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Going Green with Human Resource Management: Effects on Employee Ownership and Retention

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Abstract The primary element of this research is to augment the existing theory on green human resource management (HRM) and to motivate organizations to learn more about green HRM, act sustainably and adopt environment friendly practices. The study analyzes the relation of three constructs of green HRM with employee turnover while adding employee ownership as a mediator. The data was gathered from a sample of 200 individuals (employees) representing 23 different companies across 13 different sectors in Pakistan. The evaluating technique was comfort based scrutinizing and the time skyline was single shot cross-sectional review. We tested the interconnection between the variables under study using the two well-known statistical tools, Process Hayes and SPSS, as soon as the data for analysis was obtained. The hypothesis was tested by carrying out the research model three times on Process Hayes for model number 4. As per the findings, green HRM practices exhibit a positive relationship with employee ownership, leading to better employee retention. However, complete mediation of employee ownership was observed in the case of green training only. This implies the deep rooted effects of green training on organizational sustainability. The research paper makes a novel theoretical contribution as it broadens application of the conservation of resources theory. Endorses Sustainable Development Goals; 7, 8, 9, 11, 12, 13 & 16.

Keywords Green HRM, Sustainability, Green Training, Green Performance Management, Green Involvement, Employee Ownership.

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1 Introduction

In the words of [Renwick et al \(2013\)](#), "HRM activities, which enhance positive environmental outcomes" are considered to be "Green HRM." The green policies opted by an organization normally proves to be beneficial in rising the sales and the anticipated workforce performance [Al-Hajri \(2020\)](#). The human resources are the catalyst to realize the green policies. Therefore, when the employees acknowledge that their institution propels to espouse the green initiatives they apt to exhibit more allegiance towards the institution with the steadier intention to stay [Fazal-e Hasan et al \(2023\)](#).

In contemporary age the organizations are apprehensive about the earth conscious protocols that amplify the profit, decrease the cost, reverse employee turnover and is constructive for their employees [Jam and Jamal \(2020\)](#). Due to which the concept of green human resource management is becoming field of keen interest among the HR managers and researchers. Green HRM leverages human resources to achieve competitive advantage, environmental performance, social responsibility and waste reduction by adopting environmental approaches and initiatives that are integrated with the mission and strategies of the organization. Behaviour, attitudes, knowledge, and motivation of employees that are relevant to their working environment can all be assessed and altered by HRM. Considering that without the employees' efficacious assistance businesses are not able to formulate and display the desired ethical practices related to ecological concerns [Fazal-e Hasan et al \(2023\)](#). The companies must enhance their existing HRM practices to deliver and implement environmentally friendly requirements. Thus to induce pro eco-friendly behaviors, commitment from administration, HR practices, organization and support from personnel in charge, are a must for building a sustainable workplace [Provasnek et al \(2018\)](#) which is not possible if the individuals involved fail to take the ownership of the process thus it's important not to overlook the interpersonal interaction of the stakeholders and the enterprise [Abbas et al \(2022\)](#). Green HRM application as a whole, guarantees commitment to society and dedication to environmental safety.

Practices related to Green HRM assist businesses in developing a workforce that is capable of appreciating and comprehending green schemes. These green policies are primarily to embark the operationalization of the organizational resources to advance environmental advocacy, elevating the employee's contentment and camaraderie [Al-Hajri \(2020\)](#). With the awareness of need of self-fulfillment, the perception of psychological ownership plays a prominent role in the talent optimization [Jing and Yan \(2022\)](#) the employees want to stay with organizations with whom they could build an abstract, emotional connection and not just monetary transactions.

The ecological dangers are acquiring the consideration of world in this manner green thoughts and ideas are beginning to accumulate pace in every possible field including the HR space, apart from adding sparkle to the brand, they are highlighting significant advantages for the company. However, there lies a theoretical/ hypothetical hole due to the absence of exploration around the objective in Pakistan, lack of research, insufficient information regarding literature.

The main consideration of this study is to look into the potency of Green HRM operations in Pakistan's corporations. The problem in espousing Green

HRM is that employees are unaware of the ins and outs of environment management. Unfortunately for last two decades the environment has witnessed an alarming need for environment protection worldwide. Industrial waste is the major malefactor deteriorating and draining natural resources very quickly in form of pollution. Therefore, it asserts that green HRM have direct and significant relation with environment sustainability. Practically we can't stop the practices of corporate world as they fulfill our unlimited wants more over the drastically increase in population and lifestyle changes has worsen it for that reason this study aims to generate awareness about Green HRM in order to stimulate the sustainable use of provided resource within workplace sagely to contribute in environment sustainability and minimize the negative use of resources towards environment. This study intent to analyze the relation of green human resource management (Green HRM) practices including the green training and development, green performance management, green involvement with employee retention while studying the mediating effect of employee ownership.

2 Literature Review

The variables under consideration include Green HRM practices comprising of green training & development, green performance management and green involvement while employee ownership has been taken as a mediator. The relation of these variables with employee retention has been studied.

2.1 Green HRM

Green HRM specifies the human resource management (HRM) policies which endorse sustainable utilization of the resources within an establishment (Mishra, 2014). This modern HRM practice seeks to develop and implement a positive and green system, persuading the work force to contribute to sustainability and be responsible for their actions. Green HRM also includes designing and approving of job descriptions in coordination with other departments to incorporate and highlight sustainable development goals. From the existing literature, it can be stated that it is strenuous to accurately establish and cultivate sustainable environmental performance without proper green HRM practices [Obaid \(2015\)](#).

Businesses that actively practice environmental responsibility are seen as moral and progressive [Rabha \(2023\)](#). Such favorable associations result in greater customer loyalty, improved investor relations, and improved market status. Green practices are included into HRM to promote a sense of purpose among staff members. Morale and engagement among employees tend to rise when they are aware of the organization's commitment to environmental stewardship [Olawoyin \(2020\)](#). Higher work satisfaction, lower turnover, and improved overall productivity result from this value alignment. As businesses work to incorporate environmental sustainability into their HR practices, green human resource management (HRM) presents a number of complex problems. Redefining talent acquisition tactics to attract people with strong environmental consciousness in line with the business's green aspirations is one prominent difficulty [Chaudhary \(2019\)](#). Additionally, it can be challenging to modify performance evaluation methods to account for both traditional work indicators and employees' con-

tributions to sustainability activities. To provide staff with the knowledge and skills needed for eco-friendly practices, training and development programs must be updated, frequently requiring significant money and time [Raman \(2019\)](#). It can be arduous to strike a balance between employee expectations for work-life equilibrium and the needs of sustainable operations. Creating a framework for effective communication to encourage a sense of commitment and purpose among all participants is also one of the core objectives of Green HRM [Das and Baruah \(2013\)](#).

The consideration of Green HRM has been more well-known in recent years as businesses all over the world work to strike a balance between their corporate goals and environmental sustainability [Raman \(2019\)](#). By incorporating eco-friendly practices and concepts into numerous HR tasks, this strategic approach produces a wide range of advantages that go beyond environmental considerations. Initiatives in green HRM can dramatically improve a company's reputation and brand image. Employers who prioritize sustainability through Green HRM attract outstanding talent to their locations. Companies with a strong commitment to green practices are more likely to attract competent and motivated personnel because job seekers are prioritizing ethical and environmental issues in their career decisions [Shoaib et al \(2022\)](#). Given that their beliefs coincide with the objective of the company; these workers are also more inclined to stick with it.

2.2 Green Training & Development

The conventional term of training & development concerns with the development of skills by providing adequate resources. Whereas, the phrase green training & development includes facilitating the workforce in ways that improve resource utilization, waste mitigation, energy conversion and cause reduction of environmental deterioration [Olawoyin \(2020\)](#).

This practice provides employees with latitude to engage themselves in resolving environmental obstacles, sharpening them to deal with potential environmental problems; parallel with planting a favorable environmental culture for the welfare of employees and the organization as a whole (HRMI, 2022). The employees when provided with the opportunity to enhance their knowledge and skill set in respect to the green initiatives they will feel more connected to their job and nature cause [Adeyefa et al \(2023\)](#) and demonstrate the anticipated behaviors. As per previous research studies, training & development plays pivotal role in the evolution or transformation of the employees' attitudes, knowledge, skills and behavior which eventually serves as a rapport between the management and the employees. The green training and development facilities the employees to cultivate self-efficacy and sense of autonomy which enables them to feel the ownership over it. This recognition to the green competencies advances their purpose and meaning which enables them to be psychologically ready to approach the challenges [Waqas et al \(2021\)](#). This in turn improves performance of the organization as a whole [Obaid \(2015\)](#). In Green HRM, training programs are designed to fill in knowledge gaps about the environment; these programs may be able to encourage employees to act environmentally friendly

and elevate their morale [Olawoyin \(2020\)](#). According to [Raman \(2019\)](#), employees should receive instructions on how to perform a green workspace analysis and be provided with the training necessary to support green initiatives. These policies stimulate employee's psychological ownership, with the pro environmental behavior, involves the shared beliefs and norms of standard of conduct which are in accordance to the institutions wellbeing [Waqas et al \(2021\)](#).

Thus, when employees are trained with green practices, they become more proficient about the consequences of their actions on the environment and will hence, contribute to sustainability. This sense of employee ownership and responsibility increase the sense of job satisfaction and amplify employee engagement. Thus the following is hypothesized:

H1: There is a significant and positive relationship between Green Training and development and employee ownership.

2.3 Green Performance Management

The practice of encouraging staff members to advance their professional skills and proficiencies in order to help the organization better meets its goals and objectives can be summed up as performance management. Whereas the term green performance management refers to a method for assessing employee performance in environmental management activities. The focus of these practices includes establishing green performance standards for each employee and assessing how well they meet those standards, with the primary aim of inspiring employees to exhibit performance behaviors that support the environmental objectives of the company [Chaudhary \(2019\)](#). While the psychological ownership enables the employee to connect with the sustainability standards of the organization and be more invested in their job performance to attain those set goals. Performance appraisal is the most crucial part of performance management; therefore an effective performance appraisal does not only satisfy the stipulation of fairness, but it also gives the employee useful feedback and helps the company improve its professional and environmental outcomes (HRMI, 2022) rewarding the employees on the basis of their green performance will uplift their self- confidence and the conviction in the organization. It fundamentally aims to encourage the employees to exhibit performance behaviors which align with the environmental objectives of the institution. And in order to motivate the employees to demonstrate the appropriate behavior its significant to deliver them valuable feedback [Jam and Jamal \(2020\)](#) and award their performance accordingly. The unionization of performance appraisal with green management regulates performance behavior in favor of the sustainability goals [Chaudhary \(2019\)](#). The psychological ownership provides the employees with the broader insight in the responsibilities and job roles in addition to the extra positive and green attitude and behavior. The sense of ownership which comes from the right evaluation from the green performance standards unbolts the prolonged loyalty and commitment with the enterprise.

As per empirical evidence provided by researchers, it can be observed that there is a positive, mutually beneficial relation among green performance man-

agement, employee ownership and organizational citizenship behavior. The integration of environmental sustainability into the model of performance management will help in creating a firm culture of employee ownership and accountability around green initiatives. In line with above, it is hypothesized that:

H2: There is a significant and positive relationship between Green Performance and employee ownership.

2.4 Green Involvement

Employee involvement is said to be correctly in practice when the employees of an organization actively participate with the management, provide feedback, are involved in problem solving and are well aware of the organizations work ethics and values [Rabha \(2023\)](#). On the other hand, the term green involvement refers to employees' involvement in creating environmentally sustainable initiatives; like waste reduction, efficient energy consumption and promoting environment awareness programs. The organizations with green practices empowers their employees by giving them the opportunity to participate in the decision making process [Waqas et al \(2021\)](#) which embed the notion that their involvement is valuable. This structure of green employee involvement entails a participative culture in which individuals can voice their opinions regarding significant environmental affairs and propose creative solutions [Chaudhary \(2019\)](#) which provides them the sense accomplishment and peace of mind.

[Shoaib et al \(2022\)](#) postulates that higher level of employees' involvement in the workplace is closely and positively linked to organizational dedication, how much an employee is invested in his/her job. The psychological ownership notion advocates that liberating the employees aid them in becoming more responsible, proactive and creative. Active green involvement of employees tends to create a better connection with the organization sustainability goals, enhancing the engagement in the green policies formulation and implementation thereby increasing job satisfaction, commitment to their role and loyalty to the organization. A constructive work environment that encourages employees to use their environmental knowledge and competencies to learn more about environment related concerns results can result in better productivity for the organization [Pham et al \(2020\)](#). In such organizations, employees embrace sustainable goals and feel more inclusive; which strengthens their psychological connection with the company. After a vivid analysis of relevant research, it can be proposed that:

H3: There is a significant and positive relationship between Green Involvement and employee ownership.

2.5 Employee Ownership

Employee ownership is the psychological attachment of the employees with the organizational goals; it is achieved when the employees believe that their contribution is meaningful and is appreciated by the organization. This acknowledgment helps them in developing a feeling of ownership and they tend to be more committed to their jobs [Uslu \(2015\)](#). Legal and psychological ownership

are two separate entities whereby legal refers to lawful possession and psychological ownership is based on an individual's own experience and thinking [Chang et al \(2012\)](#). A feeling of psychological ownership may unfold in individuals through their experiences, even though they do not have any legal ownership of institution.

The prerequisite to obtain the contentment from the workforce is to firstly provide them with the organizational support [Jing and Yan \(2022\)](#). In order to retain the talent, the organization must recognize their needs and demands. For the employees to rebrand themselves as the representatives of the organization is crucial for them to be able to connect abstractly with the enterprise rather than just being part for monetary reasons. This psychological ownership plays a crucial role in increasing organizations productivity and leads to positive employee behavior [Campbell Pickford et al \(2016\)](#). The employees with the deep rooted sense of ownership for their organization or its several aspects tends exhibit more responsibility towards their role and possessive behavior [Özbozkurt et al \(2022\)](#). Research suggests that fostering a culture of ownership in an organization is a great investment and will produce a more motivated, loyal and engaged workforce countering the paramount concern of employee turnover. This is because the feeling of ownership is accompanied with a strong sense of responsibility regarding organization burden sharing [Pierce et al \(2001\)](#). For example, the employees who perceive themselves as owners and think that they have the right to set the direction of the organization will presume they also have a deeper responsibility and they will find it an obligation to exhibit loyalty and dedication. Employees are more likely to be satisfied with their jobs and will be averse to leave the organization if they have a sense of ownership. Thus, we hypothesize the following:

H4: There is a significant and positive relationship between Employee ownership and employee retention.

Research suggests that psychological ownership may have a significant impact on the adaptation of green HRM practices and their efficacy. An organization's environmental orientation require the action of the green policies and practices at the steady and consistent rate which is only conceivable when the workforce accepts the organizational goals at individual level [Özbozkurt et al \(2022\)](#). For instance, the employees possessing a strong sense of ownership may apt to take part in green trainings and green performance management initiatives. They may support green involvement because they believe that these initiatives are in line with their own personal values and objectives. When the employees have such sense of belonging they will be reluctant to the intention of leaving the organization. The psychological ownership serves as the intermediary between the green HRM practices and the employee retention. Based on these discussions, the following hypothesis evaluates the role of employee ownership as a mediator:

H5: Employee ownership mediates the relationship between green training and development and employee retention.

H6: Employee ownership mediates the relationship between green involvement and employee retention.

H7: Employee ownership mediates the relationship between green performance and employee retention.

2.6 Employee Retention

The term employee retention is an organization's aptitude to avert employee turnover, as the talent outflow has a substantial impact on the organizations performance [Holliday \(2021\)](#). In simple words, it is the process by which an organization encourages its employees to remain with the company and contribute for a longer period of time [Islam et al \(2022\)](#). Its substantial that the retention is the intentional goal of the management [Adeyefa et al \(2023\)](#). Human capital retention is a top priority of human resource management to mitigate the cost of replacement and it can be obtained by efficient and effective strategies. The business in roll are well versed that the cost of hiring and training of new recruit is a complex and time consuming task than that of retaining an employee [Jam and Jamal \(2020\)](#). There are many factors which hold the power to influence the employee intention to stay like salary, culture, job satisfaction etc. Alongside the numerous benefits of the green HRM practices; cost saving, corporate social responsibility, talent acquisition, a prominent construct is reducing employee turnover [Al-Hajri \(2020\)](#). Attraction, growth and retention of talent are important HR perspectives for any organizations [Olckers and Plessis \(2015\)](#). The green HRM practices proves to be a functional defense mechanism to confront the concerns of the organization regarding human capital and allocation of the resources.

[Das and Baruah \(2013\)](#) states employee contentment and retention serves as key factors for the success of a corporation. The intention to stay with the organization comes is interlinked with the abstract notion of psychological ownership of the role being played by the individual. When employees leave an organization, they take valuable experience-based knowledge and expertise with them [Olckers and Plessis \(2015\)](#). Loss of experienced and skillful workforce is a threat to any organization as human resources are one of the biggest assets of an organization. The green HRM practices like training and development, performance management and employee involvement aid to retain the employees as they provide the workforce with the self-efficacy, confidence and sense of fulfillment which are the building blocks to build the psychological relation with the organization or its aspects.

In synopsis, green HRM practices can emphatically influence an individual's decision to either stay or leave the organization. Green HRM also results in expanding employees commitment, inspiration, responsibility and fulfillment. By exhibiting a promise to environment protection, institutions can attract new

talent and retain current employees resulting in contribution to sustainability and better business performance as well.

Thus we suggest the following hypotheses:

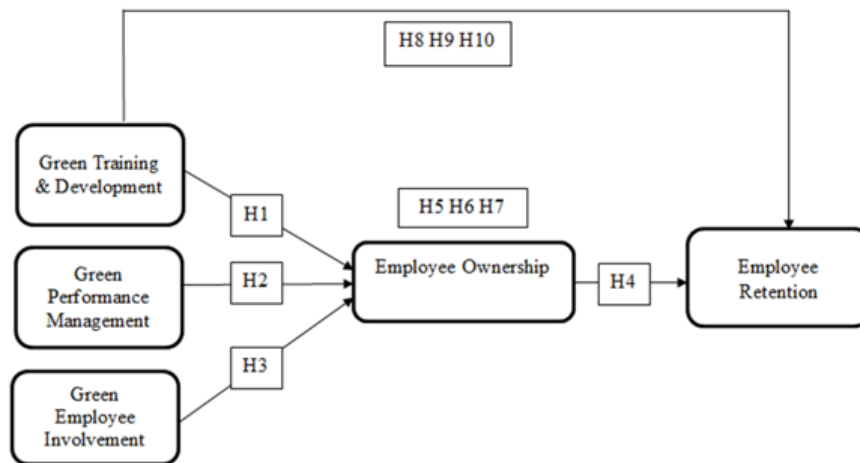
H8: Employee retention has a positive significant relationship with green training and development.

H9: Employee retention has a positive significant relationship with green performance management.

H10: Employee retention has a positive significant relationship with green involvement.

2.7 Theoretical Framework

Figure 1
Theoretical Framework



2.8 Underpinning Theory

Conservation of resources (COR) theory by [Hobfoll et al \(2018\)](#) is a motivation theory; the fundamental tenet of this theory is that humans are driven to acquire new resources and preserve their existing ones. COR theory is, at its core, a motivational theory which revolves around the evolutionary imperative to amass and conserve resources for the survival of humans and the planet.

This theory explains the commitment of individuals and organizations towards environmentally sustainable practices. Other sub areas of literature including work place stress theories and the job demands-resources model are also largely based on the COR theory. For both individuals and organizations, the COR theory has significant implications. The COR theory can also be connected with Green HRM practices; which are HRM practices that expect to advance an ecological obligation from within the organization as it serves as a

framework to green creativity the employees dedication to discover new avenues for innovative sustainable ideas [Alyahya et al \(2023\)](#). Green HRM practices can help save resources hence resulting in improved performance and well-being. In conclusion, the COR theory highlights the importance of resource conservation while Green HRM practices can be seen as a way to operationalize the COR theory by promoting sustainable development within organizations.

3 Materials and Methods

This is a Quantitative, hypothesis testing study which analyzes and tests a framework based on variables gathered from the literature pertaining to Green HRM. The research is one shot cross sectional in nature, as the data was collected in a single phase. By analyzing the data, we were able to better understand the connection between employee ownership's mediating effect and the green HR practices; entailing green training & development, green performance management, and green involvement. For the sampling technique we employed convenience sampling method, a non-probability sampling technique. The sample size was calculated on the basis of the item response theory [Nunnally \(????\)](#) which suggests that approximately 10 respondents against each item in the questionnaire can lead to the total sample size. A total of 20 items were included in our survey so the computed sample size (20×10) was 200.

The unit of analysis in this research were individuals. It is pertinent to mention that our target respondents were managerial and executive employees in the corporate sector. The industry was kept open to include the major, multinational and small firms in Pakistan's corporate sector. The participants represented 23 different companies from 13 different sectors of the economy including manufacturing, banking, education, media, health care, hospitality, architecture, insurance, information technology and others.

A structured questionnaire was adopted using items pertaining to our study variables. These items were acquired from previous robust research studies on the subject. The data collection was done through face to face self-administered questionnaires as well as through Google forms. It is relevant to mention that the google forms were sent to the respondents through contact data provided by the HR departments of the respective institutions.

The questionnaire survey was divided into 6 parts. The first part included questions related to demographic data while the other 5 parts measured the variables on a 5 point Likert scale from 'Strongly disagree' to 'Strongly agree'. The analysis of data was done in SPSS software using Process Macro by Hayes, mediation model 4. The model was run three times, in order to account for each of the Green HRM independent variables.

The following table shows the variables, number of items, sample items and sources:

Table 1
Items and Sources

Variables	No. of Items	References
Green Training & Development	3	Tang et al (2018)
Green Performance Management	3	Tang et al (2018)
Green Involvement	4	Tang et al (2018)
Employee Ownership	5	Uslu (2015)
Employee Retention	5	Kyndt et al (2009)

4 Results and Discussion

4.1 Frequency Analysis of Demographic Characteristics

The following table provides a frequency analysis of the survey respondents by their gender and age. The findings showed that by gender, females comprised of 54% of respondents (108) while males were 46% (92). The main reason for higher number of females is that there is an increased number of females employed in the HR department of the corporate sector in the study country.

Table 2
Frequency Analysis of Respondents Gender and Age

Variable	Category	Frequency	Percentage
Gender	Male	92	46
	Female	108	54
Age	25-30	76	38
	31-36	62	31
	37-42	31	15.5
	43-48	20	10
	49-53+	11	5.5

We targeted the individuals who were currently employed in any corporate organization or running their own business. We kept the nature of industry open to be more inclusive. In terms of age, we categorized the respondents into five groups starting from 25-30 years.

With the maximum respondents (79, 38.0%). Next, were the participants in range of 31- 36 years (62, 31.0%). The third category consisted of people from ages 37- 42 years (31, 15.5%) followed by respondents in the age bracket of 43- 48 years (20, 10.0%). The least number of respondents were from the fifth category ranging from 49- 53+ (11, 5.5%). This shows presence of a greater population of youth in the corporate sector and the subsequent findings of this study also hence, indicate commitment of youth to Green HRM practices. This is a meaningful finding.

4.2 Descriptive Statistics of Study Variables

This segment of the study provides a summary of descriptive, quantifiable data that form the basis for the data analysis. The process of summarizing, depicting, and simplifying statistical data into a form that is meaningful and easy to comprehend is made easier with the help of descriptive statistics analysis.

It has several sections but the most important is the highlighted range from the lowest to highest point, providing information about the central tendency and the mean and standard deviation of the values under consideration.

Table 3
Descriptive Statistics of Study Variables

Variables	Minimum	Maximum	Mean	Std. Deviation
Green Training & Development	1	5	3.55	0.88
Green performance management	1	5	3.44	1.03
Green Involvement	1	5	3.53	0.89
Employee Ownership	2	5	4.06	0.64
Employee retention	1	5	3.79	0.72

A summary of descriptive statistics of each of the study variables is provided in the above table. Every single variable was assessed through applying a five-point Likert scale. The array of mean values ranged from 3.44 to 4.06 and the standard deviations of results lie between 0.64 and 1.03. It is noteworthy to mention that the mean score for items evaluating the variables were tilted towards 'Agree' which indicates affirmation to Green HR practices, as per our developed questionnaire.

4.3 Measurement Validation

We calculated Cronbach alpha values to scrutinize the reliability and internal consistency between items of each construct (i.e. green training & development, green performance management, green involvement, employee ownership and employee retention). According to Cronbach (1951), the threshold value to verify reliability and internal consistency of a scale's items is that it should be equal to or greater than 0.7. In addition, according to Kline (2023) the value of Cronbach's alpha (reliability coefficient) greater than or equal to 0.70 is acceptable.

Table 4
Measure of Reliability

Scales	Number of Items	Cronbach's α	Reliability
Green Training & Development	3	0.830	Very good
Green performance management	3	0.890	Excellent
Green Involvement	4	0.870	Very good
Employee Ownership	5	0.840	Very good
Employee retention	5	0.810	Very good

The outcomes of the reliability test are displayed in the above table. Cronbach's α value for all variables met the threshold values which are ranging from very good to excellent (i.e., 0.81 to 0.89). As indicated through results that all variables have internal consistency of 81% to 89% and there is no kind of reliability issue in our data set.

4.4 Correlation Matrix

We carried out bivariate correlation analysis on the study variables prior to testing the hypotheses. The table given below represents correlation values of the variables under consideration whereby the correlation coefficients appear to be pointing in the anticipated course and provide preliminary support for our study hypotheses.

Table 5
 Correlation for the Study Variables

Variables	1	2	3	4	5
Green Training and Development	1				
Green Performance Management	0.74**	1			
Green Involvement	0.72**	0.84**	1		
Employee Ownership	0.37**	0.31**	0.36**	1	
Employee Retention	0.32**	0.34**	0.40**	0.60**	1

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

4.5 Hypothesis Testing

The study hypotheses were examined via Process Macro mediation model 4 Preacher and Hayes (2008). We ran this model three times for the three independent study variables i.e., Green Training and Development (GT&D), Green Performance Management (GPM) and Green Involvement (GI).

4.6 Tests of Mediation

Employee ownership was taken as mediator between the independent variables and the dependent variable. The direct and indirect effect was also analyzed using Process Macro (Preacher & Hayes, 2008). Bootstrap was kept at 2,000 and confidence interval was 95%.

4.7 Hypothesis 1, 4, 5, 8

The SPSS Process outcomes of the table below illustrate that GT&D positively impacts Employee ownership (EO), as evident from the P value being less than 0.05 and the upper and lower confidence intervals are both positive ($\beta = 0.27$, $t = 5.76$, $p < 0.001$, LLCI=0.18, ULCI=0.37) providing support for Hypothesis 1. Furthermore, the coefficient value (0.27) indicates that, if there is one unit increase in GT&D then there is 0.27 units increase in EO, on the average.

Taking a view of the direct relation of green training & development with employee retention, it is seen to be insignificant (p value = 0.08, LLCI= -.11, ULCI = 0.19). However, the indirect relation between these two variables through the mediation of employee ownership is indeed significant. This implies that green training and development has deep rooted effects on employee ownership and if successfully implemented will result in long term positive effects on employee retention. Hence, it should be a key area of focus for most organizations.

Consistent to our expectation with Hypothesis 8 the total effect of GT&D on ER is positive and significant ($\beta = 0.26$, $t = 4.74$, $p < 0.001$). Furthermore, the coefficient value (0.26) indicates that, if there is one unit increase in GT&D then there is 0.26 units increase in ER, on the average.

Further, the link between EO and ER (i.e., path b in the figure below) was positive and significant ($\beta = 0.64$, $t = 9.23$, $p < 0.001$).

Table 6
 Outcomes of Simple Mediation Model (X = Green training & development)

Direct effect Model						
Predictor	Outcome=M (Employee Ownership)					
	β	SE	T	P	LLCI	ULCI
Constant	3.08	0.17	17.68	0.000	2.74	3.43
X (GT&D)	0.27	0.05	5.76	0.000	0.18	0.37

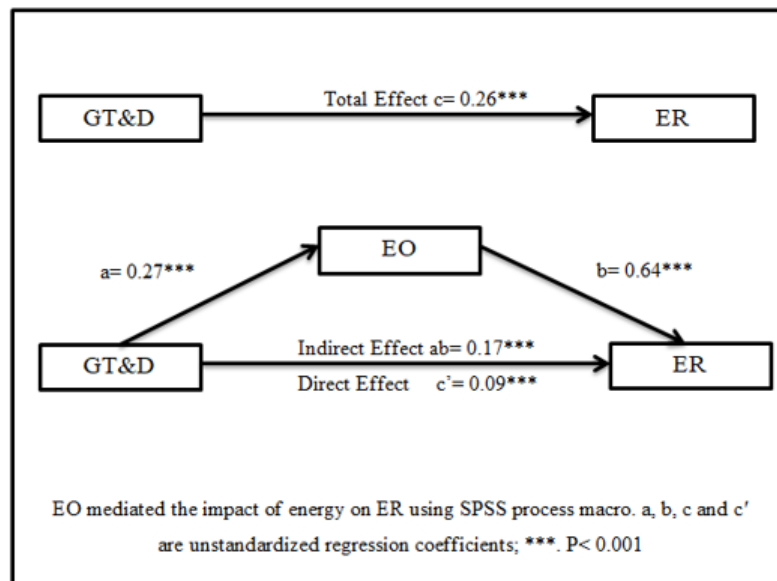
Direct effect Model						
Predictor	Outcome=Y (Employee Retention)					
	β	SE	T	P	LLCI	ULCI
Constant	0.90	0.27	3.31	0.000	0.36	1.44
M (EO)	0.64	0.07	9.23	0.000	0.50	0.77
X (GT&D)	0.09	0.05	1.75	0.08	-0.11	0.19

Total Effect Model						
Predictor	Outcome= Y (Employee Retention)					
	β	SE	T	P	LLCI	ULCI
Constant	2.86	0.20	14.16	0.000	2.470	3.26
X (GT&D)	0.26	0.05	4.74	0.000	0.153	0.37

Indirect Effect and Significance						
	Value	SE	LLCL	ULCL	Z	P
Sobel	0.17	0.04			4.87	0.000

Bootstrap Results for Indirect Effect				
	M	SE	LL95%CI	UL95%CI
Effect	0.17	0.43	0.10	0.27

Figure 2
 Mediation Model (X = Green training & development)



Looking at the indirect (mediation effect) in detail, the Sobel test (Sobel, 1982) was also used to examine the mediation model's outcomes. This test is used to verify whether a mediator can explain the relationship between a criterion and a predictor. The formal two-tailed importance test (expecting an ordinary dissemination) exhibit that the (unstandardized) indirect effect (0.17*)

is huge with Sobel $Z = 4.87$, $P < 0.001^*$. A 95% bootstrap confidence interval for this indirect effect did not contain zero (0.10, 0.27), confirming the Sobel test results with a 0.17 identical indirect effect value. The bootstrapping did not make any assumptions about the shape of the sampling distribution (i.e., normality). This lends credence to Hypothesis 5.

4.8 Hypothesis 2, 4, 6, 9

The SPSS Process outcomes of the table below illustrate that GPM positively impacts EO, as evident from the p value being less than 0.05. In addition, the lower and upper confidence intervals are also positive, providing support for Hypothesis 2.

Table 7
 Outcomes of Simple Mediation Model (X = Green performance management)

Direct Effect model						
Outcome=M (Employee Ownership)						
Predictor	β	SE	T	P	LLCI	ULCI
Constant	3.38	0.15	22.45	0.000	3.09	3.68
X (GPM)	0.20	0.04	4.72	0.000	0.12	0.28
Direct effect Model						
Outcome=Y (Employee Retention)						
Predictor	β	SE	T	P	LLCI	ULCI
Constant	0.86	0.26	3.24	0.000	0.33	1.38
M (EO)	0.62	0.06	9.33	0.000	0.49	0.75
X (GPM)	0.12	0.04	2.99	0.000	0.04	0.20
Total Effect Model						
Outcome= Y (Employee Retention)						
Predictor	β	SE	T	P	LLCI	ULCI
Constant	2.95	0.17	17.52	0.000	2.61	3.28
X (GPM)	0.25	0.05	5.24	0.000	0.15	0.34
Indirect Effect and Significance						
Value	SE	LLCL	ULCL	Z	P	
Sobel	0.12	0.03		4.19	0.000	
Bootstrap Results for Indirect Effect						
Effect	M	SE	LL95%CI	UL95%CI		
	0.12	0.03	0.06	0.19		

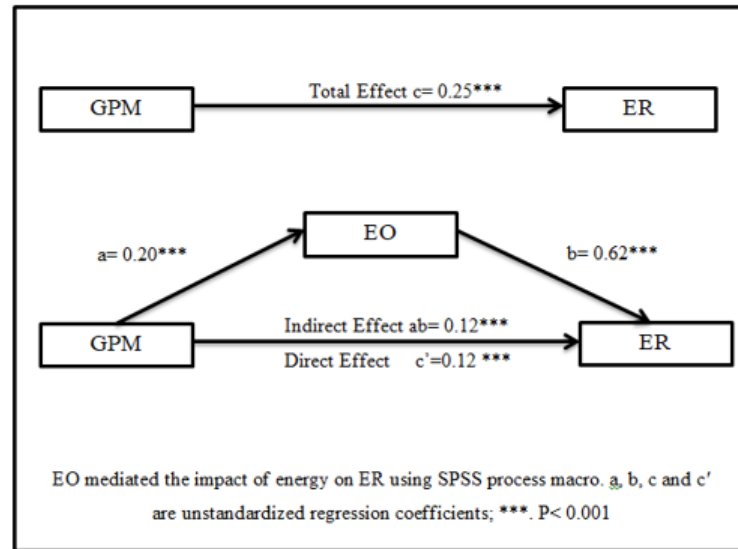
Furthermore, the coefficient value (0.20) indicates that, if there is one unit raise in GPM then there is 0.20 units increase in EO, on the average ($\beta = 0.20^*$, $t = 4.72$, $p < 0.001$). Consistent with our expectation with Hypothesis 9 the total effect of GPM on ER is positive and significant ($\beta = 0.25^{**}$, $t = 5.24$, $p < 0.001$). Furthermore, the coefficient value (0.25) indicates that, if there is one unit increase in GPM then there is 0.25 units increase in ER, on the average.

Further, the link between EO and ER (i.e., path b in the figure below) was positive and significant ($\beta = 0.62$, $t = 9.33$, $p < 0.001$). Finally, GPM positively influenced ER (i.e., path c' in figure below) and EO mediation role is also significant ($\beta = 0.12$, $t = 2.99$, $p < 0.001$) which backs up Hypothesis 4 and Hypothesis 6.

The Sobel test (Sobel, 1982) was also used to examine the mediation model's outcomes. Assuming a normal distribution, the formal two-tailed significance test demonstrates that the (unstandardized) indirect effect (0.12) is significant

with Sobel $Z = 4.19$, $P < 0.001^*$. A 95% bootstrap confidence interval for this indirect effect did not contain zero (0.06*, 0.19), confirming the Sobel test results with an identical indirect effect value of 0.12. The bootstrapping did not make any assumptions about the shape of the sampling distribution (i.e., normality). This lends credence to Hypothesis 6.

Figure 3
 Mediation Model (X = Green performance management)



4.9 Hypothesis 3, 4, 7, 10

The SPSS Process outcomes of the table below illustrate that GI positively impacts EO, as evident from the P value being less than 0.05 ($\beta = 0.26$, $t = 5.58$, $p < 0.001$), providing support for Hypothesis 3. Furthermore, the coefficient value (0.26) shows that, if there is one unit increase in GI then there is 0.26 units increase in EO, on the average.

Consistent with our expectation regarding Hypothesis 10, the total effect of GI on ER is positive and significant ($\beta = 0.33$, $t = 6.27$, $P < 0.001^*$). Furthermore, the coefficient value (0.33) indicates that, if there is one unit raise in GI then there is 0.33 units increase in ER, on the average.

Further, the link between EO and ER was positive and significant ($\beta = 0.59$, $t = 8.85$, $p < 0.001$). Finally, GI positively influenced ER (i.e., path c' in the figure below) while EO mediation role is also significant ($\beta = 0.17$, $t = 3.61$, $p < 0.001$). These results hence, back up Hypothesis 4 and Hypothesis 7. In addition, the Sobel test also supports the mediating role of employee ownership.

Table 8
 Outcomes of Simple Mediation Model (X = Green Involvement)

Direct Effect model						
Predictor	Outcome=M (Employee Ownership)					
	β	SE	T	P	LLCI	ULCI
Constant	3.13	0.17	18.05	0.000	2.79	3.47
X (GI)	0.26	0.05	5.58	0.000	0.17	0.36

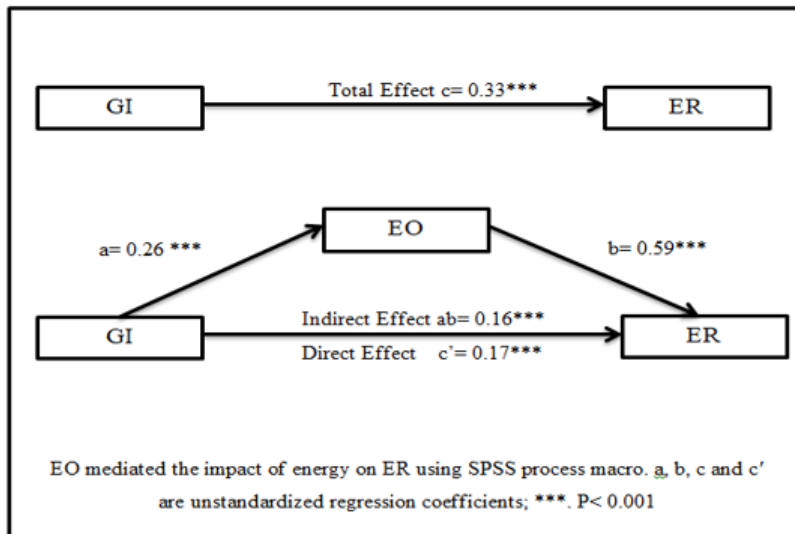
Direct effect Model						
Predictor	Outcome=Y (Employee Retention)					
	β	SE	T	P	LLCI	ULCI
Constant	0.77	0.27	2.91	0.000	0.25	1.30
M (EO)	0.59	0.07	8.85	0.000	0.46	0.72
X (GI)	0.17	0.05	3.61	0.000	0.08	0.27

Total Effect Model						
Predictor	Outcome= Y (Employee Retention)					
	β	SE	T	P	LLCI	ULCI
Constant	2.63	0.19	13.64	0.000	2.25	3.00
X (GI)	0.33	0.05	6.27	0.000	0.23	0.43

Indirect Effect and Significance						
	Value	SE	LLCL	ULCL	Z	P
Sobel	0.16	0.03			4.70	0.000

Bootstrap Results for Indirect Effect					
	M	SE	LL95%CI	UL95%CI	
Effect	0.16	0.04	0.1	0.24	

Figure 4
 Mediation Model (X = Green Involvement)



5 Discussion and Implications

This research study adds to the Green HRM literature by examining the previously remote affiliation between the Green HRM practices, employee ownership and employee retention. The positive relationship among the study variables demonstrates their influence in their respected spectrum. The significance of

streamlining the corporate profits with the environmental beneficial practices. The underlying force of abstract connection between the employees and institution leads towards the optimum outcome on both the organizational and individual levels. The psychological ownership aspect is often underestimated by the management while putting all the focus on demanding the outstanding performance. By the rightful implementation of the mechanism and close consideration of the individuals (workforce) needs perspective the institutions could gain the favor of the employees and the competitive advantage in the market. The employees who are satisfied and at peace with their role and loyal and resist the idea of leaving the organization. Thus the institutions while investing in its workforce could utilize their creativity and dedication to attain its profit and environmental objectives.

As this research emphasizes the significance of the organization-employee relationship in the context of green HRM practices and employee retention, it has the potential to enhance comprehension of the conservation of resources theory. In order to achieve positive outcomes for the organization as well as its employees, this study emphasizes the significance of aligning HRM practices with initiatives aimed at sustainability. Additionally, the study adds to the body of knowledge regarding the mediation role of employee ownership between green HRM practices and employee outcomes. The findings of the study can assist businesses in developing and putting effective HRM practices into place to boost employee retention. By consolidating Green HRM practices and worker proprietorship, associations can cultivate a feeling of responsibility and commitment among representatives.

The study has the potential to assist businesses in establishing a sustainable culture that encourages employee ownership, engagement, and retention. Organizations can attract and retain employees who are committed to environmental sustainability by fostering a culture of sustainability. The review can urge associations to integrate ecological manageability into their HRM rehearses. Additionally, the study emphasizes the significance of employee ownership as a key factor in employee retention. By giving representatives a feeling of pride, associations can make a more connected with the labor force and lessen turnover rates.

5.1 Limitations and Future Directions

This study takes into account three constructs of green HRM i.e., green training and development, green performance management and green involvement. However, two other constructs exist in addition to it, i.e., green recruitment & selection and green pay & rewards. These two constructs have been excluded from the study due to data measurement and consolidation constraints. As recruitment and rewards is a detailed area of study itself, it should be covered in future studies. Apart from the above, sample size was kept at 200 due to the high profile nature of the study subjects i.e., corporate executives. Future studies can focus on a student's perspective and what fresh graduates look for in an ideal organization.

Element of self-report bias may be present in the current study as the information gathered depends on self-revealed reactions. The findings' accuracy

may have been affected by participants' responses that were viewed as socially acceptable.

6 Conclusion

This extensive research sought to analyze the dominance of Green Human Resource Management (Green HRM) practices, i.e., green training & development, green performance management and green involvement over employee retention with the mediating effect of employee ownership. By conducting a comprehensive literature review and subsequent empirical study it is concluded that green human resource management (HRM) practices have a prominent, direct or indirect impact on employee retention. In addition, the rapport between green HRM practices and employee retention is also mediated by employee ownership. Through this research it can be seen that employee retention is aided by environmentally friendly HRM practices like eco-friendly policies and procedures, environmental training, and sustainable development initiatives. Employees are given a sense of purpose and pride in their work as a result of these practices, which not only make the workplace healthier and more sustainable but also give them a sense of purpose. Employees have a higher probability to remain dedicated to the business if they believe it is committed to environmentally responsible practices. Hopefully, this research study will motivate organizations to adopt, implement and enhance their level of green HR initiatives, for the benefit of a sustainable planet and for their own long term business growth as well.

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