E-ISSN: 3108-4176

APSSHS

Academic Publications of Social Sciences and Humanities Studies
2022, Volume 3, Page No: 224-238
Available online at: https://apsshs.com/

Annals of Organizational Culture, Leadership and External Engagement Journal

How Green Human Resource Management Shapes Employees' Green Behavioral Intentions: The Roles of Corporate Social Responsibility and Individual Green Values in Vietnam

Lucas A. Moreau[1], Camille D. Bernard[2]*, Julien Martin[1]

1. Department of Organisational Communication, Faculty of Social Sciences, University of Strasbourg, Strasbourg, France.
2. Department of Human Resource Management, IAE Lyon School of Management, University of Lyon, Lyon, France.

Abstract

This study investigates the relationship between Green Human Resource Management (Green HRM) and employees' intentions to engage in environmentally responsible behaviors. Drawing on data collected from 380 employees in Vietnam, a developing economy, the study employs SmartPLS to analyze the proposed research model. The findings reveal that Green HRM significantly and positively influences employees' green behavioral intentions. In addition, the results demonstrate that individual green values moderate this relationship, while Corporate Social Responsibility (CSR) serves as a mediating mechanism. These findings provide valuable insights for organizations aiming to strengthen environmental sustainability through the strategic implementation of HRM practices. Moreover, the study highlights the critical role of CSR in fostering socially responsible practices and improving organizational performance within the distinctive Vietnamese business context. Overall, the research emphasizes the essential role of HRM in guiding organizations toward greater environmental sustainability and social responsibility, particularly in emerging economies such as Vietnam.

Keywords: Green behaviors, Green Human Resources Management, Green behavioral intentions, Green values, Corporate social responsibility

How to cite this article: Moreau LA, Bernard CD, Martin J. How green human resource management shapes employees' green behavioral intentions: The roles of corporate social responsibility and individual green values in Vietnam. Ann Organ Cult Leadersh Extern Engagem J. 2022;3:224-38. https://doi.org/10.51847/qfc5riA8Fr

Received: 09 September 2022; **Revised:** 29 November 2022; **Accepted:** 03 December 2022
Corresponding author: Camille D. Bernard
E-mail ✉ camille.bernard@gmail.com

Introduction

Environmental degradation and climate-related challenges have increasingly compelled organizations to integrate sustainability into their management systems. In response, Green Human Resource Management (Green HRM) has emerged as a strategic approach that embeds environmental considerations into human resource policies and practices [1]. By incorporating sustainability principles into recruitment, training, performance appraisal, and reward systems, Green HRM encourages employees to internalize environmental responsibility as part of their daily work activities [2]. Organizations adopt Green HRM not only to support the delivery of environmentally friendly products and services but also to coordinate environmental initiatives and overcome implementation barriers associated with sustainability programs [3]. Empirical research has demonstrated that Green HRM produces meaningful outcomes at both organizational and individual levels. Specifically, Renwick *et al.* [4] highlight that environmentally oriented HR practices strengthen ecological performance by institutionalizing green values within organizational structures. Such practices may also influence employees' psychological processes by shaping attitudes, social expectations, and perceived control over pro-environmental actions, thereby increasing their intention to behave in environmentally responsible ways [5].

© 2022 The Author(s).
Copyright CC BY-NC-SA 4.0

Scholars have increasingly examined the role of Green HRM in shaping employees' intentions to engage in green behaviors, with particular attention to individual green values. When employees perceive organizational commitment to environmental sustainability through Green HRM initiatives, they are more likely to feel motivated and morally obligated to act in environmentally responsible ways [5]. Individual green values further reinforce this process by strengthening the alignment between organizational practices and personal beliefs. Supporting this view, Ahmed *et al.* [6] demonstrate that employees' personal environmental values amplify the positive relationship between Green HRM and green behavioral intentions. However, much of the existing literature has concentrated on organizational performance outcomes or direct behavioral effects, while the underlying social mechanisms—particularly corporate social responsibility (CSR)—have received limited empirical attention [7, 8]. Recent evidence suggests that Green HRM and CSR are closely interconnected and may reinforce one another [9]. Furthermore, employees who perceive their organization as socially responsible are more inclined to develop intentions toward pro-environmental behavior [10]. Despite this, the mediating role of CSR in the Green HRM–green behavioral intention relationship remains insufficiently explored.

Green HRM is commonly understood as a resource-efficient approach to managing employees that simultaneously enhances organizational performance, employee well-being, and environmental sustainability [11]. This management philosophy has gained momentum worldwide and is increasingly visible in emerging economies such as Vietnam. Nevertheless, empirical research on Green HRM in Vietnam remains fragmented and sector-specific. Existing studies have largely focused on the hospitality industry [12-16], limiting the generalizability of findings. Although Nguyen *et al.* [17] proposed a framework to conceptualize CSR in Vietnam, their analysis primarily addressed the association between CSR and Green HRM, without examining employee-level outcomes. Research on individual green values also faces conceptual and contextual challenges. For example, Nguyen *et al.* [18] examined how cultural orientations shape environmental values and behaviors; however, previous studies have been criticized for failing to adequately situate CSR within Vietnam's distinct cultural and societal context. Moreover, limited attention has been given to examining Green HRM within a broader economic and institutional environment or to exploring how CSR functions as an explanatory mechanism in this relationship. Studies that explicitly investigate green behavioral intention—rather than actual green behavior—remain particularly scarce in developing-country settings.

To address these gaps, this study investigates the influence of Green HRM on employees' green behavioral intentions by incorporating CSR as a mediating variable and individual green values as a moderating factor. Empirical data were collected from organizations operating in Vietnam's two largest metropolitan areas, Hanoi and Ho Chi Minh City, allowing for a more comprehensive examination of Green HRM within a rapidly developing economy.

This study contributes to the literature in several important ways. First, by applying partial least squares structural equation modeling (PLS-SEM), it provides robust empirical evidence supporting the positive effect of Green HRM on employees' green behavioral intentions in the Vietnamese context, thereby extending prior research [5]. Second, unlike earlier studies that examined CSR or individual green values in isolation, this research simultaneously integrates CSR as a mediating mechanism and individual green values as a boundary condition in the Green HRM–green behavioral intention relationship. Prior research indicates that Green HRM can enhance CSR initiatives [9, 19], and that employees' perceptions of CSR influence workplace attitudes and environmentally responsible behaviors [20]. When organizational sustainability values conveyed through Green HRM are congruent with employees' personal green values, employees are more likely to develop stronger intentions to engage in environmentally friendly actions. Third, the findings offer actionable insights for organizational leaders designing green HR policies and for policymakers seeking to promote sustainable development in emerging economies.

The remainder of this paper is organized as follows. Section 2 reviews the relevant theoretical foundations and develops the research hypotheses. Section 3 describes the research methodology, including data collection, measurement instruments, and analytical procedures. Section 4 reports the empirical results, followed by a discussion in Section 5. Sections 6 and 7 present the theoretical and managerial implications, respectively. Finally, Section 8 outlines the study's limitations and directions for future research.

Hypothesis Formulation and Literature Review

Link between employees' eco-friendly behavioral intentions and green human resource management

Green HRM refers to the incorporation of environmental protection goals into human resource strategies, policies, and procedures [21]. It involves various eco-oriented approaches, including sustainable recruitment, employee development programs, participation mechanisms, performance reviews, and incentive structures [22, 23]. This approach plays a vital role in driving organizational sustainability efforts. A growing body of recent research has examined how Green HRM influences workers' willingness to adopt environmentally responsible actions [19, 24, 25]. Works by Chaudhary [24] and Song *et al.* [25] illustrate the potential of Green HRM strategies to motivate staff toward sustainable practices. Using the Theory of Planned Behavior (TPB) framework [26], Song *et al.* [25] established a direct connection between employees' views of Green HRM and their engagement in creative environmental actions. TPB posits that intentions are a strong precursor to real actions.

Employees' eco-friendly behavioral intentions represent their resolve to perform actions that support environmental well-being [27]. As noted by Ramus and Steger [28], this reflects a person's internal predisposition toward sustainable conduct, serving as a key predictor of actual participation. Such intentions trigger a sense of ethical responsibility and intrinsic motivation, leading workers to become more dedicated to safeguarding the environment [29].

Vietnam has experienced robust economic progress lately, which has brought greater focus to issues of corporate social accountability and ecological preservation [30]. In this setting, building a skilled workforce stands out as a core driver and source of competitive strength for achieving quick yet enduring growth [31]. Vietnam's broader human resource strategy seeks to position its labor force as a central pillar for ongoing national advancement, aiming to match standards in leading global economies [32]. Prior investigations into Green HRM's impact on workers' sustainable actions, mostly within Vietnam's tourism and hospitality fields, have revealed clear positive outcomes on staff members' readiness to embrace green practices [14, 33]. According to Pham *et al.* [33], Green HRM approaches paired with ethical leadership tend to boost employees' feelings of ecological duty and voluntary environmental contributions, especially in Vietnam's highly collective society with relatively shorter-term cultural focus. Thus, extending this examination to companies across multiple sectors, we anticipate that Green HRM will maintain its favorable influence on workers' eco-friendly intentions in the Vietnamese context. This leads to our initial hypothesis:

H1: Green Human Resource Management exerts a positive influence on Employees' Green Behavioral Intentions.

Moderating effect of personal eco-friendly values on the connection between employees' green behavioral intentions and green human resource management

Personal eco-friendly values stem from broader sustainability ideals and capture an individual's outlook and conduct regarding long-term environmental care [34]. When workers possess deep-rooted convictions in ecological preservation, organizational efforts in Green HRM can more powerfully stimulate their involvement in sustainable workplace activities [5]. Findings from Dumont *et al.* [34], Gilal *et al.* [35], and Islam *et al.* [36] confirm that individual environmental values can alter the strength of the tie between Green HRM and staff's sustainable actions. Edwards and Shipp [37] observed that congruence between personal and company-provided values improves workers' job-related mindsets and performance. Newer explorations of environmentally supportive values highlight how Green HRM fosters stronger ecological motivations by encouraging green conduct on the job [38]. Additionally, Ahmed *et al.* [6] argue that personal eco-values intensify the bond between Green HRM initiatives and workers' intentions toward sustainability.

Drawing from this body of evidence, we suggest that the alignment of employees' own environmental principles with Green HRM efforts will amplify the latter's ability to boost eco-friendly intentions. In Vietnam, personal eco-values have emerged in research only recently, often framed as an advantage for sustainable startups to sidestep rivalry with established firms [30] or as an employee asset aiding green targets in tourism businesses [16]. Despite their proven role in shaping workplace mindsets and actions [39], these values have received limited attention in Vietnamese HRM studies. Therefore, we put forward the following hypothesis:

H2: Personal Eco-Friendly Values strengthen the positive relationship between Green HRM and Employees' Green Behavioral Intentions.

The mediating effect of corporate social responsibility on the link between workers' eco-friendly intentions and green human resource management

Corporate Social Responsibility (CSR) describes how businesses commit to broader societal goals through their policies, operations, and community-focused efforts [40, 41]. It goes beyond financial gains to handle the broader ecological, community, and financial effects of company decisions [42, 43]. CSR involves ongoing dedication to responsible operations that enhance public welfare via voluntary contributions and resource deployment [7]. Su and Swanson [44] emphasize that CSR drives initiatives yielding advantages for communities and nature alike. When tied to Green HRM, CSR centers on addressing ecological duties [45]. Kolk [46] further includes tackling challenges like contamination, overuse of resources, and global warming, which concern both insiders and outsiders.

Studies increasingly highlight synergies between CSR and Green HRM, stressing HR methods that promote broad inclusion and enduring viability [19, 39]. Cheema *et al.* [47] noted that aspects such as executive involvement, hiring methods, bonuses, and assessments can advance CSR goals. Core HR areas—including drawing in talent, onboarding, skill-building, oversight of results, rewards, future planning, expertise handling, and keeping staff—aid in crafting and rolling out robust CSR plans, building a close tie between HR and CSR [48].

More research has delved into CSR's role in shaping staff readiness for sustainable actions. AlSuwaidi *et al.* [49] showed CSR markedly spurs workers' environmental motivations, particularly with a solid company eco-plan acting as an enhancer. This matches Su and Swanson [44], revealing employees lean toward green habits when firms lead in CSR. Generally, CSR efforts push workers to adopt planet-friendly routines [20]. Firms active in conservation inspire personnel to match their daily choices with organizational eco-targets [50].

Overall, evidence indicates Green HRM builds up CSR engagement, which then elevates staff eco-intentions. This implies CSR acts as a bridge in the pathway from Green HRM to sustainable employee conduct. By rolling out Green HRM, companies reinforce their CSR work, creating settings that nurture green habits. CSR supplies the support and drive that turn HR efforts into real worker choices [50]. In nations like Vietnam still building their economies, CSR explorations linked to HR often target isolated elements rather than full Green HRM frameworks and their sway on staff green motivations. Examples include Nguyen *et al.* [18] and Khuda *et al.* [51] on CSR in hiring, plus Thang and Fassin [52] and Ngo and Ngo [53] on influences behind eco-focused company loyalty.

From this foundation, we advance these hypotheses:

H3: Green Human Resource Management positively influences Corporate Social Responsibility.

H4: Corporate Social Responsibility positively influences Employees' Green Behavioral Intentions.

H5: Corporate Social Responsibility serves as a mediator between Green Human Resource Management and Employees' Green Behavioral Intentions.

The conceptual framework derived from these ideas is illustrated in **Figure 1** below.

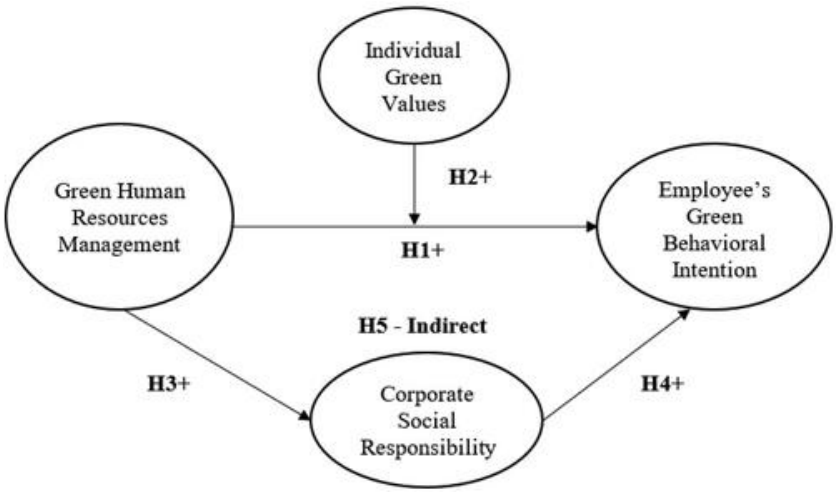

Figure 1. Research model

Research Methodology

Sample size and data collection

The target population of this study comprised employees working in Vietnamese enterprises that actively engage in socially responsible activities. With assistance from the Competition Commission under the Ministry of Industry and Trade, a database of 300 social enterprises and socially responsible firms was obtained, including contact details for their senior management. To ensure adequate representation across key regional and socioeconomic characteristics, a proportionate stratified random sampling technique was applied. Firms were categorized into two strata based on geographic location—Hanoi and Ho Chi Minh City—reflecting differences in economic development and demographic composition. From each stratum, approximately 60 organizations were randomly selected for participation. Compared with alternative sampling approaches, stratified random sampling reduces sampling bias, enhances efficiency relative to simple random sampling, and improves representation of important subgroups within the population [54].

Initial contact was made with organizational leaders to introduce the study and explain its objectives, relevance, and expected contributions. Following organizational approval, questionnaires were distributed electronically via email, accompanied by assurances of data security and confidentiality, as well as a small incentive to encourage participation. Respondents were informed that all data would be anonymized, analyzed in aggregate form, and used solely for academic purposes. Prior to participation, individuals received detailed information regarding the study's purpose, data usage, and storage procedures. Written informed consent was obtained from all participants before they were allowed to complete the questionnaire. Ethical clearance for the study was granted by Foreign Trade University, Vietnam, and participants' consent was reconfirmed at the data collection stage.

Completed questionnaires were returned through an online survey platform. Responses that were incomplete or demonstrated a lack of engagement were removed from the dataset. The remaining data were subjected to systematic screening, cleaning, and verification procedures to ensure accuracy and reliability. In total, 392 responses were collected. After excluding invalid questionnaires, 380 usable responses remained for subsequent analysis. This final sample size satisfied the recommended minimum requirements for Structural Equation Modeling (SEM) analysis [55].

Measurement of variables

The proposed research framework comprises four key constructs: Employees' Green Behavioral Intention, Green Human Resource Management, Corporate Social Responsibility and Individual Green Values. Data were collected using a structured questionnaire, with all measurement items assessed on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Measurement items were adapted from established scales in prior empirical studies to ensure content validity. To maintain conceptual and linguistic equivalence, a back-translation procedure was employed during the questionnaire development process **(Table 1)**.

Prior to full-scale data collection, a pilot study was conducted with a randomly selected group of 50 employees to evaluate the clarity, relevance, and comprehensibility of the questionnaire items. In addition, expert feedback was obtained from academics and practitioners specializing in human resource management and corporate social responsibility. Insights from the pilot test and expert evaluations were used to revise and refine the questionnaire, ensuring that the final instrument was both methodologically sound and contextually appropriate.

Table 1. Measure items for variables.

Factor/Constructs	Items	References
Green HRM (GHRM)		
Green training and development (GTD)		
GTD1	My organization considers environmental requirements when assessing training needs	[36, 56, 57]
GTD2	Environmental training in my organization is provided on an ongoing basis	
GTD3	My organization views environmental training as a valuable long-term investment	
GTD4	Training resources are provided digitally to employees to minimize paper usage	
GTD5	Employees who undergo environmental training can apply their acquired green skills in daily operations	
Green recruitment and selection (GRS)		
GRS1	The organization incorporates environmental standards into its recruitment communications	[57, 58]
GRS2	The company seeks applicants who demonstrate a personal dedication to ecological sustainability	
GRS3	This organization takes into account candidates' environmental interests and concerns during the selection process	
GRS4	Environmental-related questions are incorporated into interviews to evaluate alignment between applicants' values and the organization's mission	
GRS5	Environmental aspects are specified in job descriptions	
Green reward and compensation (GRC)		
GRC1	My organization provides financial incentives for accomplishments in environmental sustainability	[5, 57]
GRC2	My organization grants additional vacation days for involvement in eco-friendly programs	
GRC3	Innovative ideas from employees for environmental projects are incentivized	
GRC4	My organization provides promotion opportunities for leaders in sustainability efforts	
GRC5	Outstanding environmental contributions are acknowledged publicly	
Green performance management and appraisal (GPMA)		
GPMA1	Employees are aware of their specific environmental objectives, targets, and duties	[5, 57, 59]
GPMA2	The organization integrates environmental goals and targets into its performance assessment framework	
GPMA3	This organization offers ongoing feedback to employees or teams regarding the accomplishment of environmental objectives or enhancement of eco-performance	
GPMA4	Performance review sessions include a dedicated section on advancements in environmental initiatives	
Green empowerment and participation (GEP)		
GEP1	I participate in decisions related to environmental practices that impact my role	[5, 57, 59]
GEP2	Senior management promotes teamwork to effectively address and raise awareness about the company's ecological concerns	
GEP3	My organization conducts seminars or discussion platforms for employees to enhance eco-friendly practices and share implicit knowledge	
GEP4	My organization has established dedicated channels and support lines to facilitate sustainable projects	

GEP5	My organization views employees as essential partners in managing environmental issues	
Corporate Social Responsibility (CSR)		
CSR1	The organization implements targeted initiatives and guidelines to reduce negative impacts on the environment	[19, 60]
CSR2	Our organization strategically allocates resources to prevent ecological harm	
CSR3	Our organization motivates staff to take part in volunteer activities focused on protecting the environment	
CSR4	Our organization actively contributes to local community programs and voluntary services	
CSR5	Our organization supports the enhancement of educational institutions	
CSR6	Our organization works to enhance community well-being	
Employee's green behavioral intention (GBI)		
GBI1	I plan to engage in eco-conscious actions in my workplace	[27, 61]
GBI2	I intend to reduce the waste of natural resources over the next month	
GBI3	I would suggest environmentally friendly products to friends and/or colleagues	
GBI4	I aim to increase my consumption or usage of sustainable products going forward	
GBI5	I plan to motivate my colleagues to adopt environmentally sound practices	
Individual green value (IGV)		
IGV1	I feel a personal responsibility to consider the environment and nature in my everyday actions	[36, 62, 63]
IGV2	I feel a duty to protect the environment from harm, even if others do not	
IGV3	I prefer purchasing appliances that are environmentally friendly	
IGV4	I proactively engage in eco-friendly behaviors at my workplace	
IGV5	I experience guilt if my actions lead to environmental harm	

Data analysis

Structural Equation Modeling (SEM) was employed as the primary analytical technique due to its capability to examine complex relationships among multiple latent constructs simultaneously, making it widely applicable across disciplines for theory testing [64]. In line with the objectives of this study, the partial least squares variant of SEM (PLS-SEM) was selected because of its suitability for exploratory research designs and its robustness when working with relatively modest sample sizes [55]. All model estimations were conducted using SmartPLS version 4.0.

The analytical procedure followed a two-stage approach. First, the quality of the measurement model was evaluated to establish reliability and validity. Convergent validity was assessed through indicator loadings, Cronbach's alpha, composite reliability, and average variance extracted (AVE). To confirm discriminant validity, both the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio were applied, following recommended methodological guidelines [55].

After confirming the adequacy of the measurement model, the structural model was assessed to test the proposed hypotheses. The bootstrapping procedure within the PLS-SEM framework was used to examine the significance of path coefficients, including the moderating effect of Individual Green Values (IGV) on Green Behavioral Intention (GBI). In addition to SEM analysis, SPSS version 25.0 was utilized to generate descriptive statistics and to analyze the demographic characteristics of the respondents.

Empirical Results

Descriptive statistics

Table 2 presents a summary of the demographic profile of the respondents. With respect to gender distribution, 46.1% of participants identified as male, 47.6% as female, and 6.3% reported other gender identities. The age composition of the sample indicates that 19.2% of respondents were between 18 and under 22 years old, 26.8% fell within the 22 to under 30 age range, and 22.4% were aged between 30 and under 40 years. Participants aged 40 to under 50 accounted for 18.2% of the sample, while individuals aged 50 years and above represented the remaining 13.4%.

Regarding geographic distribution, slightly more than half of the respondents (51.6%) were employed in Hanoi, whereas 48.4% were working in Ho Chi Minh City. In terms of industry affiliation, 23.7% of respondents were employed in the education and training sector, 20.5% worked in healthcare, 32.4% were associated with the finance industry, and 23.4% were employed in retail-related activities. Concerning organizational ownership, 28.7% of participants worked in public-sector organizations, an equal proportion (28.7%) were employed by domestic private firms without foreign investment, and 39.2% were employed in private organizations with foreign ownership.

Table 2. Demographics of respondents.

Category	Subcategory	Percent	Frequency
Age Group	18 to under 22 years old	19.2	73
	22 to under 30 years old	26.8	102
	30 to under 40 years old	22.4	85
	40 to under 50 years old	18.2	69
	50 years old or older	13.4	51
	Total	100.0	380
Gender	Male	46.1	175
	Female	47.6	181
	Other	6.3	24
	Total	100.0	380
Occupational Sector	Education and Training	23.7	90
	Retail	23.4	89
	Finance	32.4	123
	Healthcare	20.5	78
	Total	100.0	380
Current Workplace Location	Hanoi	51.6	196
	Ho Chi Minh City	48.4	184
	Total	100.0	380
Organizational Characteristics	Public Sector	32.1	122
	Private Sector (with Foreign Investment)	39.2	149
	Private Sector (no Foreign Investment)	28.7	109
	Total	100.0	380

Assessment of the measurement model

The evaluation of the measurement model focuses on establishing both convergent and discriminant validity to ensure the reliability and accuracy of the constructs. Convergent validity was examined by analyzing indicator reliability and internal consistency using outer loadings, composite reliability (CR), Cronbach's alpha (CA), and average variance extracted (AVE), in accordance with established guidelines [65]. Discriminant validity was subsequently assessed using the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio to confirm that the constructs were empirically distinct [65].

The results reported in **Table 3** indicate that all indicator loadings are statistically significant and fall within the range of 0.760 to 0.918, exceeding the recommended minimum threshold of 0.70. Measures of internal consistency reliability further demonstrate satisfactory results, with Cronbach's alpha values ranging from 0.859 to 0.926 and composite reliability values between 0.899 and 0.942, all of which surpass the commonly accepted cutoff value of 0.70. In addition, the AVE values for all constructs vary from 0.641 to 0.750, exceeding the minimum criterion of 0.50 and thereby confirming adequate convergent validity for the measurement model [55].

Table 3. Reliability and convergent validity

Construct	Measure Items	CA	AVE	CR	Outer Loading
Green Human Resource Management (GHRM)		0.917	0.750	0.938	
Green Training and Development (GTD)		0.926	0.771	0.944	
	GTD1				0.882
	GTD2				0.873
	GTD3				0.877
	GTD4				0.880
	GTD5				0.879
Green Recruitment and Selection (GRS)		0.920	0.758	0.940	
	GRS1				0.862
	GRS2				0.836
	GRS3				0.876
	GRS4				0.862
	GRS5				0.915
Green Reward and Compensation (GRC)		0.918	0.754	0.939	
	GRC1				0.851
	GRC2				0.834
	GRC3				0.870
	GRC4				0.888
	GRC5				0.896
Green Performance Management and Appraisal (GPMA)		0.907	0.782	0.935	
	GPMA1				0.882
	GPMA2				0.867
	GPMA3				0.868
	GPMA4				0.918
Green Behavior Intention (GBI)		0.859	0.641	0.899	

	GBI1			0.760
	GBI2			0.793
	GBI3			0.799
	GBI4			0.792
	GBI5			0.856
Corporate Social Responsibility (CSR)		0.926	0.731	0.942
	CSR1			0.844
	CSR2			0.841
	CSR3			0.851
	CSR4			0.867
	CSR5			0.879
	CSR6			0.864
Green Employee Participation (GEP)		0.905	0.725	0.929
	GEP1			0.837
	GEP2			0.867
	GEP3			0.857
	GEP4			0.858
	GEP5			0.837
Intention to Stay / Green Voice Behavior (IGV)		0.893	0.700	0.921
	IGV1			0.798
	IGV2			0.865
	IGV3			0.845
	IGV4			0.824
	IGV5			0.850

As shown in **Table 4**, the square roots of the Average Variance Extracted (AVE), indicated along the diagonal, are greater than the corresponding inter-construct correlation coefficients in both the rows and columns. This outcome satisfies the discriminant validity requirement proposed by Fornell and Larcker [66]. Accordingly, all measurement scales employed in this study—including the independent, dependent, and moderating constructs—demonstrate adequate discriminant validity.

Table 4. Fornell – Larcker criterion

	IGV	GHRM	GBI	CSR
CSR				**0.855**
GBI			**0.800**	0.635
GHRM		**0.866**	0.714	0.687
IGV	**0.837**	0.478	0.634	0.403

As reported in **Table 5**, all heterotrait–monotrait (HTMT) ratios are below the recommended upper threshold of 0.90, indicating satisfactory discriminant validity. The highest HTMT value observed is 0.803, which remains well below both the conservative cutoff of 0.85 and the more lenient threshold of 0.90. HTMT values below 0.85 suggest strong discriminative power among constructs. Therefore, the HTMT results confirm that the measurement scales applied in this study exhibit robust discriminant validity.

Table 5. HTMT

	CSR	GBI	GHRM	IGV	IGV x GHRM
IGV x GHRM	0.181	0.041	0.184	0.263	
IGV	0.439	0.722	0.525		
GHRM	0.741	0.803			
GBI	0.709				
CSR					

Evaluation of the structural model

Following confirmation of the measurement model, the structural model was subsequently examined. This assessment was conducted using multiple evaluation criteria, including multicollinearity diagnostics, explanatory power (R^2), effect size (f^2), and predictive relevance (Q^2 and q^2). As shown in **Table 6**, all variance inflation factor (VIF) values are below the recommended cutoff value of 5, with many indicators reporting values under 3 [55]. These results indicate that multicollinearity is not a concern among the constructs included in the model.

Table 6. Collinearity assessment (inner VIF values)

Reflective construct	Inner VIF value
IGV	1.360
GHRM x IGV	1.074

CSR	1.926
GHRM	2.086

Table 7 presents the explanatory and predictive performance of the structural model. The adjusted R^2 value for Corporate Social Responsibility (CSR) is 0.471, while the R^2 value for Green Behavioral Intention (GBI) reaches 0.672, suggesting that the model accounts for a considerable proportion of variance in the endogenous constructs and is therefore suitable for further interpretation. In addition, the Stone–Geisser Q^2 statistics for both CSR and GBI are positive and exceed the zero benchmark, confirming the model's predictive relevance. Specifically, CSR records a Q^2 value of 0.468, whereas GBI shows a higher Q^2 value of 0.632, indicating strong predictive capability.

Furthermore, the effect size (f^2) estimates for the structural paths range from 0.090 to 0.894, all surpassing the minimum recommended threshold of 0.02. These results indicate that the hypothesized relationships exert meaningful effects within the model, with most paths reflecting moderate to substantial levels of influence.

Table 7. Result of R^2 and Q^2.

	R-square adjusted	R-square	Q-square predict
GBI	0.672	0.676	0.632
CSR	0.471	0.472	0.468

Hypotheses testing

The outcomes of the hypothesis tests are illustrated in **Figure 2** and summarized in **Table 8**. The structural path from Green Human Resource Management (GHRM) to Green Behavioral Intention (GBI) yields a standardized coefficient of 0.394, indicating a positive and meaningful relationship. This effect is statistically significant, as the associated p-value is 0.000, well below the 0.01 threshold, thereby providing empirical support for Hypothesis H1.

In addition, the analysis confirms Hypothesis H3, which proposes a positive association between GHRM and Corporate Social Responsibility (CSR). This relationship is also statistically significant, with a p-value of 0.000, reinforcing the robustness of the proposed linkage. Furthermore, the findings reveal a significant positive effect of CSR on GBI, supporting Hypothesis H4. The strength of this relationship is validated by the p-value of 0.000, which satisfies the established significance criterion.

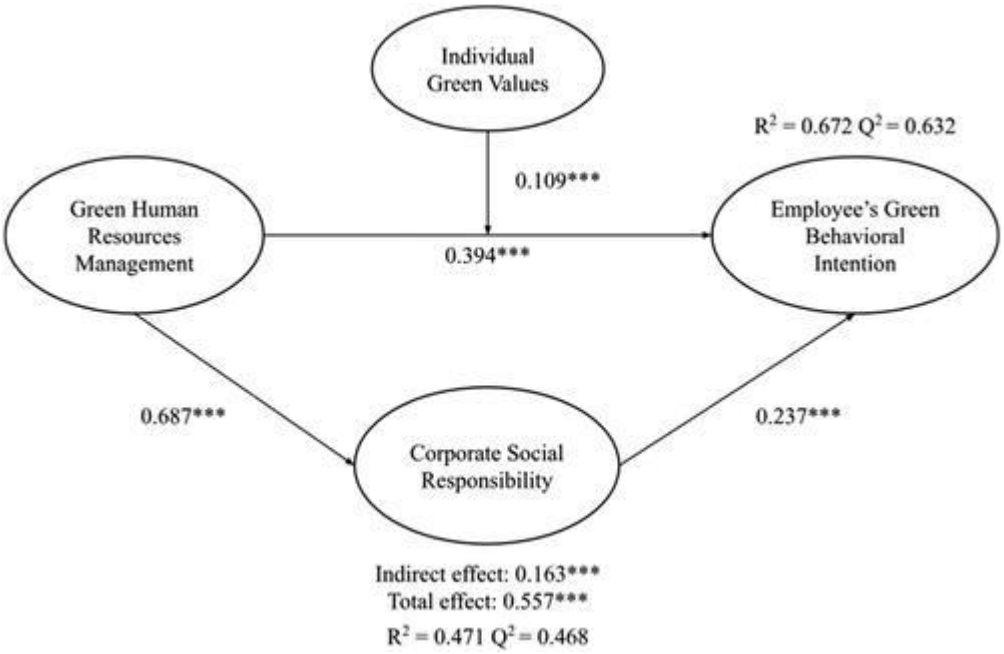

Figure 2. Structural model

Note: The symbol *** indicate statistical significance at 1%.

Table 8. Testing of research hypotheses

Path Relationship	Path Coefficient	p-value	t-value	Hypothesis Result
Green HRM → Corporate Social Responsibility	0.687	0.000	17.405	H3 supported
Green HRM → Green Behavioral Intention	0.394	0.000	6.544	H1 supported
Corporate Social Responsibility → Green Behavioral Intention	0.237	0.000	4.439	H4 supported
Moderating Effect of Intention to Stay/Green Voice Behavior				

IGV × Green HRM → Green Behavioral Intention	0.109	0.000	4.915	H2 supported
Green HRM → CSR → Green Behavioral Intention				
Mediating Effect of Corporate Social Responsibility				
Indirect effect	0.163	0.000	4.358	H5 supported
Direct effect	0.394	0.000	6.544	

Moderation analysis

Hypothesis H2 posits that individual green values (IGV) strengthen the relationship between employees' green behavioral intention (GBI) and Green Human Resource Management (GHRM). To test this assumption, a moderation analysis was conducted using the product-indicator technique within the PLS-SEM framework. This approach is considered effective for estimating interaction effects, as it accounts for measurement error that may otherwise attenuate relationship estimates.

The moderating effect was assessed by creating an interaction construct (GHRM × IGV), generated through the multiplication of the independent variable (GHRM) and the moderator (IGV), and examining its influence on GBI. The empirical results reveal that the interaction term has a positive and statistically significant effect on employees' green behavioral intention ($\beta = 0.109$, $t = 4.915$, $p = 0.000$), accounting for approximately 3% of the explained variance. These results, illustrated in **Figure 2**, **Table 9**, and **Figure 3**, provide strong support for Hypothesis H2, confirming that individual green values positively moderate the impact of GHRM on GBI.

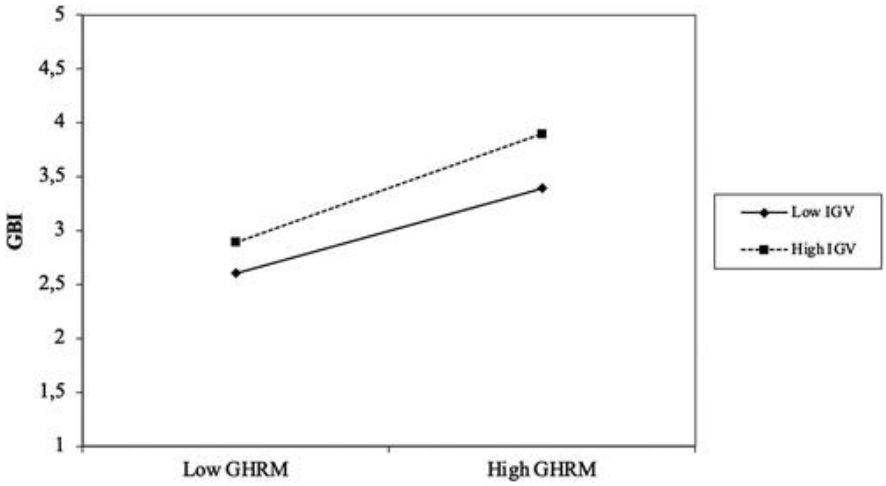

Figure 3. Illustration of the Moderation Interaction Effect

Table 9. Results from Hierarchical Regression Examining the Moderation Effect (Displayed in Tabular Form)

	Path coefficients	P value
Step 2		
IGV x GHRM—> GBI	0.109	0.000
ΔR^2	0.030	
R^2	0.676	
Step 1		
IGV—> GBI	0.394	0.000
GHRM—> GBI	0.394	0.000
R^2	0.646	

Analysis of mediation

The role of corporate social responsibility (CSR) as a mediator in the link between employees' green behavioral intention (GBI) and green human resource management (GHRM) was investigated by evaluating both the indirect and direct relationships. Initially, the direct relationship from GHRM to GBI proved to be statistically significant ($p = 0.000$). Next, the indirect relationship was derived by multiplying the coefficient of the path from GHRM to CSR with that from CSR to GBI. To assess the extent of mediation, the variance accounted for (VAF) technique was applied, but only after confirming the significance of the indirect effect [67]. As reported in **Table 8**, the indirect effect of 0.163 was highly significant ($p = 0.000$). The strength of the mediation was quantified by calculating VAF as the ratio of the indirect effect to the total effect. The total effect was obtained by adding the direct effect (0.394) and the indirect effect (0.163), resulting in 0.557. Consequently, VAF $= 0.163 / 0.557 \approx 0.293$. Based on guidelines from Hair *et al.* [67], a VAF ranging from 0.20 to 0.80 reflects partial mediation. Accordingly, CSR serves as a partial mediator in the association between employees' green behavioral intention and GHRM, thereby confirming hypothesis H5.

Discussion

The results of this study reveal that Green Human Resource Management (GHRM) significantly enhances employees' intentions to engage in environmentally responsible behavior. When organizations integrate environmental considerations into HR policies and practices, employees are more likely to internalize pro-environmental attitudes and translate them into behavioral intentions. This finding corroborates earlier empirical evidence [5]. Prior research suggests that when organizational practices reflect employees' environmental principles, a value congruence emerges that motivates individuals to act in environmentally conscious ways within the workplace [34]. In the context of developing economies, GHRM constitutes an essential element of organizational environmental strategies. However, its successful implementation requires tailored and context-specific approaches that address institutional and resource constraints [68].

In addition, the findings indicate that individual green values significantly condition the effectiveness of GHRM in shaping employees' green behavioral intentions. Employees' personal environmental beliefs, moral norms, and value systems influence how strongly GHRM practices translate into behavioral intentions. This outcome aligns with recent studies emphasizing the importance of value alignment between employees and organizations [6]. When organizations promote sustainability through GHRM and these efforts resonate with employees' own environmental values, employees exhibit a heightened willingness to engage in green actions. This interaction effect can be explained through the Theory of Planned Behavior, which posits that intentions are driven by individuals' beliefs, perceived social expectations, and perceived capacity to perform the behavior.

Furthermore, the analysis confirms that corporate social responsibility (CSR) functions as an explanatory mechanism linking GHRM to employees' green behavioral intentions. Specifically, GHRM strengthens CSR initiatives, which in turn encourage employees to adopt environmentally responsible intentions. This finding supports earlier research highlighting the positive association between GHRM and CSR outcomes [9, 19]. CSR activities are often designed and implemented by HR departments or through close coordination with HR units [69].

[69]. At the same time, some scholars argue that organizations adopt GHRM practices as a strategic response to increasing CSR expectations from stakeholders [70]. When organizations actively demonstrate social and environmental accountability, employees are more inclined to mirror these values through their own behavior. This dynamic is particularly evident in service industries such as hospitality, where employees' perceptions of CSR initiatives strongly influence their workplace attitudes and environmentally oriented behaviors [20].

Theoretical implications

This research extends the theoretical understanding of Green HRM and employees' green behavioral intentions by integrating individual green values and corporate social responsibility into a single analytical framework. Unlike prior studies that examined these constructs in isolation, this study provides empirical evidence of their combined effects within the Vietnamese context. By doing so, it contributes to the growing body of literature on sustainable human resource management in emerging economies.

The results obtained through PLS-SEM analysis confirm that GHRM serves as a key antecedent of employees' green behavioral intentions in Vietnam. As the country experiences rapid economic expansion alongside increasing environmental challenges, the role of human capital in supporting sustainable development becomes particularly critical. From a theoretical perspective, this study highlights the importance of aligning HRM practices with sustainability goals to influence employee behavior effectively, especially when CSR initiatives and individual environmental values are considered.

Moreover, while earlier studies have focused separately on GHRM–CSR relationships [39], GHRM–green behavioral intentions [29], or CSR development in Vietnam [17], this study advances theory by demonstrating both a moderating and a mediating mechanism within the same model. Specifically, individual green values amplify the impact of GHRM on green behavioral intentions, while CSR explains how GHRM translates into such intentions. These findings reinforce prior arguments that GHRM enhances CSR performance [9, 19] and that employees' perceptions of CSR initiatives play a crucial role in shaping environmentally responsible workplace behaviors [20].

Practical implications

The empirical evidence underscores the strategic importance of GHRM in fostering environmentally responsible behavior among employees. For organizations, this implies that sustainability should be systematically embedded within HR policies and daily management practices. Environmental awareness should be introduced at the earliest stages of employment, including recruitment and onboarding, and reinforced through ongoing training and development programs. Continuous education enables employees to adopt and maintain sustainable practices as part of their routine work behavior.

Organizations should also encourage employees to actively integrate sustainability considerations into operational decisions. Practical measures such as waste reduction initiatives, energy-efficient workplace practices, and environmentally responsible procurement policies can support this goal. Leadership commitment is essential in this process; when managers visibly support and participate in green initiatives, employees are more likely to follow suit. Transparent internal communication regarding environmental goals and achievements further enhances employee engagement and collective responsibility.

From a policy perspective, governments can facilitate the diffusion of GHRM practices by creating supportive institutional environments. This includes promoting community-based environmental initiatives, offering financial incentives, and recognizing organizations that demonstrate exemplary sustainability performance. Regulatory frameworks addressing waste management, emissions control, and resource efficiency are also critical. In addition, governments can act as facilitators by encouraging collaboration between businesses, non-governmental organizations, and academic institutions. Workshops, training programs, and knowledge-sharing platforms can help organizations learn from best practices and strengthen their capacity to implement GHRM effectively.

Limitations and Future Research Directions

Despite its contributions, this study has several limitations that should be acknowledged. First, the empirical data were collected primarily from large urban centers in Vietnam, which may limit the applicability of the findings to other geographical or cultural contexts. Future research could extend the analysis to rural areas or conduct cross-country comparisons to enhance generalizability.

Second, the measurement scales used to assess GHRM, individual green values, and CSR may not fully capture the complexity of these constructs. Future studies should refine existing instruments or develop new measures that more accurately reflect the multidimensional nature of sustainable HR practices and employee behavior.

Finally, future research could broaden the conceptual framework by incorporating emerging variables identified in recent studies. For example, examining the role of organizational resilience and corporate purpose in sustainability initiatives [71], or exploring how job insecurity and job anxiety influence employee well-being and behavior [72], could provide deeper insights. Including such variables would help clarify how external pressures and organizational dynamics shape the effectiveness of GHRM and CSR in promoting employees' green behavioral intentions.

Acknowledgments: None

Conflict of interest: None

Financial support: None

Ethics statement: None

References

1. Ren S, Tang G, Jackson SE. Green human resource management research in emergence: A review and future directions. Asia Pac J Manag. 2018;35(3):769-803.
2. Tang G, Chen Y, Jiang Y, Paille P, Jia J. Green human resource management practices: Scale development and validity. Asia Pac J Hum Resour. 2018;56(1):31-55.
3. Wehrmeyer WE. Greening people: Human resources and environmental management: Routledge; 2017.
4. Renwick DWS, Redman T, Maguire S. Green human resource management: A review and research agenda. Int J Manag Rev. 2013;15(1):1-14.
5. Al-Ghazali BM, Afsar B. Green human resource management and employees' green creativity: The roles of green behavioral intention and individual green values. Corp Soc Responsib Environ Manag. 2020;28(1):536-46.
6. Ahmed I, Islam T, Umar A. Bridging organisational and individual green actions through green knowledge sharing and individual values. Knowl Manag Res Pract. 2023;21(6):1071-83.
7. Ahmed M, Zehou S, Raza SA, Qureshi MA, Yousufi SQ. Impact of CSR and environmental triggers on employee green behavior: The mediating effect of employee well-being. Corp Soc Responsib Environ Manag. 2020;27(5):2225-39.
8. Suba M, Ahamed SBI, Priya BS. Green human resource management a strategic move towards the CSR through green employee performance. Int J Manag. 2021;11(11):2454-68.
9. Niazi UI, Nisar QA, Nasir N, Naz S, Haider S, Khan W. Green HRM, green innovation and environmental performance: The role of green transformational leadership and green corporate social responsibility. Environ Sci Pollut Res Int. 2023;30(15):45353-68.
10. Wut TM, Ng PMI. Perceived CSR motives, perceived CSR authenticity, and pro-environmental behavior intention: An internal stakeholder perspective. Soc Responsib J. 2023;19(5):797-811.
11. Ngoc L. Green human resources management: A path towards sustainability 2021 [Available from: https://vneconomy.vn/green-human-resources-management-a-path-towards-sustainability.htm.
12. Le Ha NT, Uyen PTB. The effect of green human resource management on employee green behaviors in a developing country: Vietnam. Int J Inf Bus Manag. 2021;13(1):107-24.

13. Luu TT. Can green creativity be fostered? Unfolding the roles of perceived green human resource management practices, dual mediation paths, and perceived environmentally-specific authentic leadership. Int J Hum Resour Manag. 2021;34(6):1246-73.
14. Nguyen TLP, Nguyen TTH, Kljucnikov A. The influence of socially responsible human resource management on green behaviours in the aviation industry. J Competitiveness. 2023;15(2):188-206.
15. Nguyen TN, Rowley C, McLean GN, Nguyen HTT, Nguyen TX. Top management support, green training and organization's environmental performance: The electric power sector in Vietnam. Asia Pac Bus Rev. 2023:1-17.
16. Tuan LT. Promoting employee green behaviors in the Chinese and Vietnamese hospitality contexts: The roles of green human resource management practices and responsible leadership. Int J Hosp Manag. 2022;105:103253.
17. Nguyen M, Bensemann J, Kelly S. Corporate social responsibility in Vietnam: A conceptual framework. Int J Corp Soc Responsib. 2018;3(1):1-12.
18. Nguyen HT, Hoang TG, Luu H. Corporate social responsibility in Vietnam: Opportunities and innovation experienced by multinational corporation subsidiaries. Soc Responsib J. 2020;16(6):771-92.
19. Sabokro M, Masud MM, Kayedian A. The effect of green human resources management on corporate social responsibility, green psychological climate and employees' green behavior. J Clean Prod. 2021;313:127963.
20. De Roeck K, Farooq O. Corporate social responsibility and ethical leadership: Investigating their interactive effect on employees' socially responsible behaviors. J Bus Ethics. 2018;151(4):923-39.
21. Harvey G, Williams K, Probert J. Greening the airline pilot: HRM and the green performance of airlines in the UK. Int J Hum Resour Manag. 2013;24(1):152-66.
22. Amjad F, Abbas W, Zia-Ur-Rehman M, Baig SA, Hashim M, Khan A, et al. Effect of green human resource management practices on organizational sustainability: The mediating role of environmental and employee performance. Environ Sci Pollut Res Int. 2021;28(22):28191-206.
23. Liu L, Zhang C. Linking environmental management accounting to green organizational behavior: The mediating role of green human resource management. PLoS One. 2022;17(12):e0279568.
24. Chaudhary R. Green human resource management in Indian automobile industry. J Glob Responsib. 2019;10(2):161-75.
25. Song D, Bai Y, Wu H, Wang X. How does the perceived green human resource management impact employee's green innovative behavior? From the perspective of theory of planned behavior. Front Psychol. 2022;13:1106494.
26. Ajzen I. The theory of planned behavior. Organ Behav Hum Decis Process. 1991;50(2):179-211.
27. Norton TA, Zacher H, Parker SL, Ashkanasy NM. Bridging the gap between green behavioral intentions and employee green behaviors: The role of green psychological climate. J Organ Behav. 2017;38(7):996-1015.
28. Ramus CA, Steger U. The roles of supervisory support behaviors and environmental policy in employee eco-initiatives at leading-edge European companies. Acad Manag J. 2000;43(4):605-26.
29. Zhang W, Xu R, Jiang Y, Zhang W. How environmental knowledge management promotes employee green behaviors: An empirical study. Int J Environ Res Public Health. 2021;18(9):1-15.
30. Tien NH, Anh DBH, Ngoc NM. Corporate financial performance due to sustainable development in Vietnam. Corp Soc Responsib Environ Manag. 2020;27(2):694-705.
31. Tien NH, Ngoc NM, Anh DBH. Current situation of high-quality human resources in FDI enterprises in Vietnam: Solutions to attract and maintain. Int J Multidiscip Res Growth Eval. 2021;2(1):31-8.
32. Prime minister's decision on approving the strategy on development of Vietnamese human resources during 2011-2020. 2011.
33. Pham NT, Vo Thanh T, Tuckova Z, Thuy VTN. The role of green human resource management in driving hotel's environmental performance: Interaction and mediation analysis. Int J Hosp Manag. 2020;88:102392.
34. Dumont J, Shen J, Deng X. Effects of green HRM practices on employee workplace green behaviors: The role of psychological green climate and employee green values. Hum Resour Manag. 2017;56(4):613-27.
35. Gilal FG, Ashraf Z, Gilal NG, Gilal RG, Channa NA. Promoting environmental performance through green human resource management practices in higher education institutions: A moderated mediation model. Corp Soc Responsib Environ Manag. 2019;26(6):1579-90.
36. Islam T, Hussain D, Ahmed I, Sadiq M. Ethical leadership and environment specific discretionary behavior: The mediating role of green human resource management and moderating role of individual green values. Can J Adm Sci. 2021;38(4):442-59.
37. Edwards JR, Shipp AI. The relationship between person-environment fit and outcomes: An integrative perspective. 2007. p. 209-42.
38. Chou CJ. Hotels' environmental policies and employee personal environmental beliefs: Interactions and outcomes. Tour Manag. 2014;40:436-46.
39. Hameed R, Mahmood A, Shoaib M. The role of green human resource practices in fostering green corporate social responsibility. Front Psychol. 2022;13:792343.

40. Tran TH, Nguyen TTH. CSR motivators of local firms in a developing country: A case study in Quang Ninh province, Vietnam. J Int Econ Manag. 2021;20(3):75-95.
41. Wood DJ. Corporate social performance revisited. Acad Manag Rev. 1991;16(4):691-718.
42. Chowdhury RH, Choi S, Ennis S, Chung D. Which dimension of corporate social responsibility is a value driver in the oil and gas industry? Can J Adm Sci. 2019;36(2):260-72.
43. Garcia-Sanchez IM, Araujo-Bernardo CA. What colour is the corporate social responsibility report? Structural visual rhetoric, impression management strategies, and stakeholder engagement. Corp Soc Responsib Environ Manag. 2020;27(2):1117-42.
44. Su L, Swanson SR. Perceived corporate social responsibility's impact on the well-being and supportive green behaviors of hotel employees: The mediating role of the employee-corporate relationship. Tour Manag. 2019;72:437-50.
45. Siregar IZ. CSR-based corporate environmental policy implementation. Br J Environ Stud. 2021;1(1):51-7.
46. Kolk A. The social responsibility of international business: From ethics and the environment to CSR and sustainable development. J World Bus. 2016;51(1):23-34.
47. Cheema S, Javed F, Nisar T. The effects of corporate social responsibility toward green human resource management: The mediating role of sustainable environment. Cogent Bus Manag. 2017;4(1):1310012.
48. Jamali DR, El Dirani AM, Harwood IA. Exploring human resource management roles in corporate social responsibility: The CSR-HRM co-creation model. Bus Ethics Eur Rev. 2015;24(2):125-43.
49. AlSuwaidi M, Eid R, Agag G. Understanding the link between CSR and employee green behaviors. J Hosp Tour Manag. 2021;46:50-61.
50. Lee S, Seo K, Sharma A. Corporate social responsibility and firm performance in the airline industry: The moderating role of oil prices. Tour Manag. 2013;38:20-30.
51. Khuda K, Nguyen HCL, Hack-Polay D. Effects of corporate social responsibility on online recruitment processes in the Vietnamese food and beverage industry. Businesses. 2023;3(2):293-309.
52. Thang NN, Fassin Y. The impact of internal corporate social responsibility on organizational commitment: Evidence from Vietnamese service firms. J Asia Pac Bus. 2017;18(2):100-16.
53. Ngo OTL, Ngo TQ. Sustainable development in Vietnamese exporters: Assessing the influence of green innovation, corporate social responsibility, and green HRM. Int J Econ Finance Stud. 2023;15(2):106-30.
54. Uma S. Research methods for business: A skill building approach: John Wiley; 2009.
55. Hair JF, Hult GTM, Ringle CM, Sarstedt M. A primer on partial least squares structural equation modeling (PLS-SEM): Sage Publications; 2021.
56. Haldorai K, Kim WG, Garcia RF. Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. Tour Manag. 2022;88:104431.
57. Masri HA, Jaaron AA. Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. J Clean Prod. 2017;143:474-89.
58. Opatha HHP. Green human resource management: A simplified introduction2013.
59. Saeed BB, Afsar B, Hafeez S, Khan I, Tahir M, Afridi MA. Promoting employee's proenvironmental behavior through green human resource management practices. Corp Soc Responsib Environ Manag. 2019;26(2):424-38.
60. Modak NM, Kazemi N, Cardenas-Barron LE. Investigating structure of a two-echelon closed-loop supply chain using social work donation as a corporate social responsibility practice. Int J Prod Econ. 2019;207:19-33.
61. Kautish P, Sharma R. Value orientation, green attitude and green behavioral intentions: An empirical investigation among young consumers. Young Consum. 2019;20(4):338-58.
62. Bissing-Olson MJ, Iyer A, Fielding KS, Zacher H. Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. J Organ Behav. 2013;34(2):156-75.
63. Steg L, Dreijerink L, Abrahamse W. Factors influencing the acceptability of energy policies: A test of VBN theory. J Environ Psychol. 2005;25(4):415-25.
64. Kaplan D. Structural equation modeling: Foundations and extensions: SAGE Publications; 2008.
65. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. Eur Bus Rev. 2019;31(1):2-24.
66. Fornell C, Larcker DF. Structural equation models with unobservable variables and measurement error: Algebra and statistics. J Mark Res. 1981;18(3):382-8.
67. Hair JF, Sarstedt M, Matthews LM, Ringle CM. Identifying and treating unobserved heterogeneity with FIMIX-PLS: Part I–method. Eur Bus Rev. 2016;28(1):63-76.
68. Usman M, Mat N. Green human resource management: Implication towards environmental performance in developing countries. Int J Econ Manag Account. 2021;29(1):207-21.
69. Mishra P. Green human resource management: A framework for sustainable organizational development in an emerging economy. Int J Organ Anal. 2017;25(5):762-88.

70. Cheema S, Afsar B, Javed F. Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit. Corp Soc Responsib Environ Manag. 2020;27(1):9-21.
71. Florez-Jimenez MP, Lleo A, Ruiz-Palomino P, Munoz-Villamizar AF. Corporate sustainability, organizational resilience, and corporate purpose: A review of the academic traditions connecting them. Rev Manag Sci. 2024:1-38.
72. Gutierrez-Broncano S, Ruiz-Palomino P, Jimenez-Estevez P, Yanez-Araque B. Job-related uncertainty and its pernicious effects on employees' well-being: The mediating role of employee job anxiety. J Competitiveness. 2024;16(1):131-45.