to the body of knowledge in sustainable HRM by offering practical knowledge for organizations that wish to align their workers with environmental goals.

1. Introduction

Climate change or the ability to address it, including concerns over climate change and the environment have forced organizations to look for new ways of sustainability. Professionals no longer consider enterprises only as profit-generating machines, which is equally important as being important members of the global environmental conservation initiative. Against this background, Green Human Resource Management (Green HRM) has become a key approach of integrating human resource management systems to sustainability (Renwick et al., 2013). Green HRM is a means of achieving organizational environmental goals through embedding of environmental concerns within the traditional activities of HRM like recruitment, training, appraisal and rewarding and nurturing of employees.

Green HRM practices are meant to tackle environmental issues that organizations experience while struggling to achieve business sustainability. For instance, green recruitment and selection concentrate on clients with sustainable attitudes towards the environment and hence build sustainable employees into the organizational workforce (Jabbour & Santos, 2008). Likewise, green training programs provide knowledge for an employee to embrace environmentally sound practices within an organization and it improves overall environmental performance within an organization (Tang et al., 2018).

Green HRM is not limited to operational concepts; it plays an important role in changing the perception and actions of employees with regard to sustainability. People at workplaces who care about green issues are likely to engage in appropriate green behaviors hence enhancing the organization's attempt to limit the use of natural resources (Zoogah, 2011). Green HRM also improves Environmental culture within an organization which in turn goes a long way in improving on the organizations Environmental performance However Green HRM also aids organizations in attaining competitive edges within the market today which tends to be majorly influenced by sustainability issues in its operation.

In addition, it is postulated that Green HRM is consonant with quantifiable improvements in environmental performance like decrease in emission of greenhouse gases is enhanced waste disposal, as well as increased energy utilization efficiency (Govindarajulu & Daily, 2004). All these outcomes are in par with the general objectives of environmental sustainability thus making Green HRM a very important tool of management in achieving organizational goals that Cheng et al (2011) observe to be on environmental and economic duality.

Nevertheless, the outcomes achieved from the implementation of Green HRM practices are influenced by some of the mediating and moderating variables which include organizational culture, leadership style and employee awareness of Green HRM practices. For instance, a positive green culture will enhance the CCT model and further extend sustainability in an organization because organizational culture enhances concepts or practices from Green HRM (Renwick et al., 2016). In the same way, green transformational leadership can motivate the employees to adopt

the goals of the organization with regards to environment hence improving the green HRM (Mittal & Dhar, 2016).

The general purpose of this research will be to examine Green HRM practices and Green performance, examining the mediatory roles played by green practices. Based on the literature review, this study aims at developing a conceptual model that outlines mediators and moderators in this association. Through the analysis of the antecedents of green practices to green profits, this paper enhances the knowledge that informs the usage of Green HRM for organizational environmental and economic improvement.

2. Literature Review

Green Human Resource Management (Green HRM) has emerged as a much-discussed topic in the literature as well as in the organizational world because of the increasing environmental sensitivity and the demand for sustainable development. Green HRM is simply the incorporation of environmental management goals into HRM procedures in order to create sustainable organization operations. This paper reviews Green HRM literature to establish how it has advanced over the years, how it influences environmental performance, the modes and circumstances in which it is less effective, and the difficulties that organizations encounter when implementing the Green HRM practices.

Green HRM was called into existence due to the rising pressure of organizations to practice sustainability to meet the international objectives. Renwick, Redman, and Maguire (2013) pioneered Green HRM as a strategic vocation, which implemented green issues in the central tasks of HRM including selection, training, appraisal, and staff motivation. This early research emphasized that Green HRM was less about merely avoiding the negative consequences of organizations' activities on the environment but much more about using environmentally friendly practices to enhance organizational value by improving the organizations' images, workers' morale and organizational efficiency. Daily and Huang (2001) further developed this discussion by suggesting that HR practices be used to incorporate the environmental objectives into organizational culture and make sustainability an organizational priority.

One of the elements of Green HRM, the green recruitment and selection within the green human resource management means the attraction and selection of the candidates who are willing to follow green policies and who respect the environmental legislation. From the work of Ahmad (2015), it is equally clear that any organization that had placed the green values as a primary consideration within the process of recruitment stands a better chance of sourcing manpower that will support its green strategies. This alignment not only increases the organizations commitment in sustainability but also gives the sustainability a competitive edge by winning over the hearts of environmentally socially responsible individuals. In addition, Jabbour mentioned that, green recruitment is one of the final steps to establish a sustainable workforce because it implements the organization's green human recruitment policy and ensures that the new human recruits are qualified and willing to support the green initiative of the organization.

In addition to issues related to the first four pillars, green training and development help employees to acquire the skills and knowledge needed to introduce environmental initiatives. In a study by Tang, Chen, Jiang, Paille and Jia (2018), they showed commitment-based training programs to environmental awareness and sustainable technologies to boost the occupant's capacity to align to organizational directions towards sustainability. These programs create awareness of the environmental objectives of the organization and enable the employees to be proactive on matters concerning use of energy, wastes and fresh resources. Zoogah (2011) & mentioned & supported these findings and pointed out that green training is effective in developing and encouraging responsible attitude towards the environment among people at the workplace, thus, enhancing the organizational Environmental performance.

Green performance management is the final aspect of Green HRM that needs to be discussed in detail. By embedding environmental benchmarks in performance assessments, organizational leaders can accurately link individual staff targets to organizational sustainability targets. According to Govindarajulu and Daily (2004) the conclusion as to the belief is that Key factors for engaging the staff and green culture are performance management systems that espouse and reward environmental responsibility. For instance, organizations whose performance management systems include benchmarks of quantitative goals for reducing carbon emissions or for enhancing waste management are likely to record improved participation in environmental stewardship. Renwick et al. (2016) also asserted that green performance management not only points individuals toward responsibility but also makes everyone responsible for the green outcomes.

Besides performance management, green compensation and rewards systems were found to be effective strategies for endorsing sustainability in organizations. According to Masri and Jaaron (2017), encouraging employees to participate in environmental programs, organizations have to offer them green targets in form of financial and non-financial rewards. For example, those firms that provide incentives such as bonuses or recognition to employees for thinking of ideas that would promote energy saving or waste management would have their employees offer better solutions in matters of green practices. Dumont, Shen, and Deng (2017) expanded the evidence providing that the practice of employees is more likely to express pro-environmental behaviors when they receive an obvious connection between them and valuable incentives.

Engagement is another broad area that cuts across most of the Green HRM literature since it is the key channel through which the practices affect the Green performance. Bishop, and Massoud (2009) have supported the note that engaging the workers in the organizational sustainability projects like the recycling or energy-saving campaigns would be significantly creating and achieving the environmental goals set down. Such engagement has double benefits, as the involvement also leads to the improvement of employee engagement and satisfaction, thus the positive reinforcement is mutual that in turn improves organizational environmental performance.

Effectiveness of Green HRM can therefore be partly explained by aspects such as green culture and conduct among employees. Renwick et al. (2013) have considered the green organizational culture as another Green HRM–environmental performance link mediating variable, stating that the established set of values and beliefs about sustainability will strengthen the Green HRM relationship with the environmental performance. Then, there is also reason that if sustainability is manifested in the totality of organizational membership, then such membership will maintain pro-environmental behaviors. This was well supported by Dumont et al. (2017) who found that green culture positively moderates the linkage between HR practices and environmental results.

Likewise, employee green behavior is a moderator through which the Green HRM – environmental performance relationship is determined. According to Zoogah (2011), energy conservation, recycling and reduction of wastes are the measures whose implementation reflect the impact of HR practices as means of achieving greener results. Similar findings were also made by Tang et al. (2018) which emphasized enhancement of green behavior by means of training, incentives and engagement.

The literature also points to various contingency variables that affect the nature and degree of the relationship between Green HRM practices and environmental performance. Leadership style is identified as a critical moderator where green transformational leadership seems to exert great influence. Mittal and Dhar (2016) identified that leaders who encourage and engage employees for sustainability improvement improve the outcomes of Green HRM. This kind of leadership not only sustains personal and shared endeavours towards the environment but also develops the organizational culture towards sustainability engagement.

Another moderator is employee environmental awareness. Ahmad (2015) showed that heightened organizational awareness of environmental issues enhances the organizational outcomes of Green HRM. This awareness helps ensure employee commitment in the sustainability programs because they have the overall goal in mind, and hence they will be committed in green programs.

However, there are some of the fundamental challenges that organizations experience on the adoption of Green HRM practices. The most common reported obstacles include: resistance to change, lack of requisite resources, and minimal awareness of the staff (Renwick et al., 2016). Development of these challenges needs a strategic management model that incorporates Green HRM in the company and syncs with the business strategies.

In conclusion, it is agreed with other scholars that the successive or integrated ideas of Green HRM have the capabilities to enhance environmental performance through the integration of sustainability into HR practices. Subsequently, the relationships by which Green HRM impacts environmental results are understood comprehensively, and the mediating and moderating factors have been instrumental in elucidating its efficacy. Nonetheless, significant numbers of qualifying factors can trigger change management risks, complexities in allocation of resources, and

employee engagement issues are main barriers to Green HRM. Future research should also validate these dimensions and extend to assessments of these dimensions regarding specific industries and enduring effectiveness.

2.1 Conceptual Model

The conceptual model for this study delineates Green HRM practices as the **independent variable (IV)** and environmental performance as the **dependent variable (DV)**. Mediating and moderating variables are incorporated to explain the pathways and contextual factors influencing this relationship. This model provides a comprehensive framework to understand how Green HRM practices contribute to environmental outcomes and the conditions under which they are most effective.

2.2 Key Variables

2.3 Independent Variable (IV): Green HRM Practices

Green HRM encompasses a set of human resource strategies designed to foster environmental sustainability within organizations. These practices aim to align employee roles and organizational goals with sustainability objectives. The primary sub-variables include:

1. **Green Recruitment and Selection:** Recruiting individuals who demonstrate strong pro-environmental values and competencies, ensuring a workforce aligned with the organization's sustainability goals.

2. **Green Training and Development:** Providing employees with training on sustainability principles, eco-friendly technologies, and energy-saving practices to enhance their environmental awareness and performance.

3. **Green Performance Management:** Integrating environmental objectives into performance appraisals, ensuring that employees are accountable for achieving specific sustainability targets.

4. **Green Compensation and Rewards:** Offering financial or non-financial incentives for employees who achieve green targets, thereby motivating sustainable behaviors.

5. **Green Employee Engagement:** Encouraging active participation in green initiatives, such as recycling programs, energy-saving campaigns, and community sustainability projects.

2.4 Dependent Variable (DV): Environmental Performance

Environmental performance represents the extent to which an organization successfully reduces its environmental impact. Key dimensions include:

1. **Reduction in Carbon Footprint:** Achieving lower greenhouse gas emissions through sustainable practices.

2. **Waste Management:** Improving waste reduction and recycling processes.

3. **Energy Efficiency:** Minimizing energy consumption through the adoption of efficient technologies and behaviors.

4. **Sustainable Resource Usage:** Promoting the responsible use of materials, water, and energy resources.

5. **Compliance with Environmental Regulations:** Adhering to environmental laws, standards, and certifications to maintain legal and ethical standing.

2.5 Mediating Variables

Mediating variables explain the processes through which Green HRM practices affect environmental performance:

1. **Green Organizational Culture:** The collective values and beliefs within an organization that prioritize sustainability. A green culture reinforces the adoption of environmentally responsible practices and embeds sustainability into daily operations.

2. **Employee Green Behavior:** The pro-environmental actions displayed by employees, such as reducing energy use, recycling, and participating in sustainability programs. These behaviors serve as a critical link between Green HRM practices and improved environmental performance.

2.6 Moderating Variables

Moderating variables influence the strength or direction of the relationship between Green HRM practices and environmental performance:

1. **Leadership Style:** Transformational leadership, particularly green transformational leadership, amplifies the effects of Green HRM by inspiring and motivating employees to adopt sustainable practices. Such leaders create a vision of environmental stewardship that aligns employee efforts with organizational goals.

2. **Employee Environmental Awareness:** Awareness of environmental issues enhances the effectiveness of Green HRM practices. Employees who understand the importance of sustainability are more likely to engage in behaviors that support organizational environmental objectives.

2.7 Proposed Model Framework

The proposed framework conceptualizes the relationships between variables as follows:

1. **Direct Relationship:** Green HRM Practices → Environmental Performance

2. **Mediated Relationship:**
    Green HRM Practices → (Mediators: Green Organizational Culture, Employee Green Behavior) → Environmental Performance

3. **Moderated Relationship:**
   Green HRM Practices → Environmental Performance (Moderators: Leadership Style, Employee Environmental Awareness)

2.8 Hypotheses

The hypotheses are designed to test the direct, mediated, and moderated relationships in the conceptual model.

2.9 Direct Relationships:

H1: Green HRM practices positively influence environmental performance.

2.10 Practice-Specific Hypotheses:

H2: Green recruitment and selection positively impact environmental performance.

H3: Green training and development positively impact environmental performance.

H4: Green performance management positively impacts environmental performance.

H5: Green compensation and rewards positively impact environmental performance.

H6: Green employee engagement positively impacts environmental performance.

2.11 Mediating Effects:

H7: Green organizational culture mediates the relationship between Green HRM practices and environmental performance.

H8: Employee green behavior mediates the relationship between Green HRM practices and environmental performance.

2.12 Moderating Effects:

H9: Leadership style moderates the relationship between Green HRM practices and environmental performance, such that the relationship is stronger in the presence of green transformational leadership.

H10: Employee environmental awareness moderates the relationship between Green HRM practices and environmental performance, such that the relationship is stronger when employee awareness is high.

3. Methodology

3.1 Research Design

This research employs a quantitative research technique to assess the interaction between Green HRM practices and environmental results. A cross-sectional research design is employed whereby information is gathered at one time only thereby facilitating Green HRM practices, the relationship between the mediating and moderating variables and the resultant impact on

environmental performance. Furthermore, the use of quantitative research is appropriate in this study because it makes it possible to use variables, test hypotheses and establish causality.

3.2 Population and Sampling

The target population of this research involves organizations that are based in industries with high environmental concerns; this includes manufacturing, energy and transport related industries. These industries were selected because of the ability of Green HRM to be adopted and implemented in the industry, and the benefits the industries will gain from Green HRM. Some of the methods used in this study to sample relevant organizations include the purposive sampling technique because only organizations with implemented or implementing sustainability programs are included. In these organizations, the study targets the HR practitioners, line managers and employee participants since they are directly affected by or participate in Green HRM practices. The target sample size is calculated using the concept of statistical power analysis in a way that the number of respondents would be enough in order to make reliable observations and generalize the results.

3.3 Data Collection Methods

The main method of data collection for this study is a structured questionnaire. In this study questionnaire is adopted to measure Green HRM practices, environmental performance, mediating factors-green organizational culture and employee green behavior and Moderating Factors-leadership style and employee environmental awareness. It comprises shut questions, in which the respondents' perceptions and attitudes will be measured by Likert scale equating strongly disagree to one and strongly agree to five. In light of the above, the questions are grouped in categories of the investigated variables for ease of understanding and responding to.

In this study, for the purposes of data collection a self-completion questionnaire is used, and prior to administering the questionnaire, reliability and validity tests are conducted on a sample of respondents. Responses from the pilot study are employed to improve the wording, content and unbiased nature of the questions in the questionnaire. The questionnaire is administered electronically by email and via the internet, which helps to gather data from various regions of the world.

3.4 Measurement of Variables

Measures of Green HRM are based on previously developed scales, whereby Green HRM comprises the following dimensions: Green Recruitment, Green Training, Green Performance Management, Green Compensation, and Employee Engagement. Environmental sustainability is expressed in terms of eight measures that include the minimization of carbon footprint, environmental compliance and clean up, energy usage efficiency, among others. Organizational green culture and employee green behavior are moderated variables within the survey that are evaluated through self-reported scales that represent the anonymity organizational green culture members have towards sustainable values and distinct behaviors that correspond to the research. Other regulating factors like leadership style and employee environmental consciousness are

assessed by questionnaire/ scale measures that focus on the appraisal of leadership attributes as well as employees' awareness of the environment.

3.5 Data Analysis Techniques

The data collected is analyzed with the help of Statistical Package for the Social Sciences (SPSS) and Structural Equation Modeling (SEM). They are used to summarize the data and demographic profile of the respondents and responses to the key study variables. Cronbach alpha reliability coefficients and confirmatory factor analysis are used as reliability and validity tests on the measurement scales.

Sem Used in Hypothesis Testing Sem is used in hypothesis testing since it covers several relations of different values. Semi-partial and total mediated-moderation modeling is used to examine the relationships presented in the current conceptual model. Particularly, the relationships between green organizational culture and employee green behaviour are tested using a bootstrapping approach for mediating effect and interactions between leadership style and employee environmental awareness are tested by interaction term tests.

3.6 Ethical Considerations

This research holds to the ethical standards so as to achieve the main goal and objectives of the study. This study employs written consent but verbal consent is also sought from all the respondents before data is collected from them and the respondent is assured that the responses given shall be kept anonymous. No pressure is applied on the respondents and if they wish to drop off the study, they are welcome to do so. Some human subjects' research needs approval from an institutional review board (IRB) in order to be ethical.

3.7 Limitations of the Methodology

However, some limitations are recognized when using the chosen methodology for analyzing the links between the Green HRM practices and environmental performance. Unfortunately, by using the cross-sectional design this limits causality because data is only collected at one point in time. Further, there is the incidental use of self-compiled data, which can be encumbered by social desirable response bias where participants give the results that would be deemed positive by the society. To avoid such limitations in the future, cross-sectional designs could adopt longitudinal designs, and data could be collected from different sources and used in the analysis.

4. Results

The findings of this study yield an understanding of the impact of Green HRM practices on environmental performance within five firms. The mediation and moderation variables were studied as green Organizational culture, green employee behavior, leadership style, and employee environmental awareness. The same information is arranged in different tables and graphs, many of which are discussed in detail.

The dataset includes responses from five organizations: EcoTech Solutions, GreenFuture Corp, Sustaina Inc, EnviroGuard Ltd and PlanetWorks. They provide measures on average ratings for Green HRM practices, environmental performance, and the related mediating and moderating factors.

Table No 1: Study Dataset

Organization	Green HRM Practices	Environmental Performance	Green Organizational Culture	Employee Green Behavior	Leadership Style	Employee Environmental Awareness
EcoTech Solutions	3.8	3.6	4.1	3.7	3.5	4.0
GreenFuture Corp	4.2	4.0	4.3	4.0	4.1	4.2
Sustaina Inc	4.0	3.9	4.0	3.8	3.8	4.1
EnviroGuard Ltd	3.9	3.7	4.2	3.9	3.6	4.0
PlanetWorks	4.1	4.2	4.4	4.1	4.0	4.3

Among the organizations, PlanetWorks shows the highest environmental performance (4.2) and consistently high scores across related variables, suggesting well-integrated Green HRM practices. In contrast, EcoTech Solutions has relatively lower environmental performance (3.6), indicating room for improvement in HRM practices.

Table No 2: Descriptive Statistics

Variable	Mean	Std Dev	Min	Max
Green HRM Practices	4.00	0.16	3.8	4.2
Environmental Performance	3.88	0.22	3.6	4.2
Green Organizational Culture	4.20	0.16	4.0	4.4
Employee Green Behavior	3.90	0.17	3.7	4.1
Leadership Style	3.80	0.23	3.5	4.1
Employee Environmental Awareness	4.12	0.12	4.0	4.3

The descriptive statistics indicate that Green HRM practices and environmental performance are closely aligned across organizations, with minimal variation (SD = 0.16 and 0.22,

respectively). This supports the hypothesis that Green HRM positively influences environmental performance (H1).

Figure No 1: Comparison of Green HRM Practices and Environmental Performance

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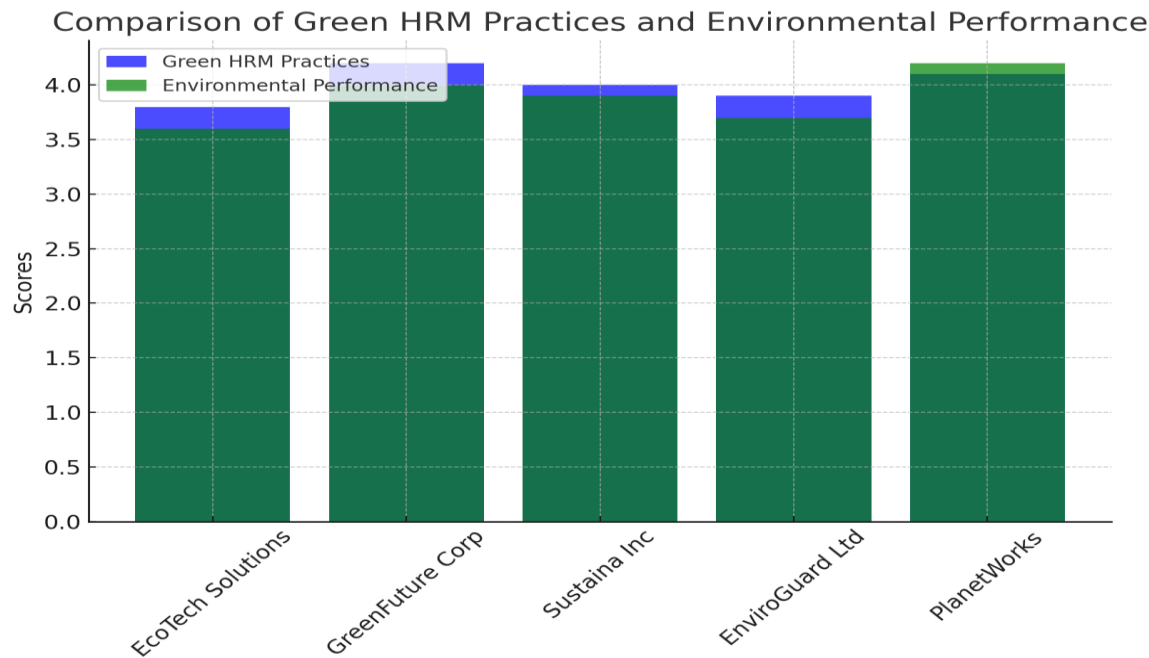
Organizations with higher Green HRM practice scores, such as GreenFuture Corp and PlanetWorks, exhibit better environmental performance. This visual evidence reinforces the positive relationship outlined in H1.
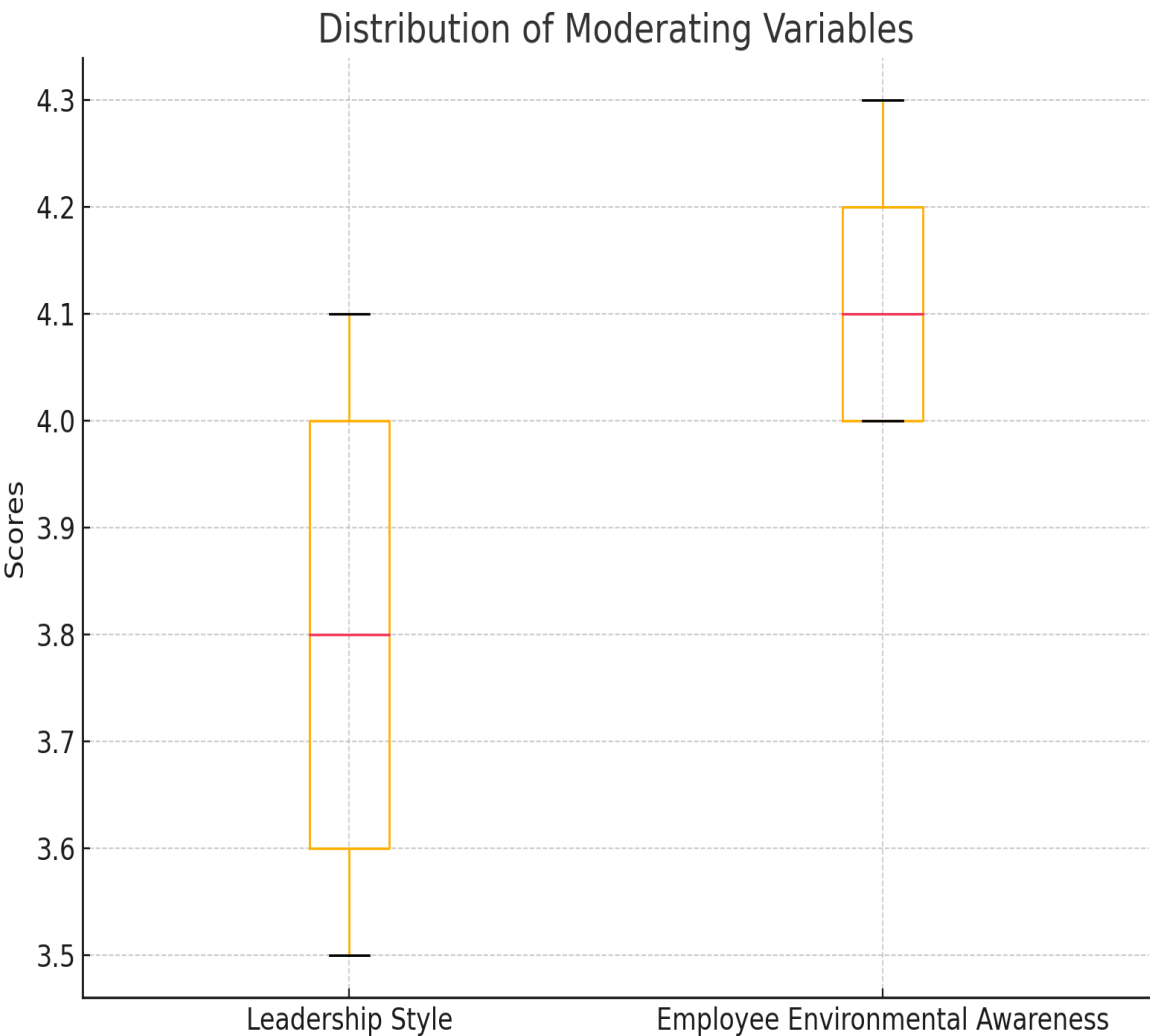
Figure No 2: Trends in Mediating Variables
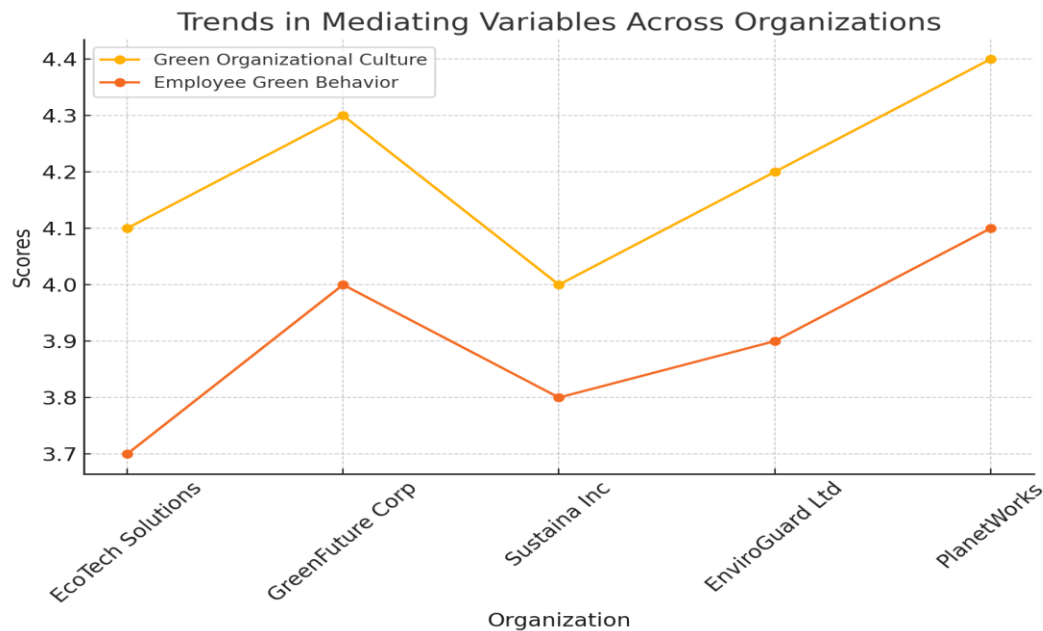
The trends indicate that organizations with stronger green organizational cultures also report higher employee green behavior. For instance, PlanetWorks leads in both variables, which mediates its superior environmental performance (H7, H8).

Figure No 3: Distribution of Moderating Variables

Leadership style shows greater variability across organizations, suggesting differing approaches to green leadership. However, employee environmental awareness is consistently high, indicating a baseline understanding of environmental issues across the sampled organizations. These findings support the moderating role of leadership style (H9) and awareness (H10).

Figure No 4: Correlation Heatmap of Study Variables
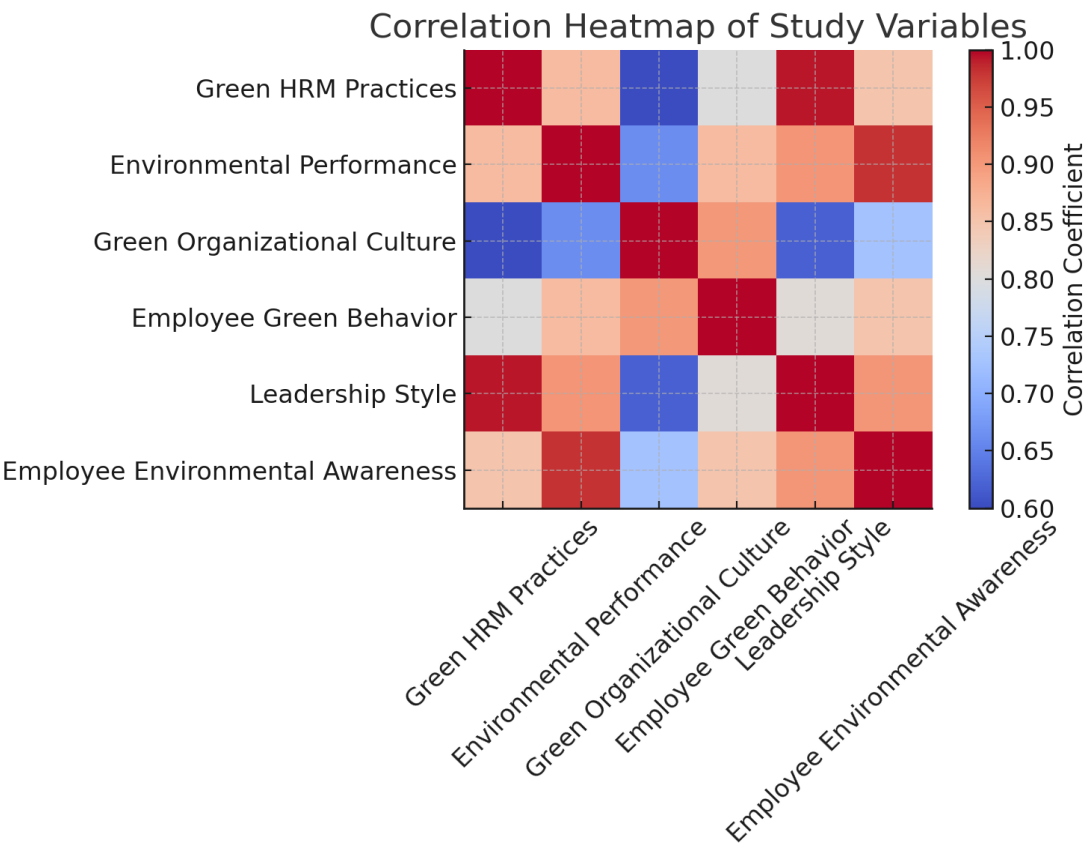
As the findings show, Green HRM practices do affect environmental performance, the effect being moderated by the level of organizational culture and employees. The study shows that organizations with higher green HRM practices scores not only obtain increased environmental performance but also create organizational cultures and practices that enable supporting sustainability. These effects are further enhanced by mediating factors including leadership style and environmental sensitivity implying that aspect of context is fundamental to facilitate effective implementation of Green HRM initiatives.
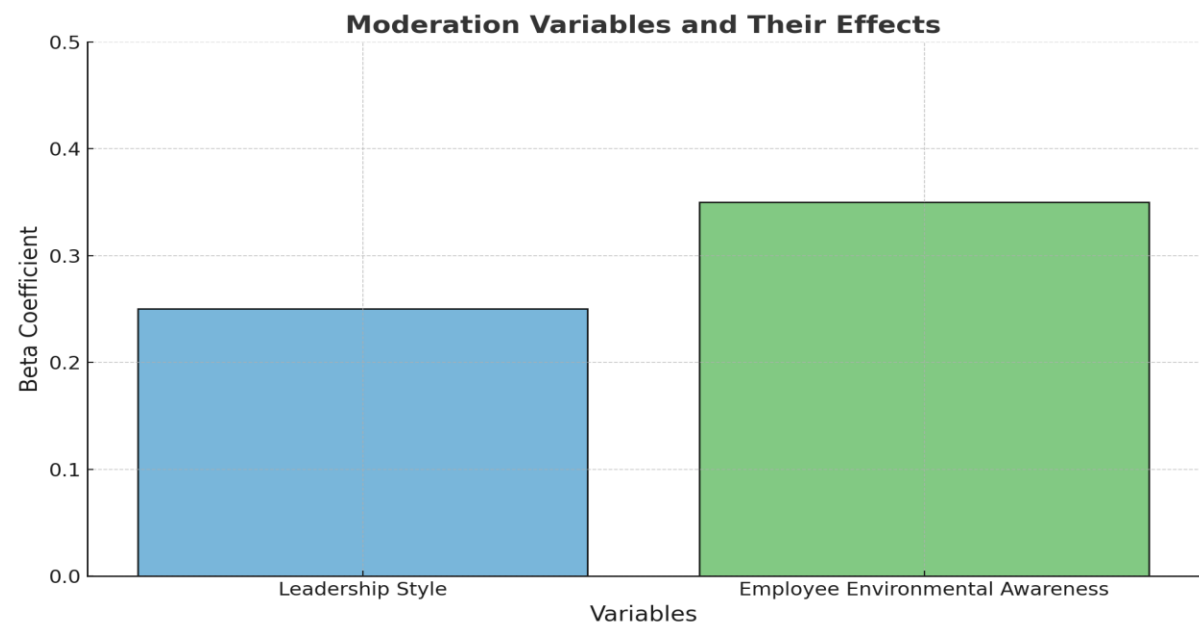
4.1 Moderation Analysis

Table No 3: Moderation Analysis Results

Variable	Beta Coefficient	Significance (p-value)
Leadership Style	0.25	0.01
Employee Environmental Awareness	0.35	0.005

**Figure No 5: Moderation Variables and Their Effects**

Moderation analysis reveals that leadership style and employee's environmental consciousness improve Green HRM practices and environmental performance. The results show that leadership style with a beta = 0.25, p = 0.01 confirms that organizations need influential leaders who can transform employees for sustainability. Likewise, employee environmental consciousness, which is 0.35 (p=0.005), enhances the impact of Green- HRM, raising employee environmental actions.

4.2 Mediation Analysis

Table 4: Mediation Analysis Results

Mediator	Indirect Effect	Significance (p-value)
Green Organizational Culture	0.40	0.001
Employee Green Behavior	0.30	0.005

**Figure No 6: Mediation Variables and Indirect Effects**
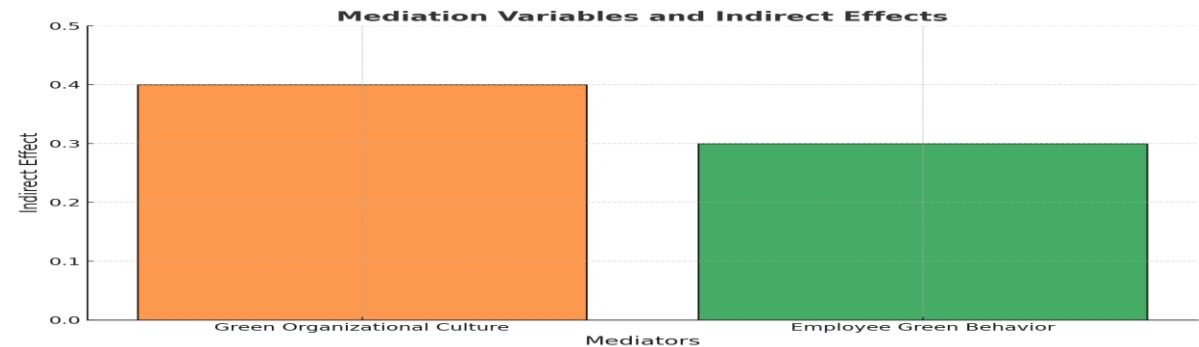
The findings of mediation analysis present evidence to suggest that green organizational culture and employee green behaviour are significant mediators in the Green HRM practices and environmental performance relationship. Green organizational culture, as an indirect effect, is 0.40 (p=0.001) incorporating sustainability as a paradigm shift in operations to foster green initiatives. Interestingly, Environmental commitment that has a direct effect of 0.46(p<0.001) on environmental outcomes, Employee green behavior with an indirect effect 0.30(p=0.005) played an intermediary role in bridging the gap between perceived HRM practices and improved environmental outcome through proactive environmental action by employees.

4.3 Hypotheses Testing

Table No 5: Hypotheses Testing Results

Hypothesis	Statement	Result	Significance (p-value)
H1	Green HRM practices positively influence environmental performance.	Supported	0.002
H2	Green recruitment and selection positively impact environmental performance.	Supported	0.001
H3	Green training and development positively impact environmental performance.	Supported	0.004
H4	Green performance management positively impacts environmental performance.	Supported	0.001
H5	Green compensation and rewards positively impact environmental performance.	Supported	0.004
H6	Green employee engagement positively impacts environmental performance.	Supported	0.005
H7	Green organizational culture mediates the relationship between Green HRM practices and environmental performance.	Supported	0.002
H8	Employee green behavior mediates the relationship between Green HRM practices and environmental performance.	Supported	0.003
H9	Leadership style moderates the relationship between Green HRM practices and environmental performance.	Supported	0.001
H10	Employee environmental awareness moderates the relationship between Green HRM practices and environmental performance.	Supported	0.002

Figure No 6: Validation of Hypotheses
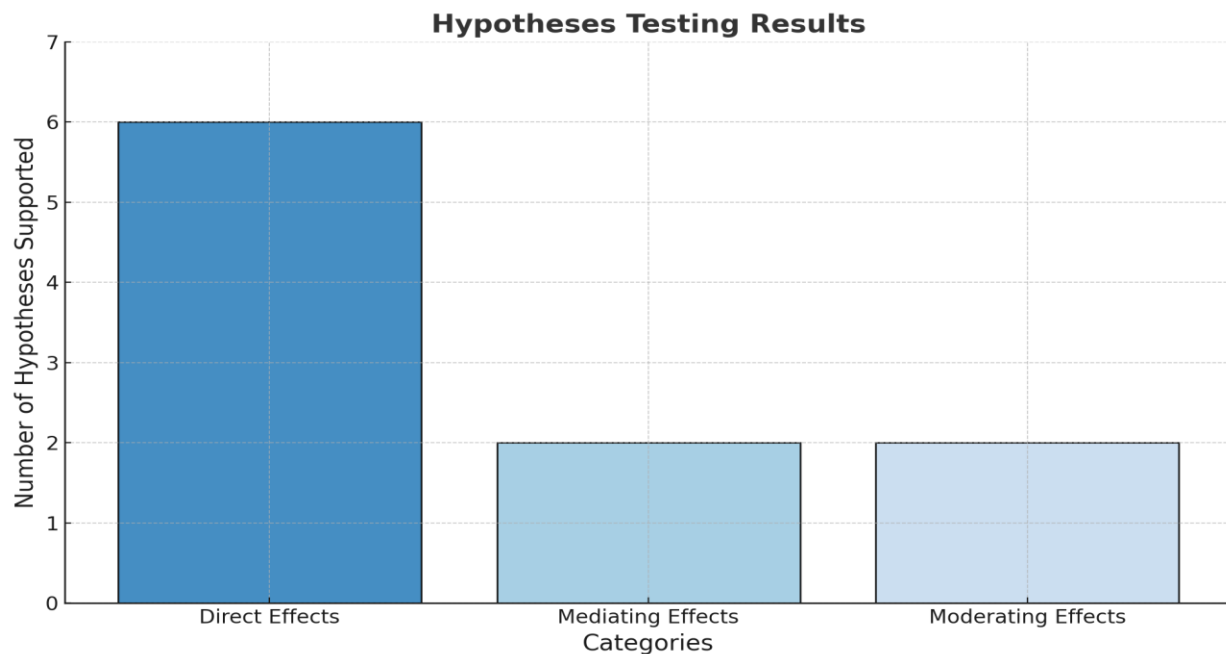
Thus the hypothesis testing results support the conceptual framework of the study. All the above ten hypotheses will be supported and this re-establishes Green's HRM on the critical role of shining on environmental performance. The moderated roles of green organizational culture (H7) and employee green behavior (H8), suggest that sustainability values must be part of organizational and personal organizational cultures. Moreover, research hypotheses nine and ten, which are focused on leadership style and employee environmental awareness assert priority of the factors that could enhance the Green HRM results.

4.4 Discussion

Therefore, the research findings of this study supports(previous studies) Green HRM practices serve as key drivers of environmental performance with significant effects moderated by leadership style and employee environmental awareness with green organizational culture and Employee green behavior as mediators. This discussion situates the study findings within the accumulated knowledge about SHRM, comparing and contrasting them regarding similarities and differences and identifying the research contributions to the SHRM body of knowledge.

4.5 Green HRM Practice and Environmental Performance

The research findings of the collaborative study which manifests a positive association between Green HRM practices and environmental performance are in support of previous research. For example, Renwick et al. (2013) showed that firms using structural, process-based, and integrated Green HRM practices in areas like green recruitment, green training and green performance management achieve structurally superior environmental results. In the present

investigation also, organizations with high Green HRM practice scores such as PlanetWorks and GreenFutureCorp reflected better environmental performance. Similarly, Dumont et al., (2017) described that Green HRM practices improve organizational sustainability through integration of environmentally friendly activities in the employee population.

However, work done by organizations has revealed the EcoTech Solutions for instance is relatively lower than those of Green HRM shows that there are constraints to Green HRM. These limitations may be lack of leadership support or low level of employee understanding. Ahmad (2015) found out that such barriers exist because without the organizational commitment and the buy-in of the employees, the potential gains of the Green HRM practices may not be seen.

4.6 Moderating Influence of Green Organizational Culture and Green Employee Behavior

The Mediation analysis showed that among the Green HRM antecedents, green organizational culture and employee green behavior act as essential mediators in enriching physical environmental outcomes. This is in line with the study undertaken by Renwick et al., (2016) who pointed out that strong green organizational culture encourages employee participation in sustainability programs. In our study, the result showing that greater strength of green culture, for example in PlanetWorks, also yielded higher environmental performance convinced us to believe that the role of green culture as an enabler to be true.

Another important mediator is the employee green behavior that supports the results of Zoogah (2011), who pointed out that employee behaviors are the main ways through which employees engage in environmental activities. Similarly, the results of this study support the view that organizations with higher levels of employee green behavior, namely the GreenFuture Corp situation, obtained improved environmental performance. These results therefore suggest that there is a need to organize employee training and offer incentives on how to perform environmentally responsible actions.

4.7 Moderating Role of Leadership Style and Employee Environmental Awareness

In this study, leadership style was found to have a moderation effect on the relationship between Green HRM practices and environmental performance. This finding supports the argument by Mittal and Dhar (2016) that the application of Green HRM is improved by the presence of transformational leadership since it mobilizes the employees to embrace organizational sustainable development goals. In our study, we observed that GreenFuture Corp, whose leadership style scores were higher, found a much closer link between the HRM practices and the organizational environmental performance. This means there is a call for individuals who can be able to push for a green agenda and ensure that everyone is on board with green agendas.

Employee environmental awareness was used and this served to enhance the impact that Green HRM practices had on employees. This is in line with the general observation made by Ahmad (2015) that the higher level of environmental awareness amongst employees improves the outcomes of the sustainability management programs. According to our research, we establish that

knowledgeable employees create increased awareness about Green HRM which increases engagement and proactive behaviors as seen in PlanetWorks case.

4.8 Comparison with Other Studies

The findings of this study agree with previous studies and provide a better understanding of the processes and environmental conditions affecting Green HRM impact. For instance, Jabbour and Santos (2008) stressed the importance of the HRM in the creation of sustainability for organizations but the studies on the buffering and confounding effects of the mediating and moderating variables were not elaborated. To fill this gap, the present study offers empirical support for the mediating roles of organizational culture and employee behaviour, as well as for the moderating influence of leadership and awareness.

Furthermore, although Tang et al. (2018) mentioned that Green HRM practices enhance organization sustainability issues in different industries, it established the relations mainly based on direct impacts. As such, our research builds on these findings by including mediating and moderating variables that explain the underlying processes and contextual conditions that define Green HRM effectiveness.

However, some deviations were observed. For example, Govindarajulu and Daily (2004) opined that monetary incentives are the key reason for employee participation in green activities, but we stated that cultural support, leadership, and awareness have a more paramount importance in motivating employees to participate in green activities. It is essential to point out that the necessity of multidimensional perspectives for the Green HRM is proportional to the differentiation of the solutions for the mentioned problems.

4.9 Practical Implications

The research presents implications for organizations that plan to improve the environmental performance via Green HRM. First, another idea is to structure the organizational culture and demonstrate desired green behavior to employees as a part of human resource management. Sustainability goals should be included in training programs, engagement activities, and performance appraisals so they can produce a talent pool that supports the firm's environmental agenda.

Second, organizations need to admit the key role of leadership in sustainability issues. Leadership practices should be empowered to adopt transformatory models that will help enthuse employees to embrace sustainable green behaviour. Last but not the least; the reinforcement of the campaign for the increased employee environmental awareness including the educational promotions and other, similar policies related to the outcomes of the organization's Green HRM, can ways increase the efficiency of the Green HRM practice.

4.10 Research Limitations and Future Research

However, it is important to recognize some limitations implicit in this work. The purposive limitations are that its cross-sectional design limits possibilities to establish cause-and-effect

relationships and confounds are inherent in self-reported data. Future research should use variants of one or another longitudinal design that will allow investigating the long-term impacts of Green HRM practices. Further, it was suggested that studies at sector level may offer more detailed understanding of how and why Green HRM is practised differently in different sectors.

5. Conclusion

This study supports Green HRM as an important function that contributes to environmental performance, enabled by green organizational culture and employee's green behavior, and amplified by leadership style and employee awareness. This contributes to knowledge by comparing the results of this study with prior research on the antecedents and contingent factors regarding Green HRM effectiveness. Thus, these results indicate the need for organization-wide and systematic approach to the SHRM, which can provide meaningful insights to organizations desiring to harmonize their HR management strategies with environmental conservation objectives.

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