

# GREEN HUMAN RESOURCE MANAGEMENT AND ENVIRONMENTAL PERFORMANCE AMONG HOTELS

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## Abstract

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The present study explores the connection between green human resource management (GHRM) and environmental performance (EP) directly and indirectly through employees' eco-friendly behaviour (EFB), environmental values (EVs), and green passion (GP). The study used a quantitative strategy based on the studies of Paillé et al. (2014) and Liu et al. (2023). We collected 288 usable cases through an online questionnaire. Using SmartPLS 4, the findings confirmed a significant positive effect of GHRM on EFB, EP, and EVs. On the one hand, GHRM is found to be a negative predictor of GP. Moreover, factors such as EFB and EVs positively affect EP, but GP negatively affects EP. Furthermore, mediating analysis shows a positive significant mediating effect of EFB and EVs in developing the association between GHRM and EP. On the other hand, GP negatively mediates the positive connection between GHRM and EP. The study overcomes the gaps by providing a robust theoretical framework that integrates the GHRM, EFB, EVs, and GP directly and indirectly towards EP. The study also offers the original contribution by providing empirical facts from Egyptian green hotels.

**Keywords:** Green Human Resource Management, Environmental Performance, Environmental Values, Eco-Friendly Behaviour, Green Passion, Green Hotels

**Authors' individual contribution:** Conceptualization — N.A.A.A. and M.A.A.D.; Methodology — N.A.A.A. and M.A.A.D.; Software — B.A.S.; Validation — N.A.A.A.; Formal Analysis — B.A.S.; Investigation — N.A.A.A., M.A.A.D., and B.A.S.; Resources — N.A.A.A. and M.A.A.D.; Data Curation — N.A.A.A. and B.A.S.; Writing — Original Draft — N.A.A.A. and M.A.A.D.; Writing — Review & Editing — N.A.A.A. and B.A.S.; Visualization — N.A.A.A. and M.A.A.D.; Supervision — N.A.A.A. and M.A.A.D.; Project Administration — N.A.A.A.; Funding Acquisition — N.A.A.A. and M.A.A.D.

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## 1. INTRODUCTION

In recent years, organizations have heightened their awareness of the pivotal role green initiatives play in their operations (Bangwal et al., 2017). The emergence of green human resource management (GHRM) indicates its growing importance within organizational business strategies, recognizing human resources' substantial influence in fostering environmentally conscious practices (Hameed et al., 2020). This shift underscores the recognition that cultivating a "green" ethos requires strategic integration with human resource practices. The significance lies in the growing recognition of green initiatives as a crucial aspect of organizational strategy. As highlighted by Bangwal et al. (2017), organizations are increasingly aware of the pivotal role GHRM plays in their overall business strategy. This is particularly true in the hospitality and tourism sector, where environmental performance (EP) is a significant challenge for hotels. The study underscores the importance of factors such as eco-friendly behaviour (EFB), environmental values (EVs), and green passion (GP) in influencing EP in this industry. EFB, as noted by Ly (2023), fosters an individual commitment to green initiatives, while GHRM positively impacts EP, organizational commitment, and EFB, according to Kim et al. (2019). Moreover, green values and green passion, as identified by Hameed et al. (2020) and Yusoff et al. (2020), respectively, are highlighted as contributing factors to EP. Understanding these linkages is crucial for organizations seeking to navigate sustainability challenges and integrate green practices effectively into their operations.

In the literature, a myriad of factors, including green culture, green advocacy, green values, GHRM, GP, organizational commitment, employee empowerment, green recruitment and selection, green pay, green training and development, organizational identity, green behaviours, green creativity, and environmental passion, have been extensively examined for their contributions to EP and environmental sustainability (Kim et al., 2019; Yusoff et al., 2020; Gill et al., 2021; Ribeiro et al., 2022; Ali et al., 2022; Ly, 2023). Notably, despite the comprehensive exploration of these factors, the literature has yet to delve into the impact of GHRM on EP, GP, EFB, and EVs (Chaudhary, 2020; Al-Hawari et al., 2021; Liu et al., 2021; Liu et al., 2023). Moreover, the integration of EFB, EVs, and GP as mediators remains an understudied aspect (Gill et al., 2019; Mohammad et al., 2020; Chen et al., 2021; Khamdamov et al., 2023; Liu et al., 2023).

However, in the literature, some gaps exist that need exploration, particularly in understanding the relationship between the hotel industry, EP, and GHRM, with a focus on green hotels. In the hospitality and tourism context, central EP through GHRM, green initiatives, EFB, EVs, and GP is identified as a significant barrier to the hotel industry. EFB develops the commitment among individuals to perform better for green initiatives of their organizations (Ly, 2023). Likewise, GHRM is the component that positively enhances hotels' EP, workers' organizational commitment, and EFB (Kim et al., 2019). Furthermore, individuals' green values also enhance EP (Hameed et al., 2020). The GP factor also significantly contributes to EP positively

(Yusoff et al., 2020). In the context of green hotels, employees are aware of greener settings and green practices; the personnel successfully engage in green practices. Egypt's hotel workers might benefit from being more aware of the issues brought on by these restrictions. According to Eldemerdash and Mohamed (2013), employees are considered a crucial first step in understanding the situation of Egyptian green hotels. Egypt's Sustainable Development Strategy (SDS), Egypt Vision 2030, significantly attempts to boost environmental protection and sustainable development through tourism management (Khalil Ahmed, 2020). Hence, considering this, the study's objective is to investigate the effect of GHRM on hotel EP directly and through EFB, EVs, and GP. Thus, we raised the following questions:

*RQ1: How does GHRM affect EP among Egyptian green hotel employees?*

*RQ2: How do EFB, EVs, and GP mediate the relationship between GHRM and EP among Egyptian green hotel employees?*

The paper's contribution provides actionable insights for hotel management, offering a roadmap for implementing sustainable development through strategic human resource practices. The study emphasizes the importance of managerial encouragement for personnel to seamlessly integrate green practices into daily operations. The findings highlight GHRM practices as a potent tool for fostering environmental protection and sustainable development within the hotel industry. By emphasizing the significance of GHRM techniques, the research aims to equip businesses with the knowledge and strategies needed to elevate EP levels, fostering a greater appreciation for and commitment to environmental sustainability in hotel operations.

The rest of this paper is structured as follows. Section 2 provides the literature review and hypotheses development. Section 3 discusses the methods employed in the study. Section 4 shows the results. Section 5 discusses the research findings. Section 6 concludes the paper.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Presently, organizations are interested in enhancing their EP through applying green initiatives. According to Gill et al. (2021), GHR policies significantly impact EP, with EFB acting as a mediating factor. GHRM substantially and positively predicts workers' organizational identity and EFB in the tourist industry (Ribeiro et al., 2022). It is a precise and organized method for raising employee commitment and EFB (Ly, 2023). EFB, employee commitment, and EP are all favourably and strongly correlated (Ali et al., 2022). According to Kim et al. (2019), GHRM is the element that appreciatively raises hotels' EP, workers' organizational commitment, and EFB. Similarly, a path analysis shows that EFB and employee green participation mediated the development of a favourable relationship between GHRM and EP. Firm performance can be improved through effective corporate governance policies (Dike & Tuffour, 2023). Likewise, in developing economies, voluntary sustainability is robust in enhancing firms' values and financial performance (Isiaka, 2022; Rao et al., 2022).

Through GHRM, there is a beneficial relationship between green employee empowerment and organizational civic conduct towards EP. EP is enhanced by green practices such as green training and development, green recruitment and selection and green pay, as claimed by Yusoff et al. (2020). Anwar et al. (2020) suggest that organizational citizenship has a favourable impact on EP. Practices in GHRM strengthen these connections as well. Like GHRM practices, employees' love for the environment significantly helps EP grow. In keeping with this idea, Roscoe et al.'s (2019) quantitative study highlights the mediating effect of green organizational culture in creating a connection between GHRM practices and EP. Besides, GHRM was favourably related to green corporate culture at the same time. According to Aggarwal and Agarwala (2023), green organizational culture is significant in mediating the relationship between GHRM practices and EP. In the context of green hotels' EP, the results confirmed a positive effect of GHRM on EP when employee enhance their environmental commitment and green process innovations (Irani et al., 2022). In the same direction, green motivation and ability are significant predictors of EP and green innovation. Besides, GHRM practices and EP are connected through green innovation in manufacturing SMEs (Awan et al., 2023). Niazi et al. (2023) demonstrates the relationship between GHRM and green innovation through green corporate social responsibility. Furthermore, green corporate social responsibility has a positive influence on EP.

Employee values (EVs) are adversely correlated with employees' views of relevance and green creativity inside their organizations (Al-Hawari et al., 2021). Green innovation is predicted by the GRHM (Liu et al., 2021). According to Chaudhary (2020), GHRM actively promotes EP and significantly contributes to attaining environmental sustainability.

Through voluntary workplace green behaviour and green creativity, the congruent environmental passion and green psychological climate are mediated (Chen et al., 2021). Gilal et al.'s (2019) research demonstrates the effectiveness of GHRM practices in predicting environmental commitment and green values. According to Mohammad et al. (2020), GP may act as a mediating factor in developing the connection between GHRM and citizens' environmental behaviour. Khamdamov et al. (2023) claim that GHRM practices predict EP, harmonious work enthusiasm, and intrinsic motivation favourably. GP considerably impacts employee green advocacy, GP greatly affects employee green advocacy, and GP also partially mediates the link between GP and GHRM (Liu et al., 2023).

Consequently, several factors such as green culture, green advocacy, green values, GHRM, GP, organizational commitment, employee empowerment, green recruitment and selection, green pay, green training and development, organizational identity, green behaviours, green creativity and environmental passion are investigated towards EP and environmental sustainability (Kim et al., 2019; Yusoff et al., 2020; Gill et al., 2021; Ribeiro et al., 2022; Ali et al., 2022; Ly, 2023). However, in the literature, the effect of GHRM on EP, GP, EFB and EVs has still not been explored (Chaudhary, 2020; Al-Hawari et al., 2021; Liu et al., 2021; Liu

et al., 2023). Specifically, EFB, EVs, and GP as mediators are still underexplored in an integrated way (Gilal et al., 2019; Mohammad et al., 2020; Chen et al., 2021; Khamdamov et al., 2023; Liu et al., 2023). The hotel industry in the EP and GHRM context needs to be explored. Hence, based on these gaps and existing relationships in the literature, we developed Figure 1 to explore among employees of green hotels in Egypt.

GHRM integrates environmentally sustainable practices into human resource processes, including training for environmental management, assessing EFB in performance appraisals, linking green actions to rewards, considering environmental fit in recruitment, ensuring understanding of corporate environmental policy, and encouraging employee suggestions for environmental improvement. It aims to align human resource practices with sustainability goals, fostering an eco-conscious organizational culture (Hsiao et al., 2014; Shen & Benson, 2016).

Likewise, EFB of employees refers to a set of actions and habits aimed at minimizing environmental impact in the workplace. This includes turning off electric appliances before leaving, switching off lights in unoccupied rooms, actively sorting and recycling workplace garbage, conserving and reusing materials, limiting water use to save water in toilets, and attentively addressing water leaks (Hsiao et al., 2014; Chou, 2014). These behaviours demonstrate a conscious effort by employees to contribute to environmental sustainability within their work environment (Tudor et al., 2007; Scherbaum et al., 2008).

Moreover, GP refers to a vibrant and enthusiastic commitment to environmental values and behaviours. Individuals with green passion actively enjoy and take pride in practising environmentally friendly actions. They may engage in discussions about environmental issues, passionately encourage others to be more environmentally responsible, and voluntarily participate in activities such as joining environmental groups or donating time and resources to support environmental causes (Robertson & Barling, 2013).

EVs encompass a set of personal convictions and beliefs regarding the importance of preventing environmental degradation. This includes a sense of personal obligation to contribute to environmental preservation, the influence of significant others who emphasize the importance of environmental protection, the expectation of encouragement from influential individuals if engaged in green initiatives, the belief that preventing environmental degradation strengthens interpersonal relationships, and the consideration of making a positive impression on others through environmentally responsible actions (Li et al., 2010).

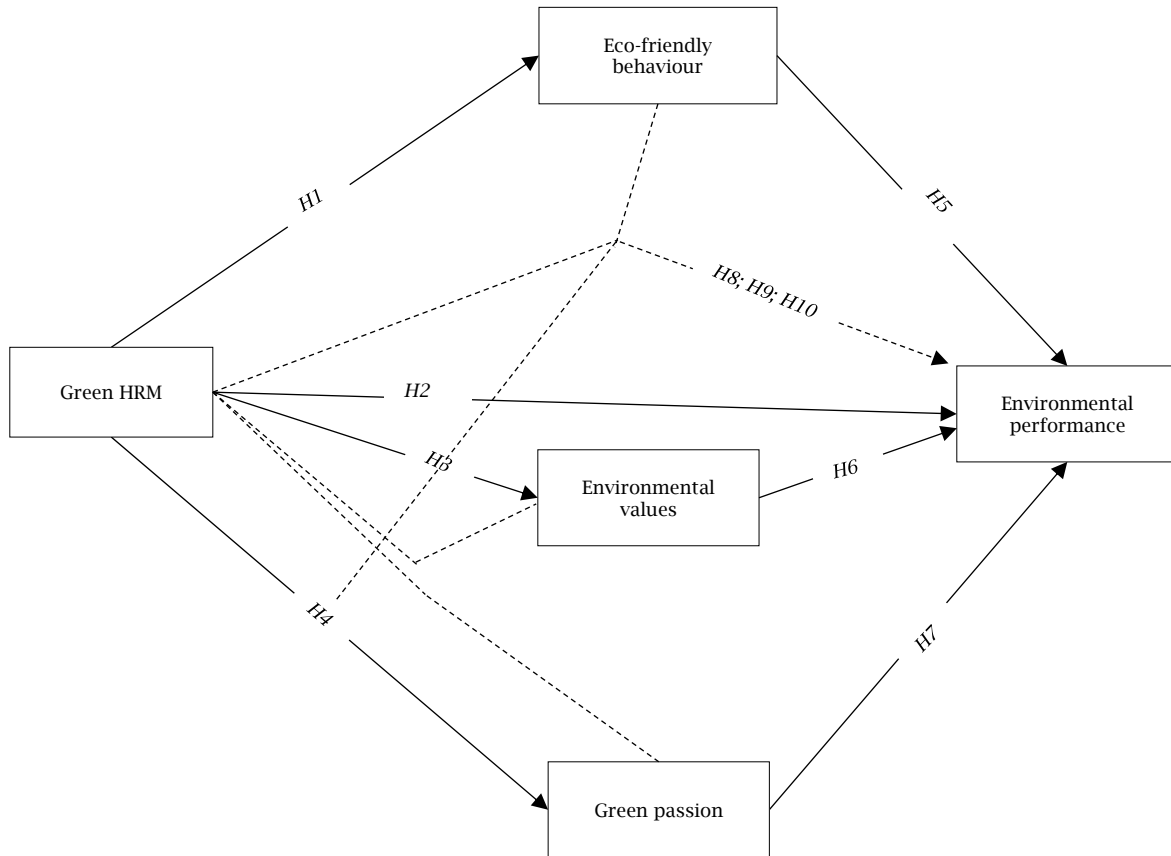
Hotel EP refers to a hotel's measurable and sustainable achievements in minimizing its ecological footprint and promoting environmental stewardship. This includes specific outcomes such as the reduction of wastes, conservation of water and energy usage, and decreased purchases of non-renewable materials, chemicals, and components, leading to overall cost reduction. Besides, improved market positioning and an enhanced reputation for the hotel, often resulting from environmentally conscious practices, are

integral aspects of hotel EP (Ilinitch et al., 1998; Melnyk et al., 2003; Paillé et al., 2014).

Consequently, in the hotel context, the GHRM integrates sustainable practices into human resource processes, fostering an eco-conscious culture. Likewise, the EFB of employees, such as energy conservation and waste reduction, directly

contributes to environmental sustainability within the hotel. GP and EVs promote environmentally friendly actions, contributing to a positive organizational culture and further shaping employees' beliefs, influencing behaviours that collectively enhance hotel environmental performance.

Figure 1. Conceptual model of the study



**2.1. Green HRM, eco-friendly behaviour, environmental performance, environmental values and green passion**

Regarded GHRM could leverage global environmental concerns to promote green practices. It is an accurate and systematic way to enhance employee commitment and EFB (Ly, 2023). Factors such as EFB, employee commitment, and EP are positively and significantly associated (Ali et al., 2022). Kim et al. (2019) assert GHRM as the factor that positively increases hotels' EP, employees' organizational commitment, and EFB. Similarly, a path analysis demonstrates a mediating contribution of EFB and employee green involvement in developing a positive connection between GHRM and EP (Fahim et al., 2019). Using SmartPLSv3.0, the empirical evidence of Gill et al. (2021) asserts a substantial effect of GHR policies on EP with the mediating effect of EFB. In tourism, GHRM positively and significantly predicts employees' EFB and organizational identification (Ribeiro et al., 2022).

Green employee empowerment and organizational citizenship behaviour toward EP are positively connected through GHRM. Individuals'

green values mediate organizational citizenship behaviour towards EP and green employee empowerment (Hameed et al., 2020). The empirical evidence shows a significant mediating impact of work-life in the association of GHRM and EPF (Bangwal et al., 2017). In the perception of Anwar et al. (2020), EP is positively affected by organizational citizenship. GHRM practices also reinforce these relationships. Likewise, GHRM practices robustly increase EP via employees' environmental passion. The environmental passion factor is more significant when an employee is high on green values (Gilal et al., 2019). Simultaneously, GHRM was also positively associated with green organizational culture. Factors such as empowerment, green training and development, performance management, and participation are meaningful and influential enablers of EFB (Ojo et al., 2022).

The GHRM is also associated with EVs. Frontline employees' EVs influence their significance perceptions and green creativity inversely contingent on their organization's adoption of green HR practices (Al-Hawari et al., 2021). In manufacturing enterprises, the association between GRHM, EVs, green organization identity, and organizational citizenship behaviours. GRHM predicts green

innovation (Liu et al., 2021). According to Chaudhary (2020), GHRM contributes robustly to achieving environmental sustainability and fosters EP. Managerial employees also exert positive and significant links between individual green values and GHRM. The study also reported substantial moderation of green management on the association between individual green values and GHRM (AlZgool, 2019).

Furthermore, GP is predicted by perceived green behaviours. The harmonious environmental passion and green psychological climate are mediated through voluntary workplace green behaviour and green creativity (Chen et al., 2021). Gilal et al. (2019) show the predictive power of GHRM practices on environmental passion and green values. In the study of Mohammad et al. (2020), GP is a potential mediating influence in developing the association between GHRM and the environmental behaviours of citizens. According to Khamdamov et al. (2023), GHRM practices positively forecast intrinsic motivation, harmonious work passion, and EP. There is a mediating contribution of harmonious environmental passion and green crafting for the connection between employee green creativity and GHRM practices (Luu, 2023). In China, GHRM significantly affects GP and employee green advocacy, GP substantially affects employee green advocacy, and GP also partially mediates the association between GHRM and employee green advocacy (Liu et al., 2023).

Consequently, the effect of GHRM on EFB, EP, EVs, and GP needs further confirmation, particularly in green hotels in Egypt.

*H1: GHRM positively and significantly predicts employees' EFB.*

*H2: GHRM positively and significantly predicts hotel EP.*

*H3: GHRM positively and significantly predicts EVs.*

*H4: GHRM positively and significantly predicts GP.*

## 2.2. Eco-friendly behaviour and environmental performance

The EFB is the massive predictor of hotels' EP through GHRM (Kim et al., 2019). The influence of GHRM practices on hotel EP by integrating individual green values and environmental knowledge. There is a positive association between GHRM practices EFB and employees' affective commitment (Raza & Khan, 2022). According to Paillé and Meija-Morelos (2019), environmental sustainability repeatedly reports when employees are reinforced by their employer, they are disposed to appealing extra exertions towards behaving in an eco-friendly manner and helping their organization prosper. The corporate level encourages staff to build an environmentally friendly workplace that will maximize EP. Results further suggest that pro-environmental behaviours and EP are moderated by environmental knowledge (Naz et al., 2023). Nevertheless, GHRM had a considerable, indirect, and favourable impact on EP through proactive pro-environmental behaviours. This illustrates the significance of employee pro-environmental behaviours and their critical role in the interaction between GHRM and EP in tourism businesses (Elshaer et al., 2021). In line with the insight of Aftab et al. (2023), to succeed in EP via operational efficiency, proper environmental

strategy, and human motivation to engage in environmental activities, it is important to use green innovation, environmental strategy, and pro-environmental behaviour. Individual variations in environmental concern, but not pro-environmental consumer behaviour and social desirability indices, were correlated with the strength of the performance impact of eco-labels among university students (Sörqvist et al., 2015). Based on significant connections between EFB and EP, we expect:

*H5: Employees' EFB positively and significantly predicts hotel EP.*

## 2.3. Environmental values and environmental performance

Promoting environmental commitment via top management ideals and leadership. Engagement of stakeholders has a significant influence on restaurants' dedication to environmental sustainability (Jang et al., 2017). Singh et al. (2019) propose that environmental training, competitive advantage, and established environmental ethics are all impacted. Employee environmental education buffers the impact of environmental ethics on a company's bottom line and competitive advantage. Environmental behaviour is contingent on situational and personnel variables in an interactive way (Corraliza & Berenguer, 2000). Implementing green HR practices by their organization affects the frontline employees' EVs, affecting their views of importance and green creativity (Al-Hawari et al., 2021). These associations lead to the enhancement of EP. The EVs and GHRM predict EP and environmental sustainability (Chaudhary, 2020). Individuals' EVs positively and significantly affect EP and green management (AlZgool, 2019). As a result, in the literature, EVs are a significant predictor of EP in several contexts. However, it needs further confirmation in the green hotel context of Egypt.

*H6: EVs positively and significantly predict hotel EP.*

## 2.4. Green passion and environmental performance

Environmental sustainability has received more attention in recent years, leading to the development of GHRM practices. EP levels are dramatically raised by the combined mediation of GP legislation and enhancers of green organizational culture and worker behaviour (He et al., 2023). The employee GP positively enhances EP. Similarly, GHRM positively impacts GP, and GP partially mediates the association between GHRM and employee green advocacy (Liu et al., 2023). Gilal et al. (2019) recognize the constructive role of GHRM practices in shaping environmental passion. In Indonesia, entrepreneurial passion is a meaningful factor that positively predicts green innovation performance (Santosa et al., 2021). Likewise, job passion has lately attracted more attention since it is essential to the productivity and well-being of employees. The employees' environmental stewardship orientation and perceived job autonomy positively affect their harmonious passion (Chen et al., 2020). Based on these relationships, we proposed:

*H7: GP positively and significantly predicts hotel EP.*

## 2.5. Eco-friendly behaviour, environmental values and green passion as mediators

The GHRM policies and EP are associated with EFB (Gill et al., 2021). In the perception of Naz et al. (2023), green HRM practices, EP, environmental knowledge, and corporate environmental strategy are mediated and moderated by FEB. Similarly, proactive pro-environmental behaviours play positive roles in developing the linkage between GHRM and EP (Elshaer et al., 2021). Green values moderately reinforce the association between GHRM and green employee empowerment (Hameed et al., 2020). Apart from that, GHRM passively affects EP, EVs, and green creativity (AlZgool, 2019; Al-Hawari et al., 2021). According to Gilal et al. (2019), GHRM practices meaningfully affect EP via employees' environmental passion. GHRM practices positively forecast intrinsic motivation, harmonious work passion, and EP (Khamdamov et al., 2023). Harmonious environmental passion mediates the connection between green creativity and GHRM practices (Luu, 2023).

As a result, the above relevant studies provide consistent positive associations of GHRM with EP directly and indirectly through EFB, EVs, and GP. Hence, based on this consistency (direct and indirect) between these associations, we suggest:

*H8: EFB mediates the association between GHRM and hotel EP.*

*H9: EVs mediate the association between GHRM and hotel EP.*

*H10: GP mediates the association between GHRM and hotel EP.*

## 3. RESEARCH METHODOLOGY

### 3.1. Research approach and respondents

Using quantitative data and real-world circumstances, we adopted the quantitative strategy as the most effective one (Baumberg, 2016). The availability of components in numbers throughout time makes the procedure more reliable (Pattaro et al., 2022). In the literature, the EP, GHRM, GP, EVs etc., factors are frequently assessed through quantitative modes of enquiry (AlZgool, 2019; Hameed et al., 2020; Al-Hawari et al., 2021; Gill et al., 2021; Elshaer et al., 2021; Naz et al., 2023; Khamdamov et al., 2023; Luu, 2023).

The study context is hotel employees in Egypt, with a focus on green-certified hotels. Among these hotels, 8% and 24% are located in Hurghada and El-Gouna, mainly ranging from 4-star to 5-star establishments. In El-Gouna, there are 16 green-certified hotels, while Hurghada has 10 (Salama et al., 2022). The remaining green-certified hotels in Egypt are situated in other areas, including Safaga, South Sinai, Alexandria, Cairo, Matrouh, and Marsa Alam (GSH, 2023). The study specifically targeted employees with at least one year of work experience (Kim et al., 2019). Experienced employees tend to perform green practices more effectively due to their knowledge of greener environments and green practices. In the context of Egyptian green hotels, hotel staff could benefit from increased awareness of the challenges associated with these practices. Employees are considered a crucial first step in

comprehending the state of Egyptian green hotels (Eldemerdash & Mohamed, 2013). Egypt's Sustainable Development Strategy (SDS), aligned with Egypt Vision 2030, emphasizes "environmental protection" and "social justice inclusion". Initiatives like the Green Star Hotel (GSH) and Universal Design (UD) advocate for sustainable development (Ahmed, 2020).

### 3.2. Reliability and validity of tools

We ensured the questionnaire's reliability and validity through a pilot test before collecting the large data. We assessed reliability with the support of Cronbach's alpha ( $\alpha$ ) and initial loading weights. The items' internal consistency (reliability) was observed overall as 0.835, where the individual factor reliability ranged above 0.70 with good values (Hair et al., 2019). Moreover, the loading of the items appeared to be acceptable ( $> 0.70$ ) for most items; however, some items existed in cross-loadings. Likewise, we ensured the validity of the tool by providing its physical structure and content to two university professors who were experts in the field of HRM and well-informed about the latest trends of quantitative assessment. Hence, we slightly modified the questionnaire to address experts' comments. As a result, we launched a reliable and valid questionnaire to collect large-scale data.

### 3.3. Data collection procedure

We applied a survey questionnaire to gather facts from the respondents. An online questionnaire was utilized to target the respondents as we obtained their emails and other social media contacts. We employed a convenience sampling strategy to approach them. Initially, we formally contacted them to ensure their willingness to voluntarily contribute to the study. Then, we made them aware of the aim and objective of the study. To determine if the hotels used GHRM procedures on their property, the researchers also asked about their training or education programmes for environmental protection. Regarding ethical values, we ensured the privacy and secrecy of using the data only for educational purposes. Finally, we collected 288 valid responses and utilized these for drawing conclusions.

### 3.4. Measures

We adopted all the items of the scale from literature, using a five-point Likert scale ranging from strongly agree = 1 to strongly disagree = 5. Six items from Shen and Benson (2016) and Hsiao et al. (2014) were used to evaluate GHRM. Likewise, seven items were applied to measure EFB, adopted from studies by Hsiao et al. (2014), Chou (2014), Scherbaum et al. (2008), and Tudor et al. (2007). The EVs construct was measured with five items adopted from Li et al. (2010). GP was assessed using ten items from the Green Passion scale developed by Robertson and Barling (2013). Finally, EP was gauged with seven items, previously applied by Paillé et al. (2014), Melnyk et al. (2003), and Ilinitch et al. (1998). The details of all the items are provided in the Appendix.

## 4. RESULTS

### 4.1. Measurement model

#### 4.1.1. Convergent validity

We assessed both convergent validity and discriminant validity using SmartPLS 4 (<https://www.smartpls.com>). As recommended by Hair et al. (2019), convergent validity was evaluated through composite reliability (CR), average variance extracted (AVE), and factor loading. The analysis

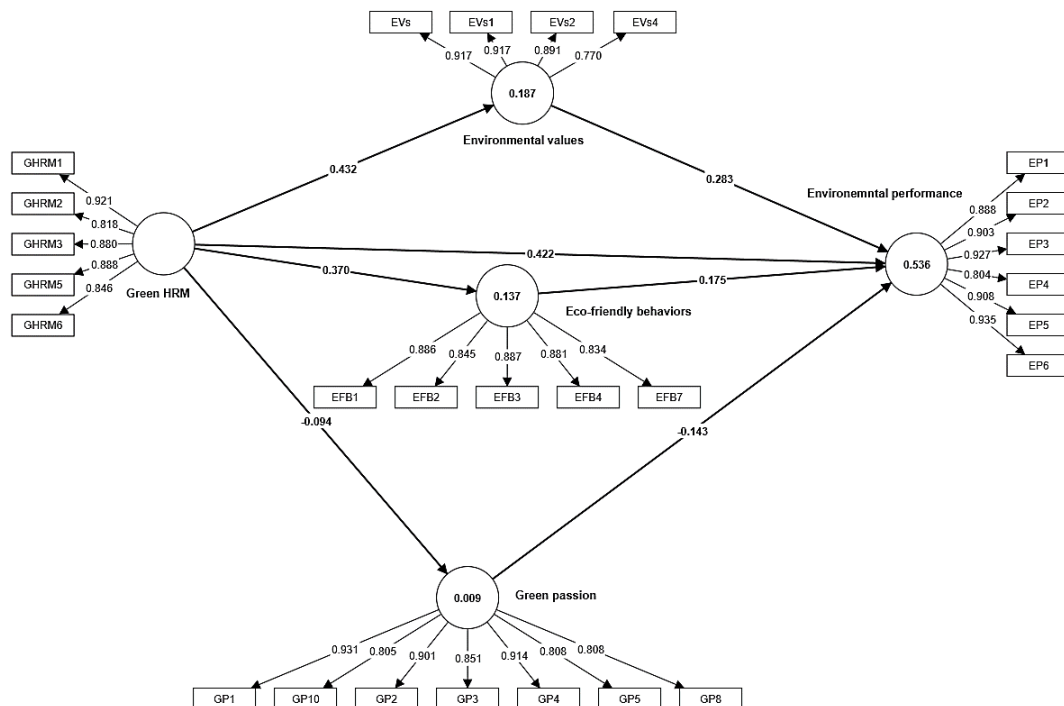
found loading values ranging from 0.770 (EVs4) to 0.935 (EP6). However, some items, such as EP7, EVs3, GHRM4, GP6, GP7, and GP9, were deleted due to values less than 0.70 (Hair et al., 2019). Moreover, AVE scores appeared from 0.741 (GP) to 0.801 (EP), exceeding the acceptable threshold of 0.50 (Hair et al., 2019). Likewise, CR scores were found above 0.70, ranging from 0.929 (EVs) to 0.960 (EP), and Cronbach's alpha values were higher than 0.70, (Hair et al., 2019), confirming convergent validity for scale measurement (Table 1 and Figure 2).

Table 1. Convergent validity

Factor	Item code	Loading weights	AVE	CR	Alpha ( $\alpha$ )
Eco-friendly behaviour (EFB)	EFB1	0.886	0.752	0.938	0.917
	EFB2	0.845			
	EFB3	0.887			
	EFB4	0.881			
	EFB7	0.834			
Environmental performance (EP)	EP1	0.888	0.801	0.960	0.950
	EP2	0.903			
	EP3	0.927			
	EP4	0.804			
	EP5	0.908			
	EP6	0.935			
Environmental values (EVS)	EVS	0.917	0.767	0.929	0.897
	EVS1	0.917			
	EVS2	0.891			
	EVS4	0.770			
Green human resource management (GHRM)	GHRM1	0.921	0.758	0.940	0.920
	GHRM2	0.818			
	GHRM3	0.880			
	GHRM5	0.888			
	GHRM6	0.846			
Green passion (GP)	GP1	0.931	0.741	0.952	0.949
	GP10	0.805			
	GP2	0.901			
	GP3	0.851			
	GP4	0.914			
	GP5	0.808			
	GP8	0.808			

Note: Deleted items = EP7, EVs3, GHRM4, GP6, GP7, and GP9.  
Source: Authors' own calculation.

Figure 2. Path analysis



4.1.2. Discriminant validity (DV)

We assessed DV using the heterotrait-monotrait (HTMT) ratio of correlations, following the recommendation of Henseler et al. (2015). DV is considered acceptable if the HTMT value is below either 0.85 (Kline, 2015) or 0.90 (Gold et al., 2001). As shown in Table 2, all values are below the HTMT.90 cutoff level (Gold et al., 2001), proving that DV has been established.

Table 2. Discriminant validity (HTMT)

Constructs	1	2	3	4	5
EFB					
EP	0.546				
Evs	0.787	0.619			
GHRM	0.391	0.653	0.465		
GP	0.179	0.111	0.168	0.087	

Source: Authors' own calculation.

4.2. Structural model

We applied a structural equation model (SEM) to examine the hypothesized associations. The analysis found a significant positive effect of GHRM on EFB, EP, and EVs [(H1 =  $\beta = 0.370$ ;  $p < 0.01$ ) ( $H = \beta = 0.422$ ;  $p < 0.01$ ) ( $H3 = \beta = 0.432$ ;  $p < 0.01$ )], supporting H1, H2 and H3. However, we found a negative influence of GHRM on GP ( $H4 = \beta = -0.094$ ;  $p > 0.01$ ), not supporting H4. Furthermore, we confirmed a positive and significant impact of EFB and EVs on EP [(H5 =  $\beta = 0.175$ ;  $p < 0.01$ ) ( $H6 = \beta = 0.283$ ;  $p < 0.01$ )]. As a result, H5 and H6 are supported. Conversely, the analysis identified a negative significant effect of GP on EP ( $H7 = \beta = -0.143$ ;  $p < 0.01$ ). Consequently, H7 is not accepted (Table 3 and Figure 3).

Table 3. Structural equation model estimations (direct paths)

Hypothesis	Proposed relationships	Std. ( $\beta$ )	Mean	Std. Dev	t-value	p-value	Decision
H1	GHRM $\rightarrow$ EFB	0.370	0.373	0.058	6.424	***	Supported
H2	GHRM $\rightarrow$ EP	0.422	0.423	0.054	7.856	***	Supported
H3	GHRM $\rightarrow$ EVs	0.432	0.435	0.053	8.222	***	Supported
H4	GHRM $\rightarrow$ GP	-0.094	-0.099	0.094	0.998	0.318	Rejected
H5	EFB $\rightarrow$ EP	0.175	0.175	0.051	3.423	***	Supported
H6	Evs $\rightarrow$ EP	0.283	0.282	0.053	5.323	***	Supported
H7	GP $\rightarrow$ EP	-0.143	-0.14	0.053	2.715	***	Rejected

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Source: Authors' own calculation.

Furthermore, the indirect effect shows a positive and significant mediating impact of EFB and EVs in developing the relationship between GHRM and EP [(H8 =  $\beta = 0.065$ ;  $p < 0.01$ ) ( $H9 = \beta = 0.122$ ;  $p < 0.01$ )]. These results support H8

and H9. Finally, GP was not found to be a significant mediator between GHRM and EP ( $H9 = \beta = 0.013$ ;  $p > 0.01$ ). Consequently, H10 is rejected (Table 4 and Figure 3).

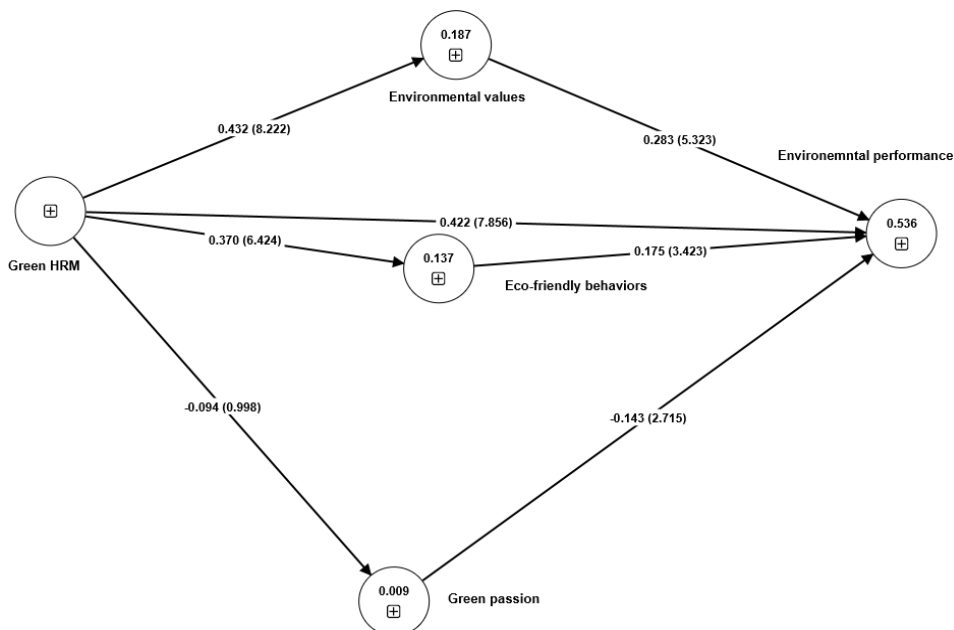
Table 4. Structural equation model estimations (indirect paths)

Hypothesis	Proposed relationships	Std. ( $\beta$ )	Mean	Std. Dev	t-value	p-value	Decision
H8	GHRM $\rightarrow$ EFB $\rightarrow$ EP	0.065	0.066	0.023	2.818	***	Supported
H9	GHRM $\rightarrow$ EVs $\rightarrow$ EP	0.122	0.123	0.031	3.988	***	Supported
H10	GHRM $\rightarrow$ GP $\rightarrow$ EP	0.013	0.013	0.012	1.123	0.262	Rejected

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Source: Authors' own calculation.

Figure 3. Structural equation model



Source: Authors' own estimation.



## 5. DISCUSSION

The study proposed to examine the association between green HRM and hotel EP directly and indirectly through EFB, EVs, and GP among employees of green hotels in Egypt. This aligns seamlessly with previous research by Fahim et al. (2019), Roscoe et al. (2019), Gill et al. (2021), Hameed et al. (2020), Yusoff et al. (2020), Al-Hawari et al. (2021), and Ribeiro et al. (2022), all of which yielded congruent results. These collective findings underscore the effectiveness of the hotel's training program in fostering a robust commitment to environmental management as a core organizational priority. These findings imply that the hotel's approach involves considering staff eco-friendliness as a critical metric in performance evaluations. The hotel has integrated environmental considerations into its reward system, linking awards and remuneration to staff eco-friendliness. Moreover, the hiring process emphasizes a fit between personal identity and environmental management, reinforcing that environmental consciousness is a valued trait in prospective employees. The proactive environmental stance extends beyond theoretical principles to practical, day-to-day actions. Employees are well-versed in the company's environmental policy and actively contribute to it by suggesting improvements. This commitment is evident in their conscientious efforts, such as turning off electronic device lights and actively engaging in waste sorting and recycling within the workplace. Water conservation measures are also integral to their environmental initiatives, from limiting toilet water use to monitoring leaks. Beyond the workplace, the study reveals a deep-seated sense of personal responsibility among the hotel's staff to combat environmental deterioration. This commitment is further reinforced by influential figures advising against environmental destruction. Notably, the study suggests that engaging in green practices garners support from critical contacts and enhances interpersonal relationships. The positive impact of adopting environmentally friendly practices is seen as a potential catalyst for improved relationships, leaving a lasting and favourable impression on others. In essence, the hotel's comprehensive approach to GHRM aligns with contemporary research and reflects a tangible commitment to environmental sustainability that permeates organizational culture and individual behaviour.

In contrast, our observations reveal a counterintuitive negative correlation between GHRM and GP, a finding at odds with the conclusions drawn by notable researchers such as Gilal et al. (2019), Mohammad et al. (2020), Chen et al. (2021), Khamdamov et al. (2023), Luu (2023), and Liu et al. (2023), all of whom reported conflicting outcomes. These incongruent results suggest a critical need for GHRM strategies to better cultivate a sense of environmental enthusiasm among employees.

Employees under the influence of GHRM exhibit a need for more enjoyment in practising environmentally friendly behaviours, expressing disinterest in environmental conservation activities. Moreover, they do not derive a sense of pride from protecting the environment and exhibit a noticeable

lack of enthusiasm in discussions about environmental issues. The reluctance extends to their unwillingness to actively encourage others to embrace greater environmental responsibility, as evidenced by a lack of involvement in volunteering for environmental organizations or making voluntary contributions — whether in terms of time or financial support — toward environmental causes. These findings underscore a pressing need for a more robust and effective integration of environmental values within the framework of GHRM. On a positive note, our study confirms a constructive impact of EFB, EVs, and GP on EP. These positive associations align harmoniously with existing literature, as supported by studies conducted by Kim et al. (2019), Gilal et al. (2019), Elshaer et al. (2021), Raza and Khan (2022), Naz et al. (2023), Aftab et al. (2023), Chen et al. (2020), Al-Hawari et al. (2021), Santosa et al. (2021), and Liu et al. (2023), all of which affirm similar outcomes. This convergence in findings highlights the interplay of these factors in fostering a conducive environment for enhanced environmental performance within organizational settings.

Concerning indirect pathways, EFB and EVs emerge as significant mediators between GHRM and EP, a relationship well-supported by existing literature (Hameed et al., 2020; Gill et al., 2021; Al-Hawari et al., 2021; Elshaer et al., 2021; Naz et al., 2023). These findings underscore the pivotal role played by EFB and EVs in fortifying and amplifying the linkages between GHRM practices and the resultant environmental performance within the organizational context. Conversely, GP does not emerge as a mediator in the relationship between GHRM and EP among hotel employees. This distinctive absence suggests that, unlike EFB and EVs, GP does not function as an intermediary factor influencing the impact of GHRM on environmental performance. This nuanced insight highlights the need for a more nuanced understanding of the specific mechanisms through which GHRM may or may not interact with different dimensions of employee attitudes and behaviours, shedding light on the intricacies of the relationship dynamics within the context of the hotel industry.

## 6. CONCLUSION

The overall results suggest a significant positive effect of GHRM on EFB, EP, and EVs except GP. Besides, EP is positively predicted by EFB, EVs, and GP. Finally, the study confirmed a mediating role of EFB and EVs in developing a connection between GHRM and EP. On the other hand, GP does not appear to have a positive mediating role. The analysis showed that our hotel's environmental management had decreased waste. They reduced their use of water and electricity. They cut back on procuring chemicals, parts, and non-renewable resources. They decreased overall expenses and raised its standing in the industry. The staff members improved the establishments' reputation.

The study provides effective practical and theoretical implications, the findings offer guidelines to hotel management to bring sustainable development and gradation through HR strategies. The study's findings point managers to encourage their staff to include green practices in their

everyday activities. GHRM practices provide a valuable means of advancing EP and sustainable development. The research will help firms understand the value of environmental sustainability and use GHRM practices to raise EP levels. By implementing GHRM practices, firms may improve their ability to contribute to sustainable development and acquire specialized skills. Finally, the study would encourage the organizations to adopt and develop EFB, EVs, GP, and GHRM to enhance the EP of organizations free of adverse effects on the environment.

Concerning theoretical implications, the study would help overcome the investigation of factors such as GHRM, EFB, EVs, and GP towards EP in an integrated way. The study would provide valuable insights into the mediating contribution of EFB, EVs, and GP in developing the connection between GHRM and EP. The study would add empirical insights into the hospitality and tourism sector, specifically from the Egyptian context. Finally, the literature would be enriched with GHRM practices, a viable and practical solution to enhance EP and promote sustainable development.

The study has several limitations. Firstly, the research is limited to a concerned theory, which is not employed to support the conceptualization. Secondly, the study used only quantitative methods. We collected only cross-sectional data. Additionally, a few constructs, such as GHRM, EFB, EVs, GP, and EP, were analyzed in the study. We concluded the study based on 288 samples collected from Egyptian green hotel employees. Lastly, the study employed only EFB, EVs and GP as mediators to observe the reinforcement of the relationship between GHRM and EP.

In future research, longitudinal studies could be conducted to confirm the direct and indirect effects of GHRM on EP. Additional factors, including green culture, motivation, talent management, and others, may be added to further explore their impact on EP. It is recommended that future studies employ relevant theories to provide a solid foundation for the conceptual framework. Moreover, increasing the sample size would contribute to the validation and generalizability of the study's findings.

## REFERENCES

1. Aftab, J., Abid, N., Cucari, N., & Savastano, M. (2023). Green human resource management and environmental performance: The role of green innovation and environmental strategy in a developing country. *Business Strategy and the Environment*, 32(4), 1782-1798. <https://doi.org/10.1002/bse.3219>
2. Aggarwal, P., & Agarwala, T. (2023). Relationship of green human resource management with environmental performance: Mediating effect of green organizational culture. *Benchmarking: An International Journal*, 30(7), 2351-2376. <https://doi.org/10.1108/BIJ-08-2021-0474>
3. Ahmed, M. E. K. (2020). Exploring inclusiveness in green hotels for sustainable development in Egypt. *International Journal of Industry and Sustainable Development*, 1(1), 15-23. <http://tinyurl.com/mt2v9pne>
4. Al-Hawari, M. A., Quratulain, S., & Melhem, S. B. (2021). How and when frontline employees' environmental values influence their green creativity? Examining the role of perceived work meaningfulness and green HRM practices. *Journal of Cleaner Production*, 310, Article 127598. <https://doi.org/10.1016/j.jclepro.2021.127598>
5. Ali, M., Puah, C.-H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: A new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614-638. <https://doi.org/10.1108/IJM-04-2020-0185>
6. AlZgool, M. (2019). Nexus between green HRM and green management towards fostering green values. *Management Science Letters*, 9, 2073-2082. <https://doi.org/10.5267/j.msl.2019.6.026>
7. Anwar, N., Mahmood, N. H. N., Yusliza, M. Y., Ramayah, T., Faezah, J. N., & Khalid, W. (2020). Green human resource management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. *Journal of Cleaner Production*, 256, Article 120401. <https://doi.org/10.1016/j.jclepro.2020.120401>
8. Awan, F. H., Dunnan, L., Jamil, K., & Gul, R. F. (2023). Stimulating environmental performance via green human resource management, green transformational leadership, and green innovation: A mediation-moderation model. *Environmental Science and Pollution Research*, 30(2), 2958-2976. <https://doi.org/10.1007/s11356-022-22424-y>
9. Bangwal, D., Tiwari, P., & Chamola, P. (2017). Green HRM, work-life and environment performance. *International Journal of Environment, Workplace and Employment*, 4(3), 244-268. <https://doi.org/10.1504/IJEWE.2017.087808>
10. Baumberg, B. (2016). The stigma of claiming benefits: A quantitative study. *Journal of Social Policy*, 45(2), 181-199. <https://doi.org/10.1017/S0047279415000525>
11. Chaudhary, R. (2020). Green human resource management and employee green behavior: An empirical analysis. *Corporate Social Responsibility and Environmental Management*, 27(2), 630-641. <https://doi.org/10.1002/csr.1827>
12. Chen, C.-F., Chen, S.-C., & Tsai, P.-S. (2020). Job passion in the context of green restaurant: Environmental stewardship orientation and job autonomy as antecedents. *Journal of General Management*, 46(1), 16-25. <https://doi.org/10.1177/0306307020911177>
13. Chen, S., Jiang, W., Li, X., & Gao, H. (2021). Effect of employees' perceived green HRM on their workplace green behaviors in oil and mining industries: Based on cognitive-affective system theory. *International Journal of Environmental Research and Public Health*, 18(8), Article 4056. <https://doi.org/10.3390/ijerph18084056>
14. Chou, C.-J. (2014). Hotels' environmental policies and employee personal environmental beliefs: Interactions and outcomes. *Tourism Management*, 40, 436-446. <https://doi.org/10.1016/j.tourman.2013.08.001>
15. Corraliza, J. A., & Berenguer, J. (2000). Environmental values, beliefs, and actions: A situational approach. *Environment and Behavior*, 32(6), 832-848. <https://doi.org/10.1177/00139160021972829>
16. Dike, V. O., & Tuffour, J. K. (2023). Corporate governance practices and firm performance: The moderating effect of female directors. *Corporate Governance and Sustainability Review*, 7(1), 8-20. <https://doi.org/10.22495/cgsv711p1>
17. Eldemerdash, J. M., & Mohamed, L. M. (2013). Exploring obstacles of employing environmental practices: The case of Egyptian green hotels. *Journal of Human Resources in Hospitality & Tourism*, 12(3), 243-258. <https://doi.org/10.1080/15332845.2013.769140>

18. Elshaer, I. A., Sobaih, A. E. E., Aliedan, M., & Azazz, A. M. (2021). The effect of green human resource management on environmental performance in small tourism enterprises: Mediating role of pro-environmental behaviors. *Sustainability*, 13(4), Article 1956. <https://doi.org/10.3390/su13041956>
19. Fahim, F., Khan, N. R., Ahmad, A., & Ali, A. (2019). Green human resource management and firm's environmental performance: Mediating role of employee commitment, green involvement and eco-friendly behaviour. *Paradigms*, 13(2), 18–25. <http://tinyurl.com/bp4sefvx>
20. Gilal, F. G., Ashraf, Z., Gilal, N. G., Gilal, R. G., & Channa, N. A. (2019). Promoting environmental performance through green human resource management practices in higher education institutions: A moderated mediation model. *Corporate Social Responsibility and Environmental Management*, 26(6), 1579–1590. <https://doi.org/10.1002/csr.1835>
21. Gill, A., Ahmad, B., & Kazmi, S. (2021). The effect of green human resource management on environmental performance: The mediating role of employee eco-friendly behavior. *Management Science Letters*, 11, 1725–1736. <https://doi.org/10.5267/j.msl.2021.2.010>
22. Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214. <https://doi.org/10.1080/07421222.2001.11045669>
23. Green Star Hotel (GSH). (2023). *Green star hotels in Egypt*. <https://www.greenstarhotel.org/gsh-in-numbers/>
24. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
25. Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance? *International Journal of Manpower*, 41(7), 1061–1079. <https://doi.org/10.1108/IJM-08-2019-0407>
26. He, W., Mushtaq, N., & Jan, L. (2023). Unlocking the dual black box of GHRMP & EGOC for sustainable environmental performance in developing economies: Can green workplace behavior and green passion transmit the real change? *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-03286-x>
27. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
28. Hsiao, T. Y., Chuang, C. M., Kuo, N.-W., & Yu, S. M.-F. (2014). Establishing attributes of an environmental management system for green hotel evaluation. *International Journal of Hospitality Management*, 36, 197–208. <https://doi.org/10.1016/j.ijhm.2013.09.005>
29. Ilinitch, A. Y., Soderstrom, N. S., & Thomas, T. E. (1998). Measuring corporate environmental performance. *Journal of Accounting and Public Policy*, 17(4–5), 383–408. [https://doi.org/10.1016/S0278-4254\(98\)10012-1](https://doi.org/10.1016/S0278-4254(98)10012-1)
30. Irani, F., Kiliç, H., & Adeshola, I. (2022). Impact of green human resource management practices on the environmental performance of green hotels. *Journal of Hospitality Marketing & Management*, 31(5), 570–600. <https://doi.org/10.1080/19368623.2022.2022554>
31. Isiaka, A. S. (2022). Voluntary sustainability reporting and financial performance: Evidence from Global Reporting Initiative disclosures in the developing economy. *Corporate Governance and Sustainability Review*, 6(4), 54–64. <https://doi.org/10.22495/cgsrv6i4p5>
32. Jang, Y. J., Zheng, T., & Bosselman, R. (2017). Top managers' environmental values, leadership, and stakeholder engagement in promoting environmental sustainability in the restaurant industry. *International Journal of Hospitality Management*, 63, 101–111. <https://doi.org/10.1016/j.ijhm.2017.03.005>
33. Khamdamov, A., Tang, Z., & Hussain, M. A. (2023). Unpacking parallel mediation processes between green HRM practices and sustainable environmental performance: Evidence from Uzbekistan. *Sustainability*, 15(2), Article 1434. <https://doi.org/10.3390/su15021434>
34. Kim, Y. J., Kim, W. G., Choi, H. M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, 76(A), 83–93. <https://doi.org/10.1016/j.ijhm.2018.04.007>
35. Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th). Guilford Press.
36. Liu, Z., Guo, Y., Zhang, M., & Ma, G. (2023). Can green human resource management promote employee green advocacy? The mediating role of green passion and the moderating role of supervisory support for the environment. *The International Journal of Human Resource Management*, 35(1), 121–153. <https://doi.org/10.1080/09585192.2023.2214319>
37. Liu, Z., Mei, S., & Guo, Y. (2021). Green human resource management, green organization identity and organizational citizenship behavior for the environment: The moderating effect of environmental values. *Chinese Management Studies*, 15(2), 290–304. <https://doi.org/10.1108/CMS-10-2019-0366>
38. Luu, T. T. (2023). Can green creativity be fostered? Unfolding the roles of perceived green human resource management practices, dual mediation paths, and perceived environmentally-specific authentic leadership. *The International Journal of Human Resource Management*, 34(6), 1246–1273. <https://doi.org/10.1080/09585192.2021.1986107>
39. Ly, B. (2023). Green HRM and eco-friendly behavior in Cambodian public organizations: The mediation of organizational commitment. *Environmental Challenges*, 10, Article 100674. <https://doi.org/10.1016/j.envc.2022.100674>
40. Melnyk, S. A., Sroufe, R. P., & Calantone, R. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operational Management*, 21, 329–351. [https://doi.org/10.1016/S0272-6963\(02\)00109-2](https://doi.org/10.1016/S0272-6963(02)00109-2)
41. Mohammad, N., Bibi, Z., Karim, J., & Durrani, D. (2020). Green human resource management practices and organizational citizenship behaviour for environment: The interactive effects of green passion. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(6), 1–10. <https://tuengr.com/V11/11A06EM.pdf>
42. Naz, S., Jamshed, S., Nisar, Q. A., & Nasir, N. (2023). Green HRM, psychological green climate and pro-environmental behaviors: An efficacious drive towards environmental performance in China. *Current Psychology*, 42(2), 1346–1361. <https://doi.org/10.1007/s12144-021-01412-4>
43. Niazi, U. I., Nisar, Q. A., Nasir, N., Naz, S., Haider, S., & Khan, W. (2023). Green HRM, green innovation and environmental performance: The role of green transformational leadership and green corporate social responsibility. *Environmental Science and Pollution Research*, 30(15), 45353–45368. <https://doi.org/10.1007/s11356-023-25442-6>

44. Nisar, Q. A., Haider, S., Ali, F., Gill, S. S., & Waqas, A. (2022). The role of Green HRM on environmental performance of hotels: Mediating effect of green self-efficacy & employee green behaviors. *Journal of Quality Assurance in Hospitality & Tourism*, 25(1), 85–118. <https://doi.org/10.1080/1528008X.2022.2109235>
45. Ojo, A. O., Tan, C. N. L., & Alias, M. (2022). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 18(1), 1–18. <https://doi.org/10.1108/SRJ-12-2019-0403>
46. Paillé, P., & Meija-Morelos, J. H. (2019). Organisational support is not always enough to encourage employee environmental performance. The moderating role of exchange ideology. *Journal of Cleaner Production*, 220, 1061–1070. <https://doi.org/10.1016/j.jclepro.2019.02.192>
47. Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, 121, 451–466. <https://doi.org/10.1007/s10551-013-1732-0>
48. Pattaro, S., Bailey, N., Williams, E., Gibson, M., Wells, V., Tranmer, M., & Dibben, C. (2022). The impacts of benefit sanctions: A scoping review of the quantitative research evidence. *Journal of Social Policy*, 51(3), 611–653. <https://doi.org/10.1017/S0047279421001069>
49. Rao, S. S., Nathan, S., & Juma, N. (2022). Choice and impact of sustainability assurance standards on firm value. *Corporate Ownership & Control*, 19(2), 127–142. <https://doi.org/10.22495/cocv19i2art11>
50. Raza, S. A., & Khan, K. A. (2022). Impact of green human resource practices on hotel environmental performance: The moderating effect of environmental knowledge and individual green values. *International Journal of Contemporary Hospitality Management*, 34(6), 2154–2175. <https://doi.org/10.1108/IJCHM-05-2021-0553>
51. Ribeiro, N., Gomes, D. R., Ortega, E., Gomes, G. P., & Semedo, A. S. (2022). The impact of green HRM on employees' eco-friendly behavior: The mediator role of organizational identification. *Sustainability*, 14(5), Article 2897. <https://doi.org/10.3390/su14052897>
52. Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194. <https://doi.org/10.1002/job.1820>
53. Roscoe, S., Subramanian, N., Jabbour, C. J., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, 28(5), 737–749. <https://doi.org/10.1002/bse.2277>
54. Salama, W., Nor El Deen, M., Albakhit, A., & Zaki, K. (2022). Understanding the connection between sustainable human resource management and the hotel business outcomes: Evidence from the green-certified hotels of Egypt. *Sustainability*, 14(9), Article 5647. <https://doi.org/10.3390/su14095647>
55. Santosa, M., Muafi, M., Widodo, W., & Suprihanto, J. (2021). When entrepreneurial passion affect green innovation performance in Indonesia?: Three-way interaction effect of emotion, Islamic work ethic, and cognition. In B. Alareeni & A. Hamdan (Eds.), *Financial technology (FinTech), entrepreneurship, and business development* (pp. 779–791). Springer International Publishing. [https://doi.org/10.1007/978-3-031-08087-6\\_54](https://doi.org/10.1007/978-3-031-08087-6_54)
56. Scherbaum, C. A., Popovich, P. M., & Finlinson, S. (2008). Exploring individual-level factors related to employee energy-conservation behaviors at work. *Journal of Applied Social Psychology*, 38(3), 818–835. <https://doi.org/10.1111/j.1559-1816.2007.00328.x>
57. Shen, J., & Benson, J. (2016). When CSR is a social norm: How socially responsible human resource management affects employee work behavior. *Journal of Management*, 42(6), 1723–1746. <https://doi.org/10.1177/0149206314522300>
58. Singh, S. K., Chen, J., Del Giudice, M., & El-Kassar, A.-N. (2019). Environmental ethics, environmental performance, and competitive advantage: Role of environmental training. *Technological Forecasting and Social Change*, 146, 203–211. <https://doi.org/10.1016/j.techfore.2019.05.032>
59. Sörqvist, P., Haga, A., Holmgren, M., & Hansla, A. (2015). An eco-label effect in the built environment: Performance and comfort effects of labeling a light source environmentally friendly. *Journal of Environmental Psychology*, 42, 123–127. <https://doi.org/10.1016/j.jenvp.2015.03.004>
60. Tudor, T. L., Barr, S. W., & Gilg, A. W. (2007). Linking intended behaviour and actions: a case study of healthcare waste management in the Cornwall NHS. *Resources, Conservation and Recycling*, 51(1), 1–23. <https://doi.org/10.1016/j.resconrec.2006.06.009>
61. Yusoff, Y. M., Nejati, M., Kee, D. M. H., & Amran, A. (2020). Linking green human resource management practices to environmental performance in hotel industry. *Global Business Review*, 21(3), 663–680. <https://doi.org/10.1177/0972150918779294>

## APPENDIX. SURVEY QUESTIONNAIRE

<i>Factors</i>	<i>Item details</i>	<i>Sources</i>
<i>Green HRM (GHRM)</i>	<ul style="list-style-type: none"> <li>• My hotel provides adequate training to promote environmental management as a core organizational value.</li> <li>• My hotel considers how well employee is doing at being ecofriendly as part of their performance appraisals.</li> <li>• My hotel relates employee's eco-friendly behavior to rewards and compensation.</li> <li>• My hotel considers personal identity-environmental management fit in recruitment and selection.</li> <li>• Employees fully understand the extent of corporate environmental policy.</li> <li>• My hotel encourages employees to provide suggestions on environmental improvement.</li> </ul>	Hsiao et al. (2014), Shen and Benson (2016)
<i>Employees' eco-friendly behaviour (EFB)</i>	<ul style="list-style-type: none"> <li>• Before I get off work, I turn off the electric appliances, such as computers, TV monitor, etc.</li> <li>• When I leave a room that is unoccupied, I turn off the light.</li> <li>• I sort and recycle garbage in the workplace.</li> <li>• I conserve materials at work.</li> <li>• I reuse materials at work.</li> <li>• I limit water use in toilet to save water.</li> <li>• I pay close attention to water leak.</li> </ul>	Hsiao et al. (2014), Chou (2014), Scherbaum et al. (2008), Tudor et al. (2007)
<i>Hotel environmental performance (EP)</i>	<p>Environmental management within our hotel has...</p> <ul style="list-style-type: none"> <li>• Reduced wastes</li> <li>• Conserved water usage.</li> <li>• Conserved energy usage.</li> <li>• Reduced purchases of non-renewable materials, chemicals, and components.</li> <li>• Reduced overall costs.</li> <li>• Improved its position in the marketplace.</li> <li>• Helped enhance the reputation of our hotel.</li> </ul>	Paillé et al. (2014), Melnyk et al. (2003), Ilmitch et al. (1998)
<i>Environmental values (EVs)</i>	<ul style="list-style-type: none"> <li>• I feel a personal obligation to do whatever I can to prevent environmental degradation.</li> <li>• People important to me thought that I should prevent environmental degradation.</li> <li>• If I start green work so most people who are important to me would encourage me.</li> <li>• If I will prevent environmental degradation so it will help me to make my interpersonal relationship closer.</li> <li>• It would make a good impression on other people.</li> </ul>	Li et al. (2010)
<i>Green passion (GP)</i>	<p>Green passion scale:</p> <ul style="list-style-type: none"> <li>• I am passionate about the environment.</li> <li>• I enjoy practicing environmentally friendly behaviors.</li> <li>• I enjoy engaging in environmentally friendly behaviors.</li> <li>• I take pride in helping the environment.</li> <li>• I enthusiastically discuss environmental issues with others.</li> <li>• I get pleasure from taking care of the environment.</li> <li>• I passionately encourage others to be more environmentally responsible.</li> <li>• I am a volunteered member of an environmental group.</li> <li>• I have voluntarily donated time or money to help the environment in some way.</li> <li>• I feel strongly about my environmental values.</li> </ul>	Robertson and Barling (2013)