



IMPACT OF GREEN HRM PRACTICES ON CORPORATE SUSTAINABILITY WITH
MODERATING ROLE OF LEADER SUPPORT AND MEDIATING ROLE OF EMPLOYEE
GREEN BEHAVIOUR: A STUDY OF BANKING SECTOR OF ISLAMABAD, PAKISTAN

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Abstract

This study examined the impact of Green Human Resource Management (GHRM) practices on corporate sustainability in the banking sector of Pakistan, with employee green behavior as a mediator and leader support as a moderator. The purpose was to investigate whether green job descriptions and green recruitment contributed to sustainability outcomes and to assess the behavioral and leadership mechanisms underlying this relationship. A quantitative, deductive approach was adopted using a cross-sectional survey design. Data was collected from 216 employees of five major banks in Islamabad through structured questionnaires. The data were analyzed using Smart-PLS 4, applying Partial Least Squares Structural Equation Modeling (PLS-SEM) to test direct, mediating, and moderating relationships. The findings revealed that green job descriptions and green recruitment had significant positive effects on corporate sustainability. However, employee green behavior did not mediate the relationship, and leader support did not moderate the link between GHRM practices and employee green behavior. The study was limited to five major banks in Islamabad and used a cross-sectional design, which may restrict the generalizability of the findings and limit causal interpretations. Future studies may consider longitudinal designs and broader geographic coverage. The study highlighted the importance of formal HR structures in driving sustainability outcomes. Banking organizations should integrate green job descriptions and green recruitment practices into their HR systems to enhance corporate sustainability performance. The study added contextual evidence from an emerging economy by examining the role of GHRM practices in Pakistan's banking sector and exploring the mediating and moderating mechanisms of employee green behavior and leader support.

Keywords: Green HRM, Corporate Sustainability, Employee Green Behaviour, Leader Support, Banking Sector, Pakistan.

1. Introduction

The focus on Green Human Resource Management (GHRM) has grown rapidly due to global environmental issues and business responsibility for acting in a way that preserves the environment. Before GHRM, the focus of Human Resource Management (HRM) was on employee performance and work output. Therefore, according to Lin et al. (2024), GHRM includes all aspects of human resources that enhance an employee's environmental consciousness, which includes recruitment, selection, training, evaluation of employee performance, and payment of wages and benefits (Lin et al., 2024). In addition to the above-stated definition of GHRM, the larger movement toward corporate sustainability is to pursue economic growth through defending the environment and social justice; thus, corporate sustainability is often referred to as the triple bottom line (TBL) model of sustainability (Nica et al., 2025). Regarding green recruitment practices, the goal is to hire employees with similar beliefs and attitudes toward the environment (Miah, 2024; Alkebti & Rice, 2024). The purpose of green training is to teach employees about the environment and provide them with the essential information, skills and competencies to implement sustainable behaviors (Miah, 2024; Alkebti & Rice, 2024). The purposes of green compensation and performance management are to encourage



employees to practice environmentally sustainable behavior (Hira, 2023; Alkebti & Rice, 2024). As a result, green HRM positively impacts the organizational performance concerning environmental sustainability and social performance by cultivating the quality of life for employees and creating an organizational culture of ethics as well as promoting organizational economic sustainability (Miah, 2024; Hira, 2023; Alkebti & Rice, 2024).

Studies have shown that there is substantial evidence from studies that specify that applying green HRM practices will lead to employee green behaviors and ultimately contribute to successful sustainability performance outcomes (Ametepe et al., 2025). Examples of organizations that have implemented green HRM practices include German and Japanese companies that have incorporated green HRM practices in their business models and have successfully achieved environmental regulatory compliance and met stakeholder expectations (Ametepe et al., 2025). Additionally, businesses working in developing countries are beginning to implement green HRM practices to meet both national and international environmental sustainability standards as well as to improve their competitive position (Yong et al., 2019). Mostly, the application of green HRM across various economic conditions demonstrates that green HRM has transitioned from being a secondary or optional HR policy to becoming an essential component of every company's business plan to align the company's human capital and sustainability goals. In this study, Corporate Sustainability is defined as the dependent variable, which represents an organization's performance across the environmental, social and economic dimensions of sustainable development (Shahzad et al., 2023). Corporate Sustainability represents the degree to which Green HRM practices can deliver sustainable long-term results consistent with current ESG and SDG frameworks.

Although there is a large body of literature on GHRM and its role in facilitating sustainability, there is a lack of theoretical understanding of the mechanisms that connect GHRM and corporate sustainability. It is established that GHRM positively impacts organizational performance, but the circumstances of the existence of such a relationship remain ambiguous (Dumont et al., 2017; Lin et al., 2024; Jamil et al., 2023; Ametepe et al., 2025; Paille et al., 2022). The green behavior aspect of employees, which is often identified as a central mediator of GHRM and sustainable results, is under-theorized in various organizational settings, and the moderating power of leader support in enhancing GHRM-sustainability relationships has received little empirical evidence (Paille et al., 2022; Jamil et al., 2023; Ametepe et al., 2025). According to recent investigations, it is necessary to integrate behavioral and leadership processes to clarify more about HRM-led sustainability pathways (Lin et al., 2024; Jamil et al., 2023). The banking industry, being affected by the SBP Green Banking Guidelines (SBP, 2023), provides a suitable environment where the GHRM practice is insufficient and not well researched in terms of employee green behaviour and leaders' support. Solving these problems fits global demands in SDG 12 and SDG 13 and assists in advancing theory and offering guidelines to managers to promote leader-employee facilitated green practices in new economies.

1.1 Problem Statement

Despite increasing interest in GHRM strategies, organizations continue to struggle in converting GHRM initiatives into measurable outcomes related to organizational sustainability, mainly in developing countries like Pakistan. Given the lack of empirical evidence regarding which GHRM strategies lead to which types of sustainability outcomes (e.g., environmental, social, and economic), and when they produce these outcomes it remains unclear how GHRM contributes to improved sustainability performance. This dilemma has considerable implications in the banking sector, where organizations are increasingly being held accountable by stakeholders and regulators to integrate environmental considerations into their operational activities (SBP, 2023). However, very little is currently known about whether leaders support moderates or how employee green behavior mediates the relationship between GHRM and organizational sustainability. Therefore, an examination of how Green HRM practices may impact banks in achieving corporate sustainability is critical to resolving this problem. According to the gap analysis, the study investigates the mediating role of employee green behavior between GHRM practices and the moderating role of leader support in enhancing the relationship between GHRM practices and corporate sustainability.



1.2 Research Objectives

- To investigate the association between GHRM practices and corporate sustainability.
- To investigate the mediating role of employee green behavior between GHRM practices and sustainable corporate performance.
- To examine the moderating role of leader support in enhancing the relationship between GHRM practices and corporate sustainability.

1.3 Research Questions

The following research questions are outlined:

- What is the impact of green HRM practices on corporate sustainability within Pakistan's banking sector?
- What role does employee green behavior play as a mediator in the relationship between Green HRM practices and corporate sustainability?
- What role does the leader support plays as a moderator in the relationship between Green HRM practices and employee green behavior?

2. Literature Review

Green Human Resource Management encompasses all activities related to the green management of hired employees, as well as the acquisition of green talent. It is the responsibility of top management to make a strategic effect of the plant to improve the performance of employees regarding green activities. There are multiple activities available in the literature that can be stated under green human resource acquisition, which includes planning of green human resources, analysis of green activities by recruited employees, a well-described description of the green job, green job specification, green selection, and recruitment. Human resource planning is a stage of making decisions in advance regarding the need for personnel to meet the company's upcoming demands, following the company's three established objectives. Human resource planning integrates with organizational planning to ensure the presence of the correct employees in the required numbers. Green human resource planning (GHRP) could easily be the prime step towards the final goal of the implementation of green human resource management practices. GHRP analyzes the appropriate numbers that will be needed to fulfill the green objectives of the company and places them according to their skills. Special skills are required to meet the goals of an organization regarding environmental management. GHRP accomplishes the obligation in a definite manner. To maintain the cooperation between the supply and demand of employees, the planning process must be flexible and adaptable to the changing environment.

The concept of corporate sustainability has developed greatly in time, shifting away from the financial performance concept and expanding towards organizational responsibility that aligns economic, social, and environmental factors. In the scope of the current research, the notion of corporate sustainability is deemed the final result of the strategically implemented Green Human Resource Management (GHRM) practices. Sustainability programs need both system and behavioral interventions, and are strongly connected to how employees are hired, trained, motivated, and encouraged to embrace sustainable practices (Bilderback, 2024). The connection is especially important in the banking sector of Pakistan, which is increasingly pressured to be flexible to meet the requirements of the Green Banking Guidelines of the State Bank of Pakistan and help both in the national and global sustainability goals. Regardless of progress in digitalization, paperless banking, and eco-friendly financing, the industry is still showing a significant difference between intentions to be green and the reality, with the poor usage of GHRM practices (Khatun, 2024). There is empirical data to lean in favor of a positive correlation between GHRM and corporate sustainability. According to Yasin et al. (2023), green job descriptions, green recruitment, and environmentally oriented HR policies can increase the awareness of the employees about their environmental responsibilities and provide them with an incentive to act in an environmentally responsive manner, and behaviors are transformed into actual sustainable results (Podgorodnichenko et al., 2022). Thus, in the contexts of high regulatory pressure and high societal expectations, which the Pakistani banking sector faces, GHRM practices play the core role in operationalizing sustainability in organizations.



The idea of job role incorporation into environmental responsibilities happened when organizations started to incorporate environmental management systems in their strategic models. Historically, job descriptions were mainly based on regular activities, performance, and skills without sustainability and environmental responsibilities (den Boer et al., 2021). According to (But Freihat et al., 2024) claim that the emergence of environmental regulations and the growing concern about the sustainability of the world forced organizations to redefine job descriptions, formulating clear green responsibilities. These roles usually include the conservation of resources, environmental procedures, involvement in sustainability programs, and the popularization of environmentally friendly activities in the company. Basically, a green job description is employed to refer to a job where environmentally related responsiveness and performance expectations are at the core of the role.

The purpose of the green job descriptions is significant in instilling environmental responsibility into the character of employees. According (He et al., 2021) setting environmental expectations clearly is important to make employees aware of their contribution to organizational sustainability initiatives, and in doing so, they can make great contributions to the intended goals. This is especially in the banking industry in Pakistan, where the level of environmental responsibility awareness among the workers is not uniform because of the differences in sustainability practices among the institutions. Green responsibility Organizations can also express green accountability not as peripheral or symbolic by incorporating green responsibilities into job descriptions (Ercantan and Eyupoglu, 2022). This formalization enhances the motivation of the employees in adopting green practices as well as guaranteeing that their daily operations are in line with the sustainability strategies of the organization.

Green responsibilities are also a strategic implementation in the HR frameworks, which serve as the support of organizational stability and performance. Alemu and Burrell (2025) underline that transparent green job descriptions make employees willing to engage in the activities of the eco-initiatives so that the operations are more eco-efficient and the organizational resources could be used sustainably. Likewise, according to Hair et al. (2023), environmental expectations set within the job level allow the organization to reduce environmental risks, ensure that sustainability practices are followed, and the workplace culture should be designed in a way that sustainability is a normal practice, but not an exception.

Making environmental responsibilities part of job descriptions offers organizations a tangible construct to follow and sustainability policies become actions to be undertaken. Green Human Resource Management (GHRM) is green job descriptions. They also make sustainability goals tangible on a personal level so that the role of employees is what makes the difference to sustainability in general within a corporation. Formalizing environmental expectations enables the company to adopt sustainability strategies more efficiently, creating an engaged workforce that will always be conscious of laboring in line with the long-term environmental and organizational goals.

According to the author, reported that Green recruitment developed as organizations realized that recruiting people who care about sustainability is important. The earlier recruitment was principally concerned with technical requirements, experience, and capability. Nonetheless, as sustainability requirements and stakeholder expectations of environmentally friendly conduct grew, organizations started to include environmental requirements in job advertising, background checks, interviews, and recruitment. according (Odhiambo, 2024) Green recruitment can thus be explained as the procedure of drawing and selecting people who have a pro-environmental mindset and who are committed to assisting an organization with its sustainability program. Green recruitment is an underpinning concept related to this study since employees who are oriented toward sustainability are more likely to develop and sustain green behaviors in the long run. In Pakistan's banking industry, where sustainability is still developing, hiring employees who already understand environmental issues reduces the need for extensive training, saving the company time, effort, and resources (Khan et al., 2023). Green recruitment leads to employees who are inherently open to engaging in the energy conservation, waste minimization, and sustainability initiatives.

The role of green recruitment in increasing corporate sustainability has been strongly supported in the literature. As Jamil et al. (2023) stated, by recruiting people who exhibit environmental sensitiveness,



organizations have been enjoying a greater level of environmental compliance, reduced resistance to green change, and better indicators of environmental performance. Green recruitment in the banking sector, particularly, has been found to complement green financing projects, lower wastage of resources, and improve the external sustainability profile of the organization (Zhang et al., 2022). Therefore, green recruitment is an essential GHRM practice, which can make an important influence on the outcomes of organizational sustainability.

Corporate sustainability is a development of the initial environmental management activities in the 1970s, when organizations started to acknowledge the lasting effects of industrial activity on the natural resources (Zamroni et al., 2022). With time, the concept became broad to include economic responsibility, ethical governance, and social well-being. According to Le et al. (2024) Corporate sustainability has now been defined as the capacity of an organization to act responsibly through the minimization of environmental damage, resource efficiency, and contributing towards the objectives of society at large. Employee Green Behavior (EGB) helps this development because it transforms the principles of sustainability into everyday activities in the workplace.

Green HRM practices i.e. eco-training, green job design, and environmentally-aligned recruitment, encourage employees to behave in a manner that is conducive to sustainability. Sivalingam and Arulrajah (2022) demonstrates that as employees find that the organization supports environmental initiatives, they also participate in sustainable behaviours, which support the sustainability performance of the organization. Based on Social Exchange Theory, EGB describes the way in which the employees react to Green HRM input through the way employees demonstrate behaviour that improves environmental performance, innovation, and trust of the stakeholders (Bashirun et al., 2025). In emerging economies such as the banking industry of Pakistan where regulation is not strict, EGB is necessary in ensuring the corporate sustainability practices.

Leadership role in sustainability has transformed the traditional roles of supervision to a more strategic role of guiding, motivating, and empowering employees to embrace environmentally friendly behaviors. With the rise of sustainability as a concern worldwide, different models of leadership, like transformational and green leadership, were developed that stated that leaders must be personally devoted to such environmentally friendly values and serve as examples of such actions (Gabelaia, 2025). Here, leader support concept can be described as the support that leaders give to employees in terms of encouragement, guidance, resource allocation, and recognition so that they can take an active part in the environmental programs. In the context of this research, leader support acts as the moderating factor that enhances the influence of Green Human Resource Management (GHRM) on green behavior of the employees.

Although the organizations have elaborate GHRM policies, it is possible that employee participation in sustainability initiatives may be low without leadership being seen to be supportive. According to Tanveer et al. (2024), the employees will be more inclined to adopt green behaviours when leaders show interest and support towards environmentally friendly behaviours. Empowering employees by leaders imparts a feeling of psychological safety, which makes them feel confident to actively engage in the environmental projects. This facilitating leadership practice brings the probability that employees will transfer green job descriptions, green recruitment expectations, and other GHRM interventions into the reality of sustainable behaviors (Tanveer et al., 2024).

Empirical data also attests to the importance of leader support in strengthening GHRM practices. Liu et al. (2023) show that employees get motivated to act in a way that may be considered as being environmentally responsible when the leaders convey the relevance of sustainability, compensate the activities that may support the green agenda, and invest in environmental-friendly programs. Also, Elshaer et al. (2024) draw attention to the fact that leader support builds the green identity of employees, and commitment to organizational sustainability goals, as well

2.1 Supporting Theory

In this research, three different and yet interconnected perspectives have been involved to understand how practices of Green Human Resource Management (GHRM), Leader Support, and Employee Green Behavior interrelate to impact Corporate Sustainability (Xie and Lau, 2023). The study relies on two theory



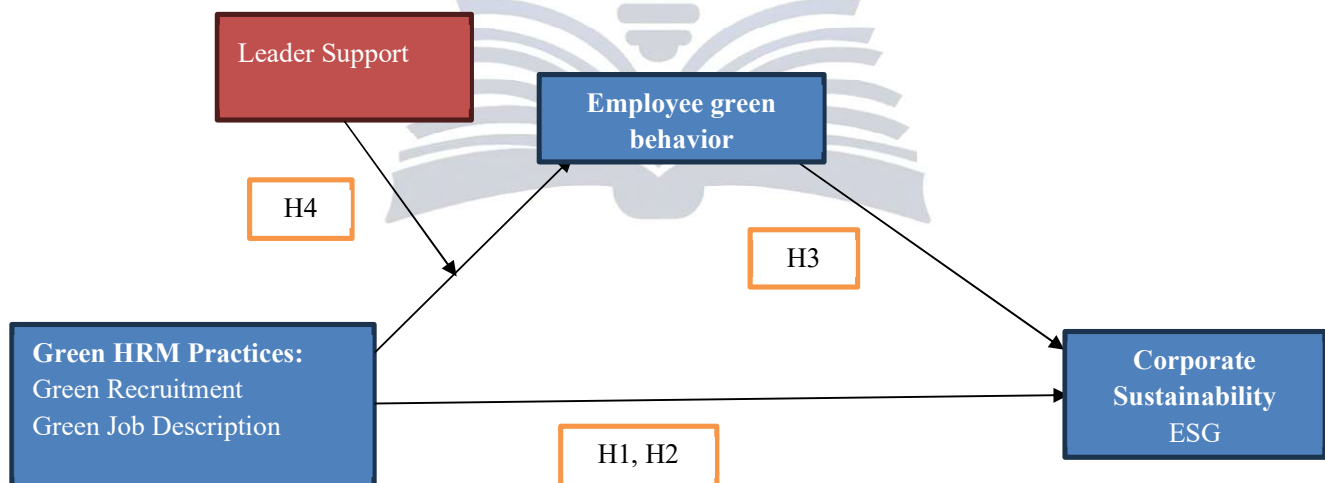
models that are closely interconnected: Social Exchange Theory (SET) and the Resource-Based View (RBV), which, when combined, offer a complete way of explaining how GHRM practices may result in the lasting sustainability of organizations. The Social Exchange Theory (SET) states that the connection between organizations and employees is based on a two-way street and mutual benefit (Blau, 1964). As organizations practice green HRM, including green recruitment, green training, and green rewards, employees will feel that the organization is investing in their well-being and professional development. Employees are also motivated to reciprocate this perception by green behaviors and attitudes that align with the sustainability goals of the organization (Ametepe et al., 2025; Dumont et al., 2017). This process is further empowered by leader support, which gives guidance, motivation, and encouragement, which helps to give the employees greater commitment to the environmental programs. By so doing the relationship between GHRM practices and corporate sustainability is strengthened because the leaders assist in turning formal policies into practices.

2.2 Conceptual Framework

The research conceptual model illustrates how GHRM practice influences corporate sustainability via a mediator - employee green behavior as well as a moderator - leader support. The model will integrate both the individual and organizational elements that can be used to explain how individual and organizational elements work together to promote the environmental, social, and economic dimensions of sustainability for companies in today's world, especially those in developing countries where the maturity level of the institutional environmental frameworks is less developed (Ametepe et al., 2025). Defined as a multidimensional construct that includes environmental performance (reduction of an organization's carbon footprint and pollution), social performance (employee well-being, employee rights/equity, and community responsibility), and economic performance (long-term operational efficiency and competitiveness), Corporate Sustainability is the dependent variable. Suggesting that when organizations apply GHRM together with employee green behavior and leader support, they can build a sustainable competitive advantage utilizing their green human capital and leader support as strategic resources, as described through the RBV and SET.

Figure 1

Conceptual Framework



The figure presents the hypothesized relationships among Green HRM Practices, Leader Support, Employee Green Behavior, and Corporate Sustainability.

2.3 Hypothesis Development

1. Green Job Description has a positive relationship with corporate sustainability.
2. Green Recruitment has a positive relationship with corporate sustainability.
3. Employee Green Behavior significantly mediates the relationship between Green HRM practices and corporate sustainability.



4. Leader support positively moderates the relationship between Green HRM practices and Employee Green Behavior.

3. Methodology

First, we begin with the methodology section. Exploratory designs seek to investigate new phenomena, descriptive designs state the characteristics of a population, and explanatory designs study cause and effect relationships (Olawale et al., 2023). The research design was explanatory, since the research aimed at investigating causal relationships between the Green HRM practices and corporate sustainability, where the employee green behavior serves as a mediator and leader support as a moderator. The explanatory design best fits complex theoretical frameworks and is generally suggested to be used in theory-driven quantitative studies (Christodoulou, 2025).

Research strategy is the systematic approach to the gathering of empirical data. The survey, experiment, case study, and interviews are common strategies. All strategies are different in their control, depth, and generalization (Zou & Xu, 2023). The study used a survey research design, where a structured questionnaire was given to employees of banks. (Siregar, 2023) reported that the survey methodology is suitable since a large sample is collected in a standardized way and this means that the data is comparative and statistically sound. It works especially well within HRM and sustainability research in which perception and behavior need to be quantified. Additionally, Yang et al. (2022) stated that surveys enable mediation and moderation analysis and suit research in geographically concentrated markets like the banking industry.

3.1 Data Collection and Population

According to Sukmawati (2023) data collection is defined as the organized collection of information in order to solve research questions. The data can be taken through secondary or primary sources. Primary data was used in this study, which is a structured questionnaire given to banking employees. To increase accessibility and response rates, the questionnaire was administered via online and physical delivery. Questionnaires are most appropriate since they provide anonymity, confidentiality, and standardization response, which enhances the accuracy and reliability of data (Zimba & Gasparyan, 2023). This research targeted a total of 216 employees, including Personal Banking Officers, Customer Relationship Managers, Branch Managers and HR Officers in Allied Bank Limited, Bank Alfalah, Askari Bank Limited, Bank Al Habib Limited and United Bank Limited (Blackman, 2022).

3.2 Sampling Size

According to the author Narayan et al. (2023) stated that sampling is the act of taking a section out of the population to represent the entire population. Purposive sampling was fit in the research of managerial and HR-related jobs that need informed answers. The number of respondents to be used in this study were 216, which is acceptable in quantitative analysis.

3.3 Research Instrument

A research instrument is a device that is employed to gather data in a systematic and organized way. By applying a structured questionnaire, the study relied on earlier proven measurement scales to guarantee reliability, validity and parallels to the previous studies. Items measuring Leadership Support are from Iqbal & Ahmad (2021), Employee Green Behavior from Robertson & Barling (2013), Corporate Sustainability from Yasin et al. (2023), and Das et al. (2020) and Green Job Description by Yong et al. (2020) and Shah, (2024) and Green Recruitment from Shah (2019). A five-point Likert scale was used to rate all items because the original instruments have been developed and tested in HRM and sustainability research environments. The validity of scales used maximizes content validity and allows comparison with other study results. To measure reliability and validity, the PLS-SEM measurement model is evaluated based on composite reliability (CR), indicator loadings, average variance extracted (AVE) and discriminant validity (HTMT) to determine strength of the measurement model (Li & Lay, 2024).

3.4 Data Analysis

Taherdoost (2022) evaluated that data analysis is the procedure of analyzing, refining, manipulating, and modeling data with the view of obtaining valuable inferences. The research involved a two-stage data analysis with Smart-PLS software. Partial Least Squares Structural Equation Modeling (PLS-SEM) was



performed with Smart-PLS to test the hypothesis. PLS-SEM was best fit with complex research models that entail mediation and moderation as in this study. It is also suitable to small-to-medium sample sizes and does not presuppose strong data normality (Nadella, 2023). Because of these benefits, PLS-SEM is commonly suggested in research of GHRM and sustainability.

4. Results

The ultimate dataset was 216 valid responses and all of them satisfied the criterion of quality and validity of data. Data preparation was performed using SPSS Version 26 to ensure accuracy and suitability for subsequent statistical analysis. Therefore, further validation through SmartPLS was necessary to confirm construct reliability and validity before structural relationships were evaluated.

4.1 Respondent Demographic Test

Demographic profiling constitutes a preliminary approach in quantitative analysis since it elucidates the source of data and the validity of the sample to the population being examined. Perceptions of Organisational policies and green practices in sustainability and HRM studies can be influenced by respondent attributes (e.g., age, education, role and experience), hence, by reporting such attributes, one can make the findings more plausible in terms of their applicability to the context and indicate the presence of sampling bias. In SPSS, a frequency analysis ($N = 216$) was performed to outline the demographic attributes of the respondents such as gender, level of education, bank affiliation, age category, job title, and work experience.

Table 1

Demographic Characteristics of Respondents ($N = 216$)

Variable	Category	Frequency	Percentage (%)
Gender	Female	133	61.6
	Male	75	34.7
	Prefer not to say	8	3.7
Education	Bachelor's Degree	40	18.5
	Master's Degree	73	33.8
	MPhil/MS	67	31.0
	PhD	30	13.9
Name of Bank	Allied Bank Limited	30	13.9
	Askari Bank Limited	44	20.4
	Bank Al-Habib Limited	75	34.7
	Bank Alfalah Limited	24	11.1
	United Bank Limited	43	19.9
Age Group	25–35	65	30.1
	36–45	59	27.3
	46–55	78	36.1
	56+	14	6.5
Job Position	Branch Manager	85	39.4
	Customer Relationship Manager	48	22.2
	HR Officer	50	23.1
	Personal Banking Officer	33	15.3
Work Experience	Less than 1 year	14	6.5
	1–3 years	51	23.6
	4–6 years	58	26.9
	7–10 years	71	32.9
	10+ years	22	10.2

Table 1) is also skewed towards female respondents (61.6%), which is indicative of the actual workforce composition in the participating branches, but this also has the potential of introducing the perceptual bias by gender, should the experiences of sustainability behaviours and organizational support vary



across genders. The level of education depicts a well-qualified sample: majority of the respondents have postgraduate qualifications (Master 33.8%, MPhil/MS 31.0%, PhD 13.9%). This enhances the conviction that respondents can have a meaningful rate of organisation sustainability and green HRM initiatives, but it might constrain the generalization to less skilled categories of workforce. Representation by the banks is spread among five large banks and the highest percentage of the bank is Bank Al-Habib (34.7%). This enhances the coverage of sectors, but the imbalance would result in a disproportionate organizational culture in the leading bank despite the overall responses. Age distribution is at the mature workforce with the highest number of respondents indicated at the age of 46-55 (36.10), indicating that the respondents have a reliable organizational exposure, which is valuable in the evaluation of sustainability practices with time. On the same note, the levels of experience have a strong concentration on 7-10 years (32.9%) and 4-6 years (26.9%) which clinch the validity of the answers. Lastly, job position profile (Branch Managers 39.4% and HR Officers 23.1%) suggests that a number of respondents are occupying jobs where they are likely to see or enforce HRM and sustainability policies, but this management bias can encourage higher HRM practices among the respondents than the staff on

4.2 Correlation Analysis

Correlation analysis was conducted to examine the strength and direction of relationships among the study variables. Pearson correlation coefficients were used to assess whether Green HRM practices, leadership sustainability, employee green behaviour, and corporate sustainability are significantly associated. Correlation analysis provides preliminary evidence of linkage between constructs; however, it does not imply causality and must be interpreted cautiously before structural modelling.

Table 2

Correlation Matrix

Variables	LS	EGB	CS	GJD	GR
LS	1				
EGB	.547**	1			
CS	.735**	.596**	1		
GJD	.587**	.545**	.720**	1	
GR	.643**	.579**	.721**	.664**	1

Note: **p < 0.01

These findings reveal that all constructs are positively and significantly correlated. Corporate Sustainability is more closely associated with Leader Support ($r = .735$), Green Recruitment ($r = .721$), and Green Job Description ($r = .720$), and indicates that the practice of leadership and HRM practices are strongly related to the results of sustainability. However, the correlations are very high, and it is also possible that this is due to conceptual overlap, which supports the importance of discriminant validity testing in Smart-PLS.

4.3 Structural Model Assessment

After confirming that the measurement model demonstrates an acceptable level of reliability and validity, the next stage in PLS-SEM is the assessment of the structural model. Structural model evaluation focuses on examining the hypothesized relationships between latent constructs and determining the predictive and explanatory power of the proposed framework. In this study, the structural model investigates how Green Job Description (GJD) and Green Recruitment (GR) influence Corporate Sustainability (CS), while considering Employee Green Behaviour (EGB) as a mediating mechanism and Leader Support (LS) as a moderating variable. Structural model assessment was conducted using Smart-PLS 4 through bootstrapping with 5,000 resamples, enabling robust statistical inference through path coefficients (β), t-values, and p-values. Following F.Hair et al. (2014), the evaluation included the coefficient of determination (R^2), effect size (f^2), hypothesis testing of direct paths, mediation analysis through indirect effects, and moderation testing via interaction terms.

The coefficient of determination (R^2) represents the proportion of variance in an endogenous construct that is explained by its predictor variables. Higher R^2 values indicate stronger explanatory power and



predictive relevance of the structural model. In behavioral and management research, Chin (1998) suggests that R^2 values of 0.67, 0.33, and 0.19 may be interpreted as substantial, moderate, and weak respectively.

Table 3

R² and Adjusted R² Values

Endogenous Construct	R ²	Adjusted R ²
Corporate Sustainability (CS)	0.747	0.743
Employee Green Behaviour (EGB)	0.600	0.590

These findings have proved to be a high predictive power of Corporate Sustainability, whereby $R^2 = 0.747$ signifies that the model predictors of sustainability outcomes (GJD, GR, and EGB) explain about 75 percent of the variation in sustainability outcomes. This is a significant level of explanation, which implies that the combination of green HRM practices and behavioral mechanisms can give a relevant understanding of sustainability performance in Pakistani banks. In the case of Employee Green Behaviour, $R^2 = 0.600$, which means that 60 percent of behavioral variance is attributed to GJD, GR, LS and the interaction terms. This is a little less than CS, but it is still an indication of a high predictive level, and it shows that organizational HRM systems and leadership situation can to some degree determine environmentally responsible behaviours of employees. All in all, these values contribute to the structural strength of the suggested framework.

While R^2 indicates overall explanatory power, effect size (f^2) evaluates the relative contribution of each predictor construct to an endogenous variable. According to Cohen (2013), f^2 values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively.

Table 4

f² Effect Sizes

Relationship	f ²	Magnitude
EGB → CS	0.484	Large
GJD → CS	0.138	Small–Medium
GR → CS	0.130	Small–Medium
GJD → EGB	0.001	Negligible
GR → EGB	0.000	Negligible
LS → EGB	0.001	Negligible
GJD×LS → EGB	0.012	Small
GR×LS → EGB	0.004	Negligible

The findings of the effect size show that the Employee Green Behaviour has the largest and practically significant effect on Corporate Sustainability ($f^2 = 0.484$). This implies that employees in the banking sector contribute immensely towards the sustainability results in terms of their real green practices and not just through the bank symbolic policies.

The Green Job Description and the Green Recruitment show a small-to-medium impact on CS, which means that HRM systems are relevant to sustainability, but not as much as behavioural implementation. On the contrary, predictors of EGB have insignificant effect sizes, meaning that neither the HR design nor recruitment practices substantially explain variation in the employee green behaviour within this sample. This brings up serious issues on whether the implementation of green HRM initiatives is being effectively realized beyond documentation.

4.3.1 Hypothesis Testing (Direct Effects)

H1: Green Job Description has a positive relationship with corporate sustainability.

H2: Green Recruitment has a positive relationship with corporate sustainability.

Direct hypothesis testing was performed using bootstrapped path coefficients. A relationship is statistically significant when $p < 0.05$.



Table 5

Path Coefficients (Direct Effects)

Hypothesis	Path	β	t-value	p-value	Decision
H1	GJD → CS	0.259	4.352	0.000	Supported
H2	GR → CS	0.268	3.970	0.000	Supported
—	EGB → CS	0.468	7.894	0.000	Significant
—	GJD → EGB	-0.065	0.278	0.781	Not Supported
—	GR → EGB	0.025	0.063	0.950	Not Supported
—	LS → EGB	0.104	0.188	0.851	Not Supported

The findings show that Green Job Description and Green Recruitment have a significant positive correlation with Corporate Sustainability. This confirms that formalizing the environmental responsibilities into job roles (GJD) and recruitment (GR) practices contributes to sustainability performance among Pakistani banks. Nonetheless, none of the predictors is significant in explaining Employee Green Behaviour. Both GJD and GR do not have any effect on EGB, which can lead to the assumption that green HRM practices can be viewed as only a promise at the policy level and not something that can influence employees in their daily activities. Leader Support also lacks significance, meaning that leadership encouragement will not result in behavioural change unless there is enforcing mechanisms or changes in organizational culture.

The findings agree with the existing literature that reveals that Green Job Description and Green Recruitment have a positive impact on Corporate Sustainability that formalizes the environmental responsibility in the HR systems (Yong et al., 2020). Sustainability was increased by Employee Green Behaviour as well, which is in line with Dumont et al. (2017). Nevertheless, the fact that there are no major effects of GHRM practices and Leader Support on EGB does not align with previous results (Liu et al., 2023), which holds that in Pakistani banks, the green internship of HR is carried out on a policy level with insignificant behavioural internalization.

4.3.2 Mediation Analysis. H3: Employee Green Behavior significantly mediates the relationship between Green HRM practices and corporate sustainability.

Mediation analysis examines whether GHRM practices influence CS indirectly through Employee Green Behaviour. Indirect effects were assessed through bootstrapping.

Table 6: Specific Indirect Effects (Mediation via EGB)

Indirect Path	B	t-value	p-value	Evidence
GJD → EGB → CS	-0.030	0.275	0.783	Not Supported
GR → EGB → CS	0.012	0.062	0.950	Not Supported
LS → EGB → CS	0.049	0.186	0.853	Not Supported

The mediation outcomes verify that the Employee Green Behaviour is not an important transmission channel between the green HRM practices and the sustainability results. Even though EGB is a strong predictor of CS at a direct level, HRM practices in the first place do not lead to the generation of green behaviour and hence mediation becomes statistically insignificant. The outcomes of the mediation dispute many of the GHRM literature, which often suggests that Employee Green Behaviour is the major mechanism between green HR practices and sustainability outcomes (Ametepe et al., 2025). Whereas EGB had a strong predictive power on Corporate Sustainability, Green Job Description and Green Recruitment did not make a significant stimulus of green behaviour, undermining the mediating route. This contradiction of previous results (Paillé et al., 2022) indicates that in Pakistani banking institutions, green HR programs can be symbolic or compliance-based instead of behavioural in nature.

4.3.3 Moderation Analysis. H4: Leader support positively moderates the relationship between Green HRM practices and Employee Green Behavior.



Moderation testing examines whether Leader Support strengthens or weakens the relationship between HRM practices and EGB. Interaction effects were tested through bootstrapped paths.

Table 7

Moderating Effects (Interaction Terms)

Hypothesis	Interaction Path	B	t-value	p-value	Decision
H4a	GJD×LS → EGB	0.425	0.998	0.318	Not Supported
H4b	GR×LS → EGB	0.301	0.461	0.645	Not Supported

The results show that Leader Support lacks significant moderation of the impact of the green job description or recruitment on the green behaviour of employees. There are positive interaction coefficients, which are, however, not statistically significant. The key answer is that the reported VIF of interaction constructs is very high, which indicates multicollinearity of constructs that can lead to poor estimation of moderation. In addition, formal systems can influence employee behaviour more than discretionary encouragement by leaders in the hierarchy banking setting; the conditional role of leader support may be diminished. The moderation results differ with the previous studies that determine Leader Support as a significant contextual element that reinforces the impact of Green HRM practices on Employee Green Behaviour (Robertson and Barling, 2013). The coefficients of interaction were positive; however, but they were statistically insignificant, perhaps because the coefficients of multicollinearity in the moderation terms were severe (Graves et al., 2013). It implies that the encouragement of the leadership in Pakistani banks might be low to translate formal green HR policies into behavioural engagement, which shows the implementation and contextual constraints.

To conclude, the proposed framework is partly supported by a structural model. Green Job description and Green Recruitment is closely associated with Corporate Sustainability, whereas Employee Green Behaviour makes a direct contribution towards sustainability outcomes. Nevertheless, the mediation by EGB and the moderation by Leader Support are not approved. These results raise a critical contextual point: although the Pakistani banks can adopt the green HRM practices in the structural sense, the task of transferring such efforts to the behavioural engagement of workers still has to be accomplished.

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5. Discussion

This study investigated how GHRM practices influence Corporate Sustainability (CS) in the banking industry of Pakistan using Employee Green Behaviour (EGB) as a mediator and Leader Support (LS) as a moderator. The results partially confirm the theoretical approach based on the Social Exchange Theory and the Resource-Based View. As it is consistent with the prior studies, Green Job Description (GJD) and Green Recruitment (GR) have had shown strong positive impacts to corporation sustainability. This is in line with Nakra and Kashyap (2024) who emphasize the fact that sustainability-oriented HR practices improve the performance of the organizational environment. Employee Green Behaviour also became the most predictive of sustainability outcomes $\beta = -0.468$, $p < 0.001$, which is in line with Dumont, Shen and Deng (2017) that claim that green actions at the employee level directly influence sustainability in the long term. But, to the contrary, EGB failed to mediate the relationship that existed between GHRM practices and CS.

There was no meaningful difference in the indirect effects, implying that the better employees behave green in terms of sustainability, the less the HRM practices in Pakistani banks can be translated to behavioral change. This is unlike the case found by Al Doghan et al. (2022) who reported a high level of mediation in more developed sustainability environments. Likewise, Leader Support failed to mediate the relationship between GHRM and EGB. This result is contrary to that of Liu et al. (2023), who highlight leadership as the major stimulus of green behaviour. This might be due to contextual constraints in the banking industry of



Pakistan where sustainability efforts might be based on policy and not behaviour. Also, there could be high multicollinearity between interaction terms which could have weakened moderation estimates. In general, the experiment indicates that green HR policies can increase sustainability at the structural level, but the underlying behavioral and leadership processes in the context are not well-developed. The discussion is based on the direct impact of Green Job Description (GJD) and Green Recruitment (GR) on sustainability performance, as well as the evaluation of the mediator role of Employee Green Behaviour (EGB) and the moderator role of Leader Support (LS). Both the measurement model and the structural model were tested using Partial Least Squares Structural Equation Modelling (PLS-SEM) to provide construct reliability, validity and hypothesis test. The chapter has introduced vital insights on the contribution of formal green HR practices to sustainability and the restrictions inherent in the sector in terms of behaviour and leadership.

5.1 Conclusion

This research conclude GHRM practices affect Corporate Sustainability (CS) in the Pakistani banking industry using Employee Green Behaviour (EGB) as a mediator and Leader Support as a moderator. The results also give important insights into the operational and behavioral processes whereby GHRM practices can be used to improve the sustainability outcomes. In particular, the study establishes that the formalized HR practices which are Green Job Descriptions (GJD) and Green Recruitment (GR) have a positive and significant influence on Corporate Sustainability. This helps to concur with the idea that incorporating environmental obligations within HRM systems is crucial in ensuring sustainability in any organizational system. Interestingly, although Employee Green Behaviour has acted as a strong predictor of sustainability outcomes, it did not mediate the relationship between GHRM practices and Corporate Sustainability. On the same note, Leader Support did not mediate the GHRM and EGB linkage. These results imply that in the Pakistani banking industry, green HRM programs are more productive at the structural level than the engagement of the behavioral aspect or the influence of discretionary leadership. It is contrary to the results of studies in developed countries, where employee green behaviour and leadership support are more significant in the process of translating the HRM practices to sustainability effects. It provides a subtle insight into the role of GHRM in the emerging economies, whereby formal HR frameworks can be the key factor in corporate sustainability in an environment where the organizational culture, enforcement of policies and regulatory consciousness are still evolving. These results form the basis of the scholarly discussion and management practices to improve sustainability among banking organizations.

5.2 Implications

The results of this study add a number of important theoretical solutions to the nature of GHRM and corporate sustainability. To begin with, the research advances the knowledge on the GHRM-sustainability nexus in developing nations, especially in Pakistan, where institutional structures and environmental consciousness are not alike in developed economies. The only partial support of the conceptual model indicates that structural HRM processes, including GJD and GR, have the ability to develop sustenance performance on their own, even in cases where strong employee behaviour changes and leader-based interventions are not present. This holds empirical evidence that organizational design, policy formalization and regulatory alignment can be adequate in generating measurable sustainability results in emerging economies.

This study has practical implications to managers, policymakers and regulators in the banking industry of Pakistan. To start with, banks ought to appreciate the fact that formal HR structures are proving to be effective in meeting the sustainability objectives instead of just enforcing leadership encouragement or employee behavioral engagement. Second, the paper presents the need to close the policy-behaviour gap. As much as structural HRM practices are successful in encouraging sustainability results, there are also mechanisms that the banks need to put in place to ensure that employees are engaged in green practices. These may take the form of performance rewards based on the environmental program, specific training programs that focus on practical environmental activities and a systematic observation of the behaviour of employees. The findings suggest the use of compliance-based systems and non-voluntary behavioral interventions in ensuring that banks achieve sustainability targets. This can inform the policy makers to develop the Green



Banking Guidelines further, integrate green issues in the HR policies and facilitate the organizational systems that will lead to quantifiable results. Lastly, the research supports the value of organizational culture and organizational communication in sustainability initiatives. The culture of banks needs to be developed so that sustainability is a key organizational value that has structural policies to back it, definite of role, and uniform top management messages. This would assist in trying to align the behaviour of the individuals to the institutional objectives in the long run.

5.3 Future Research

The research creates a number of research opportunities in the future. To begin with, scholars are advised to consider means of improving the mediating factor of Employee Green Behaviour in developing nations. The topic leadership that can assist in supporting sustainability is not explored in the emerging contexts. Future researchers might focus on the other types of leadership that can be more effective in encouraging employee engagement in sustainability initiatives, including transformational, ethical, or green leadership. In the methodological improvements that are proposed, especially the solving of multicollinearity in moderation analysis, and the conceptual overlap between constructs. The use of other statistical methods, like orthogonalized interaction terms or higher-order latent constructs to enhance the strength of the mediation and moderation results, could be utilized in future research.

Author's Contributions

All authors participated in ideation, development, and writing the manuscript. All authors read and approved the final manuscript.

Conflict of Interest Statement

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Informed Consent

Informed consent was obtained from all participants prior to data collection. Participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without any consequences. The confidentiality and anonymity of respondents were guaranteed throughout the research process.

Data Availability

The datasets generated and analysed during the current study are available from the corresponding author upon reasonable request. The authors are committed to transparency and will provide detailed methodological information and analysis protocols upon request.

References

- Alemu, B., & Burrell, D. N. (2025). Exploring Green Human Resources, Corporate Social Responsibility, and Internal Organization Sustainability Strategy. *Scientia Moralitas*, 30.
- Alketbi, A., & Rice, J. (2024). The impact of green human resource management practices on employees, clients, and organizational performance.
- Ametepe, F., Osei, B. A., & Boateng, E. (2025). Green human resource management practices and corporate sustainability: The mediating role of employee green behavior and moderating role of leader support. *Journal of Cleaner Production*, 459(141212).
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Becker, J.-M., Cheah, J.-H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2023). PLS-SEM's most wanted guidance. *International Journal of Contemporary Hospitality Management*, 35(1), 321–346.
- Bilderback, S. (2024). Integrating training for organizational sustainability: The application of Sustainable Development Goals globally. *European Journal of Training and Development*, 48(7/8), 730–748.
- Blackman, H. (2022). *Unpacking Islamabad*. Islamabad. https://www.academia.edu/download/120689583/UnpackingIslamabad_Published.pdf



- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203771587>
- den Boer, H., van Vuuren, T., & de Jong, J. (2021). Job design to extend working time: Work characteristics to enable sustainable employment of older employees in different job types. *Sustainability*, 13(9), 4719.
- Drisko, J. W. (2025). Transferability and Generalization in Qualitative Research. *Research on Social Work Practice*, 35(1), 102–110. <https://doi.org/10.1177/10497315241256560>
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior. *Human Resource Management*, 56(4), 613–627.
- Ercantan, O., & Eyupoglu, S. (2022). How do green human resource management practices encourage employees to engage in green behavior? Perceptions of university students as prospective employees. *Sustainability*, 14(3), 1718.
- Freihat, L., Al-Qaida, M., Huneiti, Z., & Abbod, M. (2024). Green human resource management/supply chain management/regulation and legislation and their effects on sustainable development goals in Jordan. *Sustainability*, 16(7), 2769.
- Gamage, A. (2025). Research design, philosophy, and quantitative approaches in scientific research methodology. *Sch J Eng Tech*, 2, 91–103.
- Hair, J. F., et al. (2023). *PLS-SEM for business research*. Green Finance Publications.
- Hair, J. F. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage.
- Hall, J. R., Savas-Hall, S., & Shaw, E. H. (2023). A deductive approach to a systematic review of entrepreneurship literature. *Management Review Quarterly*, 73(3), 987–1016. <https://doi.org/10.1007/s11301-022-00266-9>
- Hira, N. (2023). The impact of green HRM and organizational citizenship behavior on environmental performance. *Pakistan Economic and Social Review*.
- Hunziker, S., & Blankenagel, M. (2024). Cross-Sectional Research Design. In S. Hunziker & M. Blankenagel, *Research Design in Business and Management* (pp. 187–199). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-42739-9_10
- Ikram, M., & Kenayathulla, H. B. (2022). Out of touch: Comparing and contrasting positivism and interpretivism in social science. *Asian Journal of Research in Education and Social Sciences*, 4(2), 39–49.
- Iqbal, Q., & Ahmad, N. H. (2021). Sustainable development: The colors of sustainable leadership in learning organization. *Sustainable Development*, 29(1), 108–119. <https://doi.org/10.1002/sd.2135>
- Jamil, S., Zaman, S. I., Kayikci, Y., & Khan, S. A. (2023). The role of green recruitment on organizational sustainability performance: A study within the context of green human resource management. *Sustainability*, 15(21), 15567.
- Jia, J., Liu, H., Chin, T., & Hu, D. (2018). The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. *Sustainability*, 10(9), 3237.
- Kaur, G., & Sharma, S. (2023). Green HRM practices and environmental performance: Evidence from developing economies. *International Journal of Manpower*, 44(2), 367–384.
- Khan, I. U., Hameed, Z., Khan, S. U., & Khan, M. A. (2023). Green banking practices, bank reputation, and environmental awareness: Evidence from Islamic banks in a developing economy. *Environment, Development and Sustainability*, 1.
- Khatun, M. (2024). Project On "Green HRM Practice for Sustainable Workplace in the Banking Sector of Bangladesh." <http://103.109.52.4:8080/handle/52243/3088>
- Kumar, S., & Ujire, D. K. (2024). Inductive and deductive approaches to qualitative research. *International Journal of Multidisciplinary Educational Research*, 13(1), 58–63.
- Lahbar, G. M., Junejo, D., & Bhatti, A. A. (2023). Mediating effect of green human resource management (GHRM) and organizational agility (OA) on firm environmental performance (FEP): By applying quantitative research approach. *Global Economics Review*, 8(2), 67–83.



- Le, T. T., Tran, P. Q., Lam, N. P., Tra, M. N. L., & Uyen, P. H. P. (2024). Corporate social responsibility, green innovation, environment strategy and corporate sustainable development. *Operations Management Research*, 17(1), 114–134. <https://doi.org/10.1007/s12063-023-00411-x>
- Li, W., & Lay, Y. F. (2024). Examining the Reliability and Validity of Measuring Scales related to Informatization Instructional Leadership Using PLS-SEM Approach. *Dinamika Jurnal Ilmiah Pendidikan Dasar*, 16(1), 12–32.
- Lin, Z., Gu, H., Gillani, K. Z., & Fahlevi, M. (2024). Impact of green work-life balance and green human resource management practices on corporate sustainability performance and employee retention: Mediation of green innovation and organisational culture. *Sustainability*, 16(15), 6621.
- Liu, R., Yue, Z., Ijaz, A., Lutfi, A., & Mao, J. (2023). Sustainable business performance: Examining the role of green HRM practices, green innovation and responsible leadership through the lens of proenvironmental behavior. *Sustainability*, 15(9), 7317.
- Miah, M. (2024). *A systematic literature review on green human resource management: Trends in GHRM research related to sustainability (2013-2023)*.
- Nica, I., Chiriță, N., & Georgescu, I. (2025). Triple Bottom Line in Sustainable Development: A Comprehensive Bibliometric Analysis. *Sustainability*, 17(5), 1932.
- Nunnally, J. (1994). *Psychometric theory* (3rd ed.).
- Odhiambo, G. M. (2024). *Green Human Resource Management Practices and Employee ProEnvironmental Behaviour in Public Universities in Kenya*. <http://ir.jkuat.ac.ke/handle/123456789/6525>
- Olawale, S. R., Chinagoz, O. G., & Joe, O. N. (2023). Exploratory research design in management science: A review of literature on conduct and application. *International Journal of Research and Innovation in Social Science*, 7(4), 1384–1395.
- Paille, P., Chen, Y., & Boiral, O. (2022). Linking green HRM practices to employee environmental commitment: The moderating role of leadership support. *Sustainability*, 14(3), 1456.
- Robertson, J. L., & Barling, J. (2017). Toward a new measure of organizational environmental citizenship behavior. *Journal of Business Research*, 75, 57–66.
- Shahzad, M. A., Jianguo, D., & Junaid, M. (2023). Impact of green HRM on sustainable performance. *Environmental Science and Pollution Research*, 30, 88524–88547.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965.
- State Bank of Pakistan (SBP). (2023). *Green Banking Guidelines*. Karachi: SBP.
- Sukmawati, S. (2023). Development of quality instruments and data collection techniques. *Jurnal Pendidikan Dan Pengajaran Guru Sekolah Dasar (JPPGuseda)*, 6(1), 119–124.
- Taherdoost, H. (2022). Different types of data analysis; data analysis methods and techniques in research projects. *International Journal of Academic Research in Management*, 9(1), 1–9.
- Tanveer, M. I., Yusliza, M. Y., & Fawehinmi, O. (2024). Green HRM and leadership in hospitality. *Journal of Hospitality and Tourism Insights*, 7(1), 121–141.
- Willie, M. M. (2024). Population and target population in research methodology. *Golden Ratio of Social Science and Education*, 4(1), 75–79.
- Xie, H., & Lau, T. C. (2023). Evidence-based green human resource management: A systematic literature review. *Sustainability*, 15(14), 10941. <https://doi.org/10.3390/su151410941>
- Yale Center for Environmental Law and Policy. (2024). *2024 Environmental Performance Index*. Yale University.
- Yang, L., Ji, L., Wang, Q., Xu, Y., Yang, G., Cui, T., Shi, N., Zhu, L., Xiu, S., & Jin, H. (2022). Vaccination intention and behavior of the general public in China: Cross-sectional survey and moderated mediation model analysis. *JMIR Public Health and Surveillance*, 8(6), e34666.
- Yasin, R., Huseynova, A., & Atif, M. (2022). Green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and corporate social sustainability.



Corporate Social Responsibility and Environmental Management, 30(1).
<https://doi.org/10.1002/csr.2360>

- Yasin, R., Huseynova, A., & Atif, M. (2023). Green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and corporate social sustainability. *Corporate Social Responsibility and Environmental Management*, 30(1), 369–383.
<https://doi.org/10.1002/csr.2360>
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., & Fawehinmi, O. (2019). Nexus between green intellectual capital and green human resource management. *Journal of Cleaner Production*, 215, 364–374.
- Yong, J. Y., Yusliza, M., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, 29(1), 212–228.
<https://doi.org/10.1002/bse.2359>
- Zamroni, A., Putri, W. E. C., & Sagala, S. T. (2022). Evaluation of Corporate Social Responsibility programs for local communities around mining companies in Kalimantan, Indonesia: Environmental, economic, and social perspectives. *Sustinere: Journal of Environment and Sustainability*, 6(1), 66–78.

