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The Role of Happiness in Strengthening ESG-Driven Green HRM Practices and Organizational Sustainability

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Abstract

Sustainable Human Resource Management (HRM) has emerged as a crucial enabler of organizational sustainability in response to evolving workplace dynamics and global ESG demands. This study explores the integration of Environmental, Social, and Governance (ESG) principles into Green Human Resource Management (GHRM) practices and investigates how employee happiness moderates the relationship between GHRM and organizational performance, including environmental and economic outcomes. Using data from the World Values Survey (WVS), this study analyzes responses from 66 countries over a five-year period, comprising 94,278 data points. A quantitative approach employing Smart PLS 4 examines the direct and moderated effects of GHRM on environmental and economic performance (EP and ENP). Variables include ESG dimensions (Environmental, Social, and Governance), happiness as a moderating factor, and key performance indicators. Statistical methods such as hierarchical regression and structural equation modeling (SEM) were used to validate the hypotheses. The results confirm that integrating ESG principles into GHRM is feasible and significantly enhances both environmental and economic performance. While happiness positively moderates GHRM's impact on organizational outcomes, its effect is relatively limited. This suggests that although happiness can improve employee engagement and environmental participation, its overall strengthening effect on GHRM is less pronounced under varying levels of happiness. This study contributes to the Sustainable HRM literature by incorporating ESG principles into GHRM practices and exploring the novel role of happiness as a moderating variable. It provides empirical evidence supporting the integration of sustainability frameworks into HRM strategies to enhance organizational performance. Furthermore, it emphasizes the importance of aligning GHRM with employee well-being to ensure sustainable workplace innovation.

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1. Introduction

In the quest to gain a competitive advantage, organizations today are increasingly required to address not only internal workforce considerations but also the pressing need for sustainable practices in their external environments. Sustainability has emerged as a global imperative, with environmental goals extending to 2030 (Hassan & Tawfeeq, 2023; Kissi, Segbenya, & Amoah, 2024; Maertens, 2023). Achieving these goals necessitates organizational involvement beyond individual actions, as industries have come to recognize the strategic importance of integrating environmental practices into their operations (Kissi et al., 2024). Since the 1990s, organizations have incorporated environmental management into their decision-making processes, making it one of the most effective tools for achieving sustainable development (Wagner, 2013). Human Resource Management (HRM) plays a pivotal role in shaping organizational culture, strategies, and policies, influencing employee behavior and aligning the workforce with long-term organizational goals (Paauwe & Boselie, 2005; Schuler & Jackson, 2014). With the growing emphasis on environmental, social, and governance (ESG) frameworks, HRM is increasingly seen as a critical enabler of organizational sustainability (Mandip, 2012). ESG-driven HRM practices not only facilitate the disclosure of sustainability initiatives to stakeholders but also integrate environmental management into HR policies, referred to as Green Human Resource Management (GHRM). GHRM seeks to enhance organizational environmental performance (EP) by fostering employees' commitment to and participation in green initiatives (Jackson, Schuler, Lepak, & Tarique, 2011; Renwick, Redman, & Maguire, 2008). Studies show that employees are more likely to engage in green behaviors when they perceive alignment between their values and the organization's environmental goals, amplifying the impact of GHRM practices.

Moreover, employee well-being has emerged as a critical factor in advancing workplace sustainability and fostering positive organizational outcomes. Tang et al. (2018) emphasized that employees derive pride and fulfillment from engaging in environmentally responsible behaviors, such as recycling, energy conservation, and the use of green products. This sense of accomplishment contributes to enhanced morale and creates a workplace environment that is not only vibrant but also aligned with organizational sustainability goals (Kelij, Taghvaee Yazdi, & Taghvaee, 2020). However, cases of organizations that publicly endorse ESG principles but engage in unethical practices—such as illegal waste disposal or falsifying records—highlight the gap between policies and their actual impact on employees' behavior. This raises critical questions about the effectiveness of green management practices in fostering genuine employee engagement.

At the same time, the post-pandemic era has ushered in significant changes in workplace dynamics, where balancing work-life commitments has become increasingly complex. Employee well-being, encompassing both psychological and emotional dimensions, is central to achieving sustainable HRM practices. Research underscores that employee performance extends beyond technical skills and abilities, with workplace satisfaction and happiness playing a decisive role in driving engagement and improving organizational outcomes (Opatha & Uresha, 2020). Therefore, this study explores the interplay between GHRM, employee well-being, and organizational performance, shedding light on how HRM practices can effectively support employees while advancing corporate sustainability objectives. Despite the growing body of research on Green Human Resource Management (GHRM), much of the existing literature primarily focuses on the conceptualization of GHRM from the perspective of HR managers. Prior studies largely emphasize managerial practices but overlook the critical role of employees' psychological and emotional factors in driving the effectiveness of GHRM. This research addresses this gap by drawing on the insights of Ali, Hossain, Islam, and Alam (2024), which suggest the need to consider other potential mediators of sustainable performance. Specifically, this study explores how employee well-being acts as a critical factor in strengthening the effectiveness and outcomes of GHRM practices. Additionally, while early studies on GHRM primarily concentrated on environmental initiatives, they rarely integrated the broader framework of Environmental, Social, and Governance (ESG) into their analysis. The ESG framework, however, is crucial to corporate sustainability, as it captures the interconnected dimensions of environmental performance, social responsibility, and governance effectiveness (Subramaniam, Samuel, Seera, & Alam, 2024). Recognizing this gap, this research seeks to extend the understanding of GHRM by incorporating the ESG perspective into HRM practices.

This study makes two key contributions to the literature and practice of sustainable HRM. First, it innovatively applies the ESG framework to the conceptualization and implementation of GHRM, offering a comprehensive approach that aligns HR practices with broader sustainability goals. Second, it investigates whether employee well-being serves as a mechanism that amplifies the effectiveness and performance of GHRM. By evaluating the link between employee well-being and sustainable organizational practices, this study provides new insights into whether and how organizations can build long-term sustainability and competitive advantage through their HR strategies. Ultimately, this research not only bridges the gaps in the current literature but also provides practical implications for managers and policymakers seeking to balance sustainability objectives with employee engagement and well-being. By focusing on the intersection of GHRM, ESG, and employee well-being, this study contributes to advancing theoretical understanding and offering actionable strategies for achieving sustainable HRM in today’s dynamic business environment.

2. Literature Review and Hypotheses

2.1 Value Congruence Theory

According to the social information processing theory, employees adapt their information processing methods based on the organizational environment, subsequently adjusting their work motivation and behaviors (Gutworth, Cushenbery & Hunter, 2018). At the same time, irresponsible human activities within the workplace can exacerbate environmental degradation (Ones & Dilchert, 2012). Martell and Carroll (1995) emphasized that human resource functions and activities play a critical role in fostering consensus and encouraging the alignment of values and behaviors. Organizational core assumptions, values, and beliefs are transmitted to employees through HR mechanisms. Building on the perspective of Bansal and Hunter (2003), value congruence theory explores how an organization's environmental policies influence the attitudes and behaviors of its employees. Trust, which is based on emotional bonds and mutual care (McAllister, 1995), is shaped by perceptions of goodwill and shared values (as illustrated in Table 1). The theory posits that hiring, training, and educating employees must align with the organization's core values to ensure cultural fit (Bansal, 2003). Employees who perceive that their values align with those of the organization are more likely to engage meaningfully with the organization's sustainability initiatives. This alignment becomes particularly relevant in the context of sustainability-focused organizations. Employees who identify with sustainable development principles are more likely to be attracted to organizations that actively implement such policies. Consequently, hiring candidates with a strong commitment to sustainability not only ensures value congruence but also enhances organizational alignment with environmental and social goals. By integrating value congruence theory into sustainable HRM practices, organizations can create a shared sense of purpose between employees and the organization, which fosters employee engagement and strengthens the organization's environmental and social initiatives.

2.2 Green Human Resource Management (GHRM)

Human Resource Management (HRM) practices have long been aimed at maximizing organizational performance and competitive advantage. Substantial evidence suggests that effective HRM practices significantly enhance both organizational performance and competitive positioning (Boselie, Paauwe & Jansen, 2001). In recent years, as organizations increasingly focus on sustainable development, HRM has evolved to integrate green initiatives, accelerating its transformation into a sustainability-driven domain (Prathima & Misra, 2012).

Table 1: Elements of the literature review on value congruence theory framework

Environmental Dimension	Target	Content of Value Congruence Theory	Author
Internal Environment	Employee	The greater the alignment between an employee's personal values and the company's organizational values, the higher the employee's identification and engagement with the company, and the lower the intention to leave.	Huang & Huang (2003)
		The degree of shared work values among employees will influence their perceptions, attitudes, and work behaviors, such as job satisfaction, organizational commitment, and job performance.	Apasu, Ichikawa, & Graham (1987); Meglino, Ravlin & Adkins (1992);
		Employee value congruence is indeed related to employee work behaviors. The higher the value congruence, the more likely employees will exhibit positive behaviors, including higher organizational commitment, organizational internalization, and job satisfaction, while having a lower intention to leave.	Huang & Huang (2003)
External Environment	Customer	The alignment of values between customers and employees, as well as between customers and the environment, has a positive impact on customer compliance, which in turn influences customer satisfaction and future willingness to participate.	Rather et al. (2022)
		Customers will compare their self-concept with their perceptions of service personnel, the brand, and the environment, and then evaluate the degree of alignment between themselves and the service personnel, brand, and environment.	Sirgy (1982)
		The value congruence between customers and employees will influence the roles, abilities, and motivations that customers play in the service delivery process.	Dellande, Gilly, & Graham (2004)
	Supplier	As the buyer's trust in the supplier increases, the transaction costs in the relationship are reduced because the need for formal contracts and repeated negotiations decreases.	Akrout & Woodside (2024)
		Buyers and suppliers often hold different perspectives, and perceived asymmetry is a significant factor in communication between businesses.	Henderson, & Graebner (2020), Mora Cortez & Johnston (2019)
		When the supplier’s trust exceeds that of the buyer, trust asymmetry results in decreased supplier opportunism.	Wang, Zhou, Bai, & Li (2024)

Source: Authors

One key approach in this transformation is the adoption of policies that foster eco-friendly organizational cultures, leading to the emergence of Green Human Resource Management (GHRM), which incorporates environmental sustainability into HRM practices (Hassan & Tawfeeq, 2023). GHRM encompasses a wide range of strategies and initiatives aimed at minimizing the environmental impact of organizational activities. These practices extend across various HRM functions, including performance appraisal, training and development, recruitment, and selection, among others (Kissi et al., 2024)(as illustrated in Table 2). For example, organizations may prioritize hiring employees who hold professional certifications related to environmental protection, thereby aligning workforce competencies with sustainability objectives. Furthermore, scholars have emphasized the pivotal role of individual employee norms in determining the success of GHRM practices. Aftab, Abid, Cucari, and Savastano (2023), along with Shakil, Karim, Uddin, and Chowdhury (2023), argue that an organization's ability to effectively implement GHRM practices hinges not only on organizational policies but also on employees' personal values and efforts. For instance, employees' intrinsic motivation to support green initiatives can significantly influence the overall success of GHRM practices. Additionally, the effectiveness of GHRM may vary based on employee demographics, such as gender, further shaping the organization's green performance outcomes (Hassan et al., 2023). By integrating environmentally friendly practices into HRM, GHRM serves as a strategic tool for organizations to align employee behaviors with sustainability goals. This alignment not only reduces the environmental footprint of organizational activities but also enhances the organization's ability to achieve long-term sustainability. Through GHRM, businesses can create a cohesive culture where individual norms and collective goals converge, ultimately driving environmental and organizational success.

2.3 GHRM and Performance

Pham, Hoang, and Phan (2020) emphasize that various HR practices—such as job descriptions and analysis, performance management, organizational culture, unions' roles in environmental management, organizational learning, and green health and safety—are integral to Green Human Resource Management (GHRM). Some scholars even argue that environmental consciousness should be incorporated into selection tools for evaluating final candidates, as hiring employees with strong environmental awareness fosters a more responsible workforce compared to those lacking such awareness (Kissi et al., 2024). Performance remains one of the most critical factors for any organization, directly impacting its success and sustainability (Folan & Browne, 2005). Employee performance, in particular, is pivotal for organizational success (Mesiya, 2019), underscoring the essential and inseparable relationship between GHRM and performance that must be further explored. Prior research has extensively examined environmental and economic sustainability within green management practices. Numerous empirical studies employing diverse parameters have highlighted the positive impact of environmental management

practices on organizational performance (Iraldo, Testa, & Frey, 2009; Yang, Lin, Chan, & Sheu, 2010). Sustainability has garnered significant attention due to the complex challenges associated with conflicting norms, values, and beliefs embedded in sustainable practices (Peterson, 2009; Rittel & Webber, 1973).

Table 2: Content of green practices

Mission	Content of Green Practices	Author
Performance appraisal	Establish a comprehensive performance management system, including setting green goals in the key performance areas (KPA) and key performance index (KPI).	Almulhim(2024), Hosain & Rahman(2016), Tahir *et al.*(2024)
	Green performance goals and green behavior indicators should become key areas of performance evaluation at all levels.	
	Examples of goals could include increasing employees' environmental awareness and achievements, and encouraging subordinates to promote green environmental learning, among others.	
Training and development	Utilize a wide range of online and web-based training modules and tools.	Hosain *et al.* (2016), Hobday, Gaugler, Joly, Rosopa, Graham, Cicchinelli, & Mittelman(2024)
	Issues such as safety, energy efficiency, waste management, and recycling can be key points in green training.	
	Online course materials and case studies, rather than printed handouts, books, and manuals, to reduce paper usage.	
Recruitment and selection	Measures such as using online advertising and recruitment with less paper to reduce carbon emissions in office spaces.	Hosain *et al.* (2016), Ma, Zhang, & Fang(2022)
	Selection tests can also be made paperless, such as behavioral observations, interviews, and presentations, which require less paper.	
	Prioritize candidates who are more environmentally conscious and friendly, or those who have a strong motivation to keep the office and environment green or natural.	

Source: Authors

In recent years, the green agenda has gained prominence across various economic sectors, with strong links established between employees' environmental skills and participation and enhanced economic performance (Montalvo-Falcón, Sánchez-García, Marco-Lajara, & Martínez-Falcó, 2023). Energy consumption is closely tied to economic growth, as energy remains a critical component of modern economies (Soomro, Wang, Tunio, Aripkhanova, & Ansari, 2021). However, workplace negligence in economic activities often leads to environmental degradation (Ones & Dilchert, 2012). In this context, GHRM serves as a vital mechanism to mitigate the negative environmental impacts of organizational activities (Kissi et al., 2024). By integrating GHRM practices, companies can reduce costs—such as tariff-related expenses—while simultaneously enhancing employee participation and commitment to environmental initiatives. Through targeted environmental training, organizations can enhance employees' knowledge and skills, ultimately driving both improved environmental protection and stronger economic performance (Montalvo-Falcón et al., 2023). This dual advantage highlights the potential of GHRM to balance environmental sustainability with economic growth. Building upon these insights, the following hypotheses are proposed (as illustrated in Figure 1):

Hypothesis 1a. There is a positive relationship between the environmental protection (E) component of GHRM and environmental performance.

Hypothesis 2a. There is a positive relationship between the environmental protection (E) component of GHRM and economic performance.

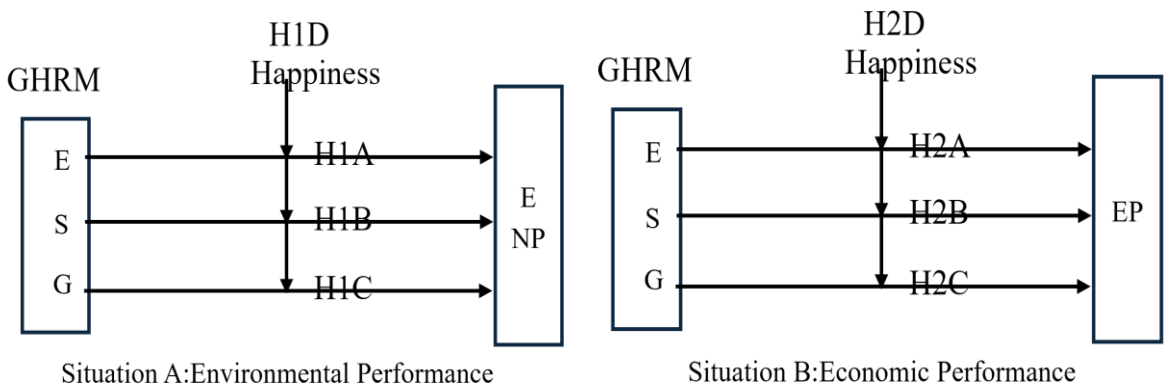

Figure 1: The research framework diagram

Source: Authors

Liu et al. (2024) identified a positive relationship between human resource management practices and employees' voluntary green behavior. This suggests that effective HRM can encourage employees to actively participate in environmentally responsible activities without coercion. Furthermore, employees' perceptions of corporate social responsibility (CSR) policies significantly shape their emotions, cognition, and behaviors, as illustrated by Zhou and Zheng (2024). A distinctive aspect of CSR policies lies in their inherent responsibilities, which serve to motivate employees' engagement in voluntary green initiatives (Zhao et al., 2023). Green Human Resource Management (GHRM) offers multifaceted benefits, including improved environmental performance, enhanced employee satisfaction, and elevated organizational reputation (Taneja, Bansal, Johri, Asif, & Shamsuddin, 2024). Its contributions extend beyond the economic realm, encompassing improvements in social and environmental performance as well (Montalvo-Falcón et al., 2023). These findings underscore the potential for GHRM to leverage social responsibility elements not only to support environmental sustainability but also to enhance the organization's overall economic and social impact. Building on this theoretical foundation, this study explores the dimensions of GHRM and proposes the following hypotheses (as illustrated in Figure 1):

Hypothesis 1b. There is a positive relationship between the social responsibility (S) component of GHRM and environmental performance.

Hypothesis 2b. There is a positive relationship between the social responsibility (S) component of GHRM and economic performance.

The most pressing global challenges today, including climate change, poverty, inequality, and environmental degradation, have created significant barriers to achieving sustainable growth (Dai & Chen, 2023). In many cases, corporate practices driven by the sole pursuit of profit have exacerbated these challenges. For instance, studies have demonstrated that economic corruption can impede green growth by reallocating critical resources inefficiently, highlighting sustainable governance as a critical factor for fostering green growth in emerging economies (Liu & Lyu, 2024). Corporate governance thus becomes a vital mechanism for mitigating these issues and steering companies toward sustainability. O'Donohue and Torugsa (2016) emphasize that integrating sustainable approaches into human resource management enables companies to reduce risks associated with legal disputes, employee grievances, and environmental issues. By doing so, businesses can safeguard their assets while enhancing their economic resilience. Moreover, Kissi, Segbenya, and Amoah (2024), in their study across banking, finance, local governance, and healthcare industries, established a positive relationship between green human resource management (GHRM) practices and environmental sustainability. Their findings highlight the significant role of GHRM in promoting health and safety, performance improvement, and environmental sustainability. Drawing on these insights, this study aims to examine how the governance dimension of GHRM impacts organizational outcomes, specifically in terms of

environmental and economic performance. Thus, the following hypotheses are proposed (as illustrated in Figure 1):

Hypothesis 1c. There is a positive relationship between the governance (G) component of GHRM and environmental performance.

Hypothesis 2c. There is a positive relationship between the governance (G) component of GHRM and economic performance.

2.4 The Moderating Role of the Happiness

Happiness is defined as a positive emotional state related to feeling good, enjoying life, and enhancing overall well-being (Cooper, 2009; Layard, 2005). Diener, Gohm, and Oishi (2000) describe happiness as an individual's cognitive and emotional self-assessment, typically determined by material well-being such as wealth and income. Moreover, happiness is emphasized as a particularly relevant emotion because people often prioritize happiness over other aspects of life, such as intelligence, success, or even health (Ballas, 2013; Smith & Reid, 2018). In the study of Ali, Hossain, Islam, and Alam (2024), it was found that companies with high-performing employees tend to achieve better sustainability performance, thereby improving financial results and employee happiness. Green human resource management (GHRM) practices were identified as mechanisms that contribute to sustainable performance, which, in turn, foster employee well-being. Research has also highlighted the positive relationship between happiness and job performance (Sakarj, Abdullah Thani, Nik Min, & Ishak, 2022). Employee performance is not solely a matter of skills and abilities; job satisfaction and happiness play pivotal roles (Awashreh & Omri, 2024). Consequently, organizations should focus on promoting employee happiness and creating work environments that enhance career well-being. This approach has been shown to deliver better business outcomes (Kumar & Pansari, 2016; Wahyudi, Panjaitan, & Junaedi, 2023; Yousuf & Saqib, 2021). Furthermore, happiness aligns with organizational strategies, positively influencing internal communication and organizational performance, ultimately contributing to a favorable corporate image (Ravina-Ripoll, Nunez-Barriopedro, Almorza-Gomar, & Tobar-Pesantez, 2021). Human resource departments should, therefore, provide training, counseling, and initiatives based on Maslow's theory, fostering appropriate personality traits to enhance employee happiness and job satisfaction (Opatha et al., 2020).

Environmental factors also play a crucial role in life satisfaction and happiness. For example, Cuñado and De Gracia (2013) explored the relationship between the environment and happiness, reporting that climate change and air pollution significantly impact happiness levels. Similarly, Štreimikienė (2015) confirmed the role of environmental conditions in influencing life satisfaction. Beyond external factors, happiness is also shaped by human behaviors and perceptions. Corruption, for instance, negatively affects happiness by distorting resources, enabling exploitation, and slowing economic development, resulting in frustration and lower

well-being (Helliwell, 2006; Rothstein, 2010; Arvin & Lew, 2014). Additionally, cultural dimensions, such as gender norms and inequalities, also affect happiness (Behera, Padmaja, & Dash, 2024). Schyns (1998) further identified significant relationships between happiness and economic and cultural factors. Considering the above, socio-economic, cultural, and environmental factors are all critical determinants of happiness (Behera et al., 2024). Moreover, the positive relationship between happiness and performance underscores the role of GHRM practices in enhancing employee well-being. This study, therefore, incorporates happiness as a moderating variable to examine whether it amplifies the effectiveness and outcomes of GHRM practices. Based on these insights, we propose the following hypotheses (as illustrated in Figure 1):

Hypothesis 1d. Happiness moderates the relationship between GHRM and environmental performance.

Hypothesis 2d. Happiness moderates the relationship between GHRM and economic performance.

3. Methods

3.1 Sample and data source

This study examines individuals from 66 countries or regions globally (see Table 3), aiming to analyze changes in human values, attitudes, and cultural beliefs over time, specifically focusing on trends in well-being and life satisfaction. According to Rokeach (1973), values are enduring beliefs that prioritize one mode of behavior or end-state of existence over an alternative. These beliefs significantly influence personal and societal behavior patterns. The formation of values is shaped by worldviews, life experiences, and the interplay between family and society, regulating needs, motivations, and behavioral patterns. To ensure objective and reliable data, this study utilized a broad dataset capturing diverse perspectives across nations on values and beliefs. The dataset selected for analysis was sourced from the World Values Survey (WVS), one of the most comprehensive global research initiatives.

The World Values Survey (WVS) is a global research project conducted by the World Values Survey Association (WVSA). This initiative covers over 120 countries and represents 90% of the global population. The survey investigates the evolution of human values, attitudes, and cultural beliefs and examines their impact on social, political, and economic environments. It is recognized as one of the most extensive and long-standing cross-cultural studies globally. Themes explored include economic development, democratization, religion, gender equality, social capital, and subjective well-being, making it invaluable for scholars and policymakers worldwide. For this study, data from the seventh wave of the WVS (version 6.0), collected between 2017 and 2022, were utilized. The dataset comprises survey responses from 66 countries and regions (as illustrated in Table 3). All samples were obtained using random probability sampling methods, ensuring

representativeness across adult populations. Most of the data were collected through in-person interviews (PAPI/CAPI). The study extracted variables aligning with this dataset's research framework and hypotheses for statistical analysis. By leveraging this globally recognized and reliable dataset, this study provides robust and generalizable insights into the evolving role of values in shaping well-being and performance in green human resource management.

Table 3: Sample Country Frequencies

Country	Frequency	Country	Frequency
Albania	0	Lebanon	1200
Andorra	1004	Libya	1196
Argentina	1003	Lithuania	0
Armenia	1223	Macao SAR	1023
Australia	1813	Malaysia	1313
Austria	0	Maldives	1039
Azerbaijan	0	Mexico	1741
Bangladesh	1200	Mongolia	1638
Belarus	0	Montenegro	0
Bolivia	2067	Morocco	0
Bosnia Herzegovina	0	Myanmar	1200
Brazil	1762	Netherlands	2145
Bulgaria	0	New Zealand	1057
Canada	4018	Nicaragua	1200
Chile	1000	Nigeria	1237
China	3036	North Macedonia	0
Colombia	1520	Northern Ireland	447
Croatia	0	Norway	0
Cyprus	1000	Pakistan	1995
Czechia	1200	Peru	1400
Denmark	0	Philippines	1200
Ecuador	1200	Poland	0
Egypt	1200	Portugal	0
Estonia	0	Puerto Rico	1127
Ethiopia	1230	Romania	1257
Finland	0	Russia	1810
France	0	Serbia	1046
Georgia	0	Singapore	2012
Germany	1528	Slovakia	1200
Great Britain	2609	Slovenia	0
Greece	1200	South Korea	1245
Guatemala	1229	Spain	0
Hong Kong SAR	2075	Sweden	0
Hungary	0	Switzerland	0
Iceland	0	Taiwan ROC	1223
Indonesia	3200	Tajikistan	1200
Iran	1499	Thailand	1500
Iraq	1200	Tunisia	1208
Italy	0	Turkey	2415
Japan	1353	Ukraine	1289
Jordan	1203	United States	2596
Kazakhstan	1276	Uruguay	1000
Kenya	1266	Venezuela	1190
Kyrgyzstan	1200	Vietnam	1200
Latvia	0	Zimbabwe	1215

Source: Authors

3.2 Variables and Measurements

This study integrates the concept of ESG into the psychological dimension of happiness to explore whether employee happiness enhances the effectiveness and outcomes of Green Human Resource Management (GHRM). The goal is to evaluate a firm's sustainability capacity and competitive advantages, which guided the development of the theoretical framework and hypothesis derivation. Based on the proposed research framework (see Figure 1), a quantitative analysis method was adopted, employing Smart PLS 4 to examine and analyze the model and data. The data source is the seventh wave of the World Values Survey (WVS), encompassing core variables and moderating variables required for the study. Core variables include ESG components: Environmental Protection (E), Social Responsibility (S), and Corporate Governance (G), along with economic and environmental performance. The moderating variable is happiness (Happiness) (see Table 4).

Table 4: Dimension question number

Measurement Dimension	Question Number	Detailed Content	Author
E (Environmental)	Q79Confidence:The Environmental Protection Movement	I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? Environmental organizations	Guo, Tang, Wang, & Zhang(2024)
	Q99Active/Inactive membership: Environmental organization	Now I am going to read out a list of voluntary organizations; for each one, could you tell me whether you are a member, an active member, an inactive member or not a member of that type of organization? Environmental organization	
	Q99RMembership: environmental organization	Recoded variable for Q99	
	Q111Protecting environment vs. Economic growth	Here are two statements people sometimes make when discussing the environment and economic growth. Which of them comes closer to your own point of view? A. Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs B. Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent.	
S (Social)	Q10 Important child qualities: Feeling of responsibility	Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five. –Feeling of responsibility	Lee (2022), Zhang, Zhang, & Li (2025)
	Q206 Information source: Internet	People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never: Internet	
	Q207 Information source: Social media (Facebook, Twitter, etc.)	People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never: Social media (Facebook, Twitter, etc.)	
	Q208 Information source: Talk with friends or colleagues	People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never: Talk with friends or colleagues.	
G (Governance)	Q31 Men make better business executives than women do	For each of the following statements I read out, can you tell me how strongly you agree or disagree with each. Do you strongly agree, agree, disagree, or strongly disagree? - On the whole, men make better business executives than women do	Brando (2017), Marino (2025)
	Q71 Confidence: The Government	I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? The government (in your nation's capital)	
	Q107 Private vs state ownership of business	Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.	
	Q114 Involved in corruption: Business executives	Among the following groups of people, how many do you believe are involved in corruption? Tell me for each group if you believe it is none of them, few of them, most of them or all of them? Business executives.	

Source: Authors

To ensure alignment with the research questions, rigorous data selection and processing were conducted. Representative items were chosen from the database, covering all aspects of the research topic and fitting the theoretical framework and hypotheses. Data were transformed into a five-point Likert scale to facilitate analysis and ensure statistical validity. Outlier identification and correction were performed using standard statistical methods to ensure data integrity and consistency. These efforts rendered the final dataset more representative and scientifically sound for subsequent analyses. By converting raw data into a structured, analyzable dataset, the study establishes a solid foundation for hypothesis testing and model development.

4. Results

4.1 Descriptive Statistics

The unit of analysis for this study is defined as country/region-year. The sample includes data from 66 countries and regions over five years, capturing annual perceptions of values across nations. A total of 18 items were selected, resulting in a dataset of 94,278 observations. The observations are treated as a panel data model, combining cross-sectional data (66 countries/regions) with time-series data (5 years). To examine the relationships among variables, including Environmental Protection (E), Social Responsibility (S), Corporate Governance (G), economic performance, environmental performance, and happiness, correlation analysis was conducted (see Table 5). Pearson's product-moment correlation coefficient was employed to test for linear relationships between two continuous variables. The coefficient ranges between -1 and +1, with values closer to 1 (positive or negative) indicating stronger correlations between variables (Rahadian, Bandong, Widyotriatmo, & Joelianto, 2023). This analysis serves as the basis for exploring the interrelations among the ESG dimensions, performance metrics, and happiness, setting the stage for subsequent hypothesis testing and model verification.

4.2 Hypothesis Testing

This study employed the multivariate regression method proposed by Pearson (1908) to test eight hypotheses. The analysis results are summarized in Table 6, and Figure 2 illustrates the complete model in detail. Model A represents scenarios where the moderating variable (happiness) is high, serving as a potential moderator influencing the relationships. Model B examines situations where the moderating variable (happiness) is low, assessing the direct impact of the independent variables (E, S, G) on the dependent variables (environmental and economic performance) under such conditions. Model C assumes that the moderating variable (happiness) equals the mean, considering only the direct relationships between the independent variables (E, S, G) and the dependent variables (environmental and economic performance), without any additional moderating or intervening effects. Table 6 demonstrates the significance levels of each pathway across the three models, with most pathways showing significant relationships in Models A, B, and C (p-values

< 0.05). These results validate hypotheses H1A, H2A, H1B, H2B, H1C, H2C, H1D, and H2D. However, the E → EP pathway in Model B was found to be non-significant (p-value = 0.122). This suggests that integrating ESG dimensions into Green Human Resource Management (GHRM) is feasible and that implementing these strategies positively influences both environmental and economic performance. Furthermore, the majority of T-values in the models were significantly greater than 2, providing additional support for the robustness of the findings.

Table 5: Correlation coefficient

Measurement Dimension	1	2	3	4	5	6
E	1					
S	-	1				
G	-	-	1			
EP	0.005**	0.304	0.017*	1		
ENP	0.000***	0.805	0.000***	-	1	
Happiness	-	-	-	0.000***	0.000***	1
Happiness x E	-	-	-	0.000***	0.253	
Happiness x S	-	-	-	0.071	0.199	
Happiness x G	-	-	-	0.218	0.000***	

Note: [a] p*<0.1, p**<0.005, p***<0.001
[b] E = Environmental, S = Social, G = Governance, EP = Economic Performance, ENP = Environmental Performance

Source: Authors

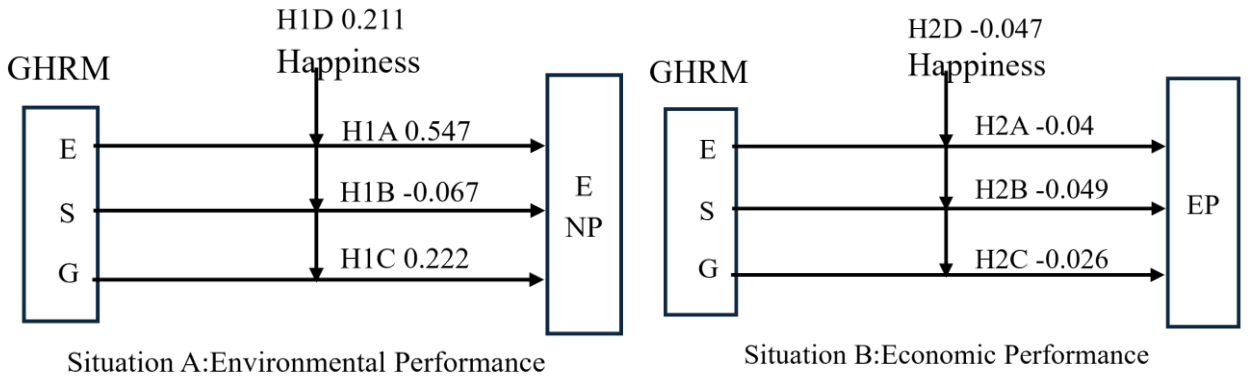

Figure 2: Results of all hypotheses

Source: Authors

Table 6: Results of regression analyses

Path	Model	β	T	p	Significance	Confidence Interval
E→EP	Model A	-0.066	6.076	0.000***	Yes	[-0.087, -0.044]
	Model B	-0.015	1.546	0.122	No	[-0.033, 0.004]
	Model C	-0.040	4.758	0.000***	Yes	[-0.057, -0.023]
G→EP	Model A	-0.019	2.383	0.017*	Yes	[-0.035, -0.003]
	Model B	-0.032	4.355	0.000***	Yes	[-0.046, -0.017]
	Model C	-0.026	4.469	0.000***	Yes	[-0.037, -0.014]
S→EP	Model A	-0.056	9.240	0.000***	Yes	[-0.068, -0.044]
	Model B	-0.041	7.375	0.000***	Yes	[-0.053, -0.031]
	Model C	-0.049	11.691	0.000***	Yes	[-0.057, -0.041]
E→ENP	Model A	0.565	18.193	0.000***	Yes	[0.505, 0.625]
	Model B	0.529	20.570	0.000***	Yes	[0.479, 0.579]
	Model C	0.547	22.925	0.000***	Yes	[0.501, 0.594]
G→ENP	Model A	0.150	6.245	0.000***	Yes	[0.103, 0.196]
	Model B	0.295	14.420	0.000***	Yes	[0.254, 0.334]
	Model C	0.222	13.040	0.000***	Yes	[0.187, 0.255]
S→ENP	Model A	-0.081	4.899	0.000***	Yes	[-0.113, -0.048]
	Model B	-0.054	3.702	0.000***	Yes	[-0.082, -0.025]
	Model C	-0.067	5.880	0.000***	Yes	[-0.089, -0.044]

Note:
[a] p*<0.1, p**<0.005, p***<0.001
[b] E = Environmental, S = Social, G = Governance, EP = Economic Performance, ENP = Environmental Performance

Source: Authors

4.3 Moderating effect analysis

Following Baron and Kenny's (1986) framework, this study employed hierarchical regression analysis to examine the moderating role of happiness in the relationships between Green Human Resource Management (GHRM), environmental performance (ENP), and economic performance (EP). By comparing the three models (Model A, Model B, and Model C) presented in Tables 6 and Figure 2, the study identifies the significance and strength of happiness as a moderating factor. The results indicate that happiness significantly moderates most pathways. However, in Model B, where happiness is low, the relationship between E (environmental protection) and EP (economic performance) becomes non-significant. This suggests that low levels of happiness may weaken the impact of E on EP, implying that individuals with lower happiness levels may not perceive the economic benefits associated with environmental changes as strongly. Nonetheless, other pathways in Model B, such as G (corporate governance) → EP and S (social responsibility) → EP, remained significant. This indicates that under conditions of low happiness, both S and G still exert positive impacts on EP and ENP. In summary, happiness as a moderating variable influences the significance and effect size of

certain pathways, such as E → EP, potentially weakening or strengthening the directional impact between variables. However, for other pathways, such as E → ENP, G → ENP, and S → ENP, happiness consistently contributes to a positive moderating effect. The model results demonstrate stability under various settings, suggesting that happiness plays a nuanced role in moderating these relationships. When the models (A, B, and C) are analyzed collectively, the overall moderating effect of happiness appears less pronounced. This implies that regardless of whether happiness levels are high, medium, or low, its moderating influence on the relationships between independent and dependent variables remains relatively limited. The independent variables, such as E, S, and G, continue to exert stable effects on the dependent variables. These findings reveal variability in the moderating role of happiness across different scenarios and suggest that further exploration of underlying mechanisms and influencing factors is warranted.

5. Discussion

Prior studies, such as those by Tahir, Umer, Nauman, Abbass, and Song (2024), have recommended exploring corporate responsibilities and regulations while integrating Green Human Resource Management (GHRM) practices to achieve a work-life balance. Similarly, Sheikh, Shan, Hassan, Khan, and AbdAlatti (2024) have advocated for incorporating the triple bottom line (economic, social, and environmental aspects) to enhance the effectiveness of GHRM practices. Building on these insights, this study explores how happiness strengthens the impact of GHRM on environmental and economic performance while integrating the Environmental, Social, and Governance (ESG) framework into GHRM. By doing so, the study provides new perspectives on assessing corporate sustainability and competitive advantage. While previous research has confirmed the positive relationships between GHRM and environmental as well as economic performance (Montalvo-Falcón et al., 2023; Tahir et al., 2024), this study makes an innovative contribution by investigating the role of happiness as a moderating factor. Furthermore, it incorporates the ESG framework into the GHRM practice, expanding the theoretical and practical understanding of how companies can leverage sustainability-oriented human resource practices to achieve organizational goals. The findings of this study confirm that incorporating ESG principles into GHRM practices is feasible and significantly enhances both environmental (EP) and economic performance (ENP). This underscores the importance of ESG-focused GHRM initiatives as a critical tool for driving sustainable development and fostering growth in corporate environmental and economic outcomes. Companies that prioritize ESG principles and integrate them into their GHRM strategies can achieve tangible improvements in both dimensions, supporting their long-term sustainability goals. Regarding the moderating role of happiness in strengthening GHRM's effectiveness, the results reveal that while happiness positively influences employee morale, engagement, and willingness to participate in environmental protection efforts, its strengthening effects are relatively limited. Employees who

experience happiness at work exhibit greater motivation and commitment, which can enhance organizational performance. However, the extent of this enhancement is not as substantial as anticipated. These findings suggest that while happiness is an important factor in promoting employee engagement, other organizational and external factors may also play significant roles in determining the success of GHRM practices. This study's results contribute to the ongoing discussion on sustainable HRM by highlighting the potential of ESG-driven GHRM as a cornerstone of corporate sustainability. Additionally, it emphasizes the nuanced role of employee well-being, underscoring its importance while recognizing the limits of its impact in isolation. Further exploration is warranted to identify additional mechanisms and variables that can amplify the effectiveness of GHRM practices.

6. Conclusion and Future Suggestions

This study provides valuable insights into the integration of ESG principles into Green Human Resource Management (GHRM) and its implications for environmental and economic performance, alongside exploring the moderating role of happiness. While the findings contribute to advancing the theoretical understanding and practical applications of GHRM, this study is not without limitations. The data for this research was derived from the World Values Survey (WVS), which, while comprehensive, lacked direct interaction with respondents. This limitation may have resulted in the oversight or omission of unreported behaviors or latent factors, restricting a deeper understanding of the phenomena under investigation. The indirect nature of the data collection process might have affected the ability to fully capture respondents' authentic thoughts and contextual realities, thereby imposing constraints on the study's interpretive depth. Future research is encouraged to adopt more diversified data collection methods, combining large-scale quantitative surveys with in-depth qualitative studies. Such an approach would help bridge the gap between researchers and respondents, enabling the exploration of underlying behaviors, motivations, and perceptions. By integrating qualitative insights with quantitative findings, future studies can address the limitations of indirect data collection, enhancing the explanatory power and academic value of their conclusions. Moreover, this study underscores the need for continued exploration of other moderating variables and contextual factors that could amplify or hinder the effectiveness of GHRM practices in achieving sustainability goals. Investigating these dimensions in diverse cultural, industrial, and organizational settings can further refine the understanding of the interplay between GHRM, ESG integration, and employee well-being. This will ultimately provide organizations with more robust strategies for fostering sustainability and achieving long-term competitive advantage.

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