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Green HRM and Sustainable Performance in Malaysian Hotels: The Role of Employees' Pro-Environmental Attitudes and Green Behaviors

Abstract

Due to the business complexity and competitive environment, hotels are paying great attention to improve their sustainability performance through greening their workforce. Thus, this study examines the role of Green HRM practices in attaining sustainable environmental performance in Malaysian hotels while considering the crucial role of employees' pro-environmental attitudes, green behaviors, and green work climate perceptions. Data were collected from the employees who were directly engaged in implementing green practices in selected hotels. A survey questionnaire was used for data collection, and about 350 responses were received and applied for analysis through PLS-SEM. Findings revealed that Green HRM practices (green training and involvement, green performance management and compensation) positively and significantly influence employees' pro-environmental attitudes, further promoting green behaviors. It was also found that employees' green behaviors are the key contributors to spurring sustainable hotel performance. Therefore, this study might support decision-makers in understanding the role of Green HR practices in greening the workforce in the hospitality industry context.

Keywords: green HRM practices, employees' pro-environmental attitude, employees' green behavior, sustainable performance, green work climate perceptions

1. Introduction

The hospitality industry has become a swiftly growing economic zone worldwide that has pushed nations in societal and monetary advancement while contributing 10% plus in GDP. Tourism has been acknowledged as key to achieving the 17 SDGs (Sustainable Development Goals) and the 169 associated goals by United Nations (Abdou et al., 2020). These arguments exhibit factual evidence of the growing concern of the hospitality sector. So, the hospitality industry's influence on the environment and society emerged to be a severe concern (Goldstein & Primlani, 2012) as its dramatic influence has been proved on edification, traditions, finances, and the environment (Melissen et al., 2016). Environmental management as an important issue was highlighted in the previous literature (Thapa, 2012). Further, Ellahi and Rashid (2010) have synthesized the importance of the hotel industry as the spine of the serving sector, which has high profitability through conversion services and is a labor-intensive industry (Kianto et al., 2010).

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Tourism is one of the largely supportive sectors of the Malaysian economy (Ahmad et al., 2019), with a contribution of Ringgit Malaysia (R.M.) 41.69 to the national revenue with a highlighted rise of 6.8% in tourist receipt by welcoming 13.35% international tourist till the mid of 2019. (Karim et al., 2020). Malaysian tourism and hospitality have become an attraction for the international traveler through its different tourism offerings, including traditional and heritage tourism, health tourism (Sarwar, 2013), study tourism (Ojo et al., 2020), and Halal tourism (Haque et al., 2019). These categories mentioned above are highly appreciated classifications during the last ten years; the most popular is Halal traveling. According to Tourism Malaysia, the graph for night stays has increased from 0.4% to 6.2%. Accordingly, till half of 2019, the tourist rate was tremendous (Karim et al., 2020). According to United Nations World Tourism Organization (2019), 1.5 billion entrants were reported in 2019 worldwide, indicating the last six decades and 3.8 % annual growth in tourism. It also affects leisure spending from US\$ 495 billion to US\$ 1.5 trillion globally, drastically changing goods and services by 7%. A noticeable increase was found in room occupancy and revenue (Nisar et al., 2021).

Although the hospitality industry is contributing towards economic stability, on the other hand, it carries adverse outcomes as well. Following statistics are available in this regard. In Hoi, (Vietnam), hotel wastage "0.35 kg/room/day to 4 kg/room/day ranged from small to a 4-star hotel" (Hoang et al., 2017) and likewise in Danang (Vietnam) "89.72 kg/hotel/day to 0.95 kg/room/day "has been reported (Otoma et al., 2013). Malaysia also suffers from the same situation (Nisar et al., 2021). Research studies on Malaysian hospitality confirmed that this industry is the primary source of negative environmental impact through excessive water and energy consumption and bulk waste production (Siti-Nabiha et al., 2011; Yousof & Jamaluddin, 2013). Therefore, if Malaysian hospitality does not appropriately manage that, it will be a significant threat to natural surroundings from the second largest GDP contributor of the country (Abdulaali et al., 2019), as only 24 hotels are declared as environment-friendly hotels (Ministry of Tourism, Arts and Culture, 2020). According to (Siti-Nabiha et al., 2011) recent studies, the Malaysian hotel sector is aware of the changing environmental requirements. Still, only a few pieces of research evidence the Green Human Resource (H.R.) practices strategies applied, which means no preference for Green HR practices.

Consequently, achieving sustainability in hotel performance is necessary to gain a competitive edge or maintain environmental goals. Agreeing with Martinez-Perez et al. (2015), Green HR practices have become essential in the current hotel scenario. Only a few organizations applied green techniques as a strategic scheme for sustainability in every regard.

Changing human resource (H.R.) practices are leading to a new dimension of the relationship between employee and employer, another challenge the hotel sector faces (Becker & Gerhart, 1996). H.R. practices impact in two aspects through employee attitude and behavior toward sustainable performance (Arthur, 1994; Huselid, 1995), in the same vein, through operational and functioning proficiencies toward organizational goals (Guthrie, 2001). Thus, the literature shows a positive relationship between employee behavior and H.R. policies that stimulate functional proficiency. According to Kollmuss and Agyeman (2002), green behaviors are an influential element that can eliminate the negative impact of employee behavior in the working environment. Green behavior comprises those activities that people willingly adopt to protect natural settings (Boiral et al., 2015). Another influential constituent in the field of organizational psychological environment is green work climate perceptions (Zhou et al., 2018). Green work climate perception applies to those institutions that attain sustainability in goal achievements through using green strategies (Ramus & Steger, 2000). According to the description by Norton et al. (2015), psychological green climate consists of the organizational green climate awareness and green work climate perceptions of individuals.

Despite the presence of literature regarding said affairs, Ojo and Raman (2019) called to research more about Green Human Resource Management (HRM) and how intensely business' green strategies play a vital role in nurturing environmental performance through psychological green-climate and workers' pro-environmental

behavior. Current research is the reciprocal answer for the call required concerning other psychological and individual factors performing in Green HRM boosting impact on environmental performance and employee behavior. Though, there has been a deficit of literature in this regard (Dumont et al., 2017). Therefore, there is a need to understand that the underlying mechanism prevails between Green HRM and pro-environmental behavior (Saeed et al., 2019). There comes an emerging trend of Green HRM while studying environmental issues (Renwick et al., 2013). Still, little research highlighted sustainability trends and ecological impacts inside and outside the institutions. Therefore, there is a need to explore Green HR practices at an advanced level with a granular result of Green HR practices on individuals' attitudes and behaviors (Harris & Tregidga, 2012). According to de Oliveira Menezes and da Cunha (2016), in the hospitality sector, substantial studies (Jones et al., 2014, 2016; Legrand et al., 2005) have been conducted on sustainability.

Consequently, only a few studies investigated sustainable performance involving economic, social, and environmental aspects on a single platform, especially in the hospitality sector. Hence, sustainability is hard to achieve without Green HR practices. Therefore, there is a need to explore sustainable performance in a specific context.

Although studies have examined the Green HR practices and employees' behaviors, understanding the mechanism under which employees' pro-environmental attitudes and behaviors affect the sustainable performance of the firm needs to be enhanced. Accordingly, the Green HRM employee behaviors are widely studied, but there is a need to explore them further in the tourism and hospitality context (Afrasyab Khattak et al., 2021). A recent study (Dias et al., 2021) in the hospitality industry led light on finding the internal and external mechanisms for starting and strengthening eco-innovation, which is another story and shows a need to find out more about the topic "H.R. practices and employees' attitudes and behavior in green context. So, there is a need to explore this phenomenon (Aggarwal & Bhargava, 2009; Saeed et al., 2019). Additionally, Green HRM practices are widely studied, but how specific rules lead toward pro-environmental behavior and environmental performance from an employee perspective is not widely examined (Ojo et al., 2020).

On the other hand, the literature also presented contradictory findings regarding both pro-environmental behaviors and attitudes. For instance, previous studies have shown that pro-environmental attitudes and behaviors have a positive relationship with green behaviors (Ajzen, 1991; Bissing-Olson et al., 2013; Norton et al., 2015). On the other hand, some studies have presented a negative relationship (Bamberg & Möser, 2007). Therefore, the contradictory findings have resulted in a need to find the appropriate predictor to facilitate the connection between pro-environmental attitude and pro-environmental behavior for a better understanding of workplace perceptions (Kuenzi & Schminke, 2009; Tian et al., 2020). Furthermore, from a contextual perspective, Green HRM literature is dominated by the western context (Mishra, 2017; Noronha et al., 2016; Renwick et al., 2013). Therefore, there is a need to conduct Green HRM-related studies in the developing countries context (Amjad et al., 2021; Malik et al., 2021; Nisar et al., 2021). Therefore, the current study has considered the Green HRM and its influence on sustainable performance in the developing countries context to advance the literature.

The recent study fills the gaps that were previously not addressed and still require discussion. Thus, this study examines the role of Green HRM practices in attaining sustainable environmental performance in Malaysian hotels while considering the crucial role of employees' pro-environmental attitudes, green behaviors, and green work climate perceptions. The rest of the paper included a literature review, methodology, findings, and conclusive remarks.

2. Literature review

This section provides details regarding the research framework (see Figure 1) and how the Social Cognitive theory underpins it. Additionally, it individually discusses the hypotheses among the variables under study.

2.1. Theoretical background

The study is underpinned by Bandura's (1986) Social Cognitive theory. According to this theory, three factors influence human behaviors; environment, behavior, and personality. An individual's knowledge, proficiencies, and attitude can cause positive behavior. Green human resource practices enhance employees' skills, attitudes, and proficiencies and enrich progressive behavior toward pro-environmental behaviors. Moreover, these positive behaviors toward the environment improve environmental performance (Bandura, 1994). According to Bandura (2001), individuals gain experiences from their social and physical environment, which reflects that environment affects attitudes and behaviors. As a result, a person possessed a greater level of intellectual capital at the time of hiring, trained with green discipline, norms, and standards, and executed pro-environmental behaviors. According to previous studies (Sawitri et al., 2015; Singh et al., 2020; Temminck et al., 2015), when green human resource management practices provide strong support with minor hurdles for employees, environmental performance remains realizable.

Social Cognitive theory proposes that personal, environmental, and behavioral factors instigate pro-environmental behaviors, improving environmental performance. Researchers in the literature used Social Cognitive theory to predict human behaviors in different domains. However, the focus remained on academic outcomes, health behaviors, goal setting, professional superiority, work performance, decision-making, achievement attitudes, educational behaviors, and motivation (McCormick & Martinko, 2004; Bandura, 1994; Zimmerman, 1989). However, little or no research has been found to study Social Cognitive theory-based human behaviors that influence attitudes in hospitality.

2.2. Hypotheses development

2.2.1. Green hiring and pro-environmental attitudes

Human resource practices impact employees as well as organizations. H.R. practices contour individuals' expertise, attitudes, and actions, leading to the firm's stimulus performance (Arthur, 1994; Huselid, 1995). Accordingly, Nishii et al. (2008) acknowledged that human resource practices determine the employees' attitudes and behaviors according to their perceptions toward the "HRM aspect of green management" (Renwick et al., 2013, p.1) through which positive environmental results can be achieved (Kramar, 2014). Although less research has explained the mechanism through which Green HR practices and green organizational outcomes pass (Anwar et al., 2021; Roscoe et al., 2019). Previous studies have established a relationship between Green HRM and pro-environmental behaviors (Elshaer et al., 2021; Nisar et al., 2021; Rubel et al., 2021; Uyun, 2021). Organizations have started to link their job-related tasks with environmental issues. When the employees are already aware of environmental issues, they tend to have a pro-environmental attitude (Martins et al., 2021). Recently, Ahmed et al. (2021) in their study reported that the green hiring of employees tends to motivate them to opt for environment-oriented approaches. Accordingly, the present study argues that the hiring parameters, when linked to the environment, tend to result in increased pro-environmental attitudes since the employees already have the sense to contribute towards the environment. Hence, it is hypothesized that:

H1: *Green hiring is significantly related to pro-environmental attitudes.*

2.2.2. Green training and development and pro-environmental attitudes

As a great contributor to sustainable expansion, the company prioritizes green training and involvement (Pinzone et al., 2019). Furthermore, it is significant for productive activities related to environmental concerns like green management (Jabbour, 2013) and ecological production (Diana et al., 2017). Green training and development are crucial for successful environmental management results (Mousa & Othman, 2020). It is an opportunity to elevate green management and enhance it through workers' involvement in green strategies because it helps employees to construct environmentally-friendly goals, enthusiasm, and competencies

(Florida & Davison, 2001; Kitazawa & Sarkis, 2000). In the journey of knowledge, scholars found that green training has become a transitional part of achieving sustainability exhibited through eco-friendly behaviors and green innovativeness of workforces (Genty, 2021; Nisar et al., 2021). Empirical results generated by Pham et al. (2019) presented that green training is crucial and works as a mechanism so that employees involve themselves as green participants. Moreover, employee's training is necessary to equip them with important skills and knowledge related to the environmental practices that will trigger their environmental concerns. Accordingly, it is hypothesized that:

H2: *Green training and involvement are significantly related to pro-environmental attitudes.*

2.2.3. Green performance management and compensation and pro-environmental attitudes

Tang et al. (2018) emphasized that implementing green values has become the firms' priority for successful environmental performance. Accordingly, green standards of performance management can foster pro-environmental attitudes. Employees tend to align their behaviors with the criteria against which their performance is measured. Similarly, Ojo et al. (2020) argued that employees tend to align their behaviors with the key performance indicators assessed by green performance management. Furthermore, companies should introduce a reward system for workers as part of environmental outcomes measures to support green strategies. Companies should benefit their workers in the shape of subsidiary green rewards to be a part of ecological plans and dedicated to green intentions (Merriman & Sen, 2012). Employee engagement increase when employees are rewarded for their engagement in environment-oriented initiatives. Accordingly, it is argued that green performance management and compensation will result in pro-environmental attitudes.

Hence, the hypothesis is that:

H3: *Green performance management and compensation are significantly related to pro-environmental attitudes.*

2.2.4. Pro-environmental attitudes and green behaviors

Previous researchers (Hawcroft & Milfont, 2010) defined pro-environmental attitudes as a tendency to how much an individual is concerned with his environment, which has a positive relationship with pro-environmental behaviors (Ajzen, 1991). Literature evidence a correlation between green attitudes and green behaviors (e.g., Bamberg & Möser, 2007; Kaiser et al., 1999). Besides, according to scholars (Bissing-Olson et al., 2013), pro-environmental attitudes predict general and the working environment. Findings by Cordano and Frieze (2000) exhibit that managers' green attitudes are positively related to their intentional engagement towards environmental protection behaviors. According to a recent study (Cordano et al., 2010), environment-friendly attitudes of leaders stimulate their intentions towards environment protection behaviors. Recently, studies on attitudes besides behaviors have been done with the encouragement of motivational touch (Tian et al., 2020). They have studied attitudinal impact in the presence of a mediator, i.e., motivation. Thus, the following hypothesis is presented.

H4: *Pro-environmental attitudes are significantly related to green behaviors.*

2.2.5. Green behaviors and sustainable performance

The issue of sustainability has become an essential part of the H.R. system and a universal phenomenon (Mousa & Othman, 2020). Sustainable performance is not limited to only environmental performance (Nisar et al., 2021) but also social and economic performance (Dubey & Gupta, 2018). Newman et al. (2016) highlighted that social performance refers to how organizations deal with social aspects through their green H.R. policies, which are linked with the organization and its product portfolio in stakeholders' views. Chowdhury et al. (2017) suggested that environment-friendly activities can be helpful to human resources

to enhance social benefits among personnel. In their study, Amrutha and Geetha (2021) contended that the employees' green behaviors result in sustainable performance. Therefore, by performing green behaviors, employees accomplish social objectives as well.

Besides social performance, green behaviors are also found to have a relationship with economic performance. In this regard, Amrutha and Geetha (2021) contended that the employees' green behaviors result in the organization's superior performance. Furthermore, Nielsen et al. (2009), in their meta-analysis study, reported that environment-oriented behaviors result in performance that captures both the financial and customer aspects. Finally, the green behaviors performed by the employees tend to result in environmental performance. For instance, in their study, Elshaer et al. (2021) contended that environment-oriented behaviors, i.e., green behaviors, enhance an organization's environmental performance.

Similarly, Gill et al. (2021) also reported a positive relationship between green behaviors and environmental performance. Accordingly, the present study argues that when employees engage in green behaviors such as using emails instead of performance, avoiding unnecessary car usage to reduce carbon emissions, and switching off the extra lights improve financial, social, and environmental performance. Hence, the hypotheses are:

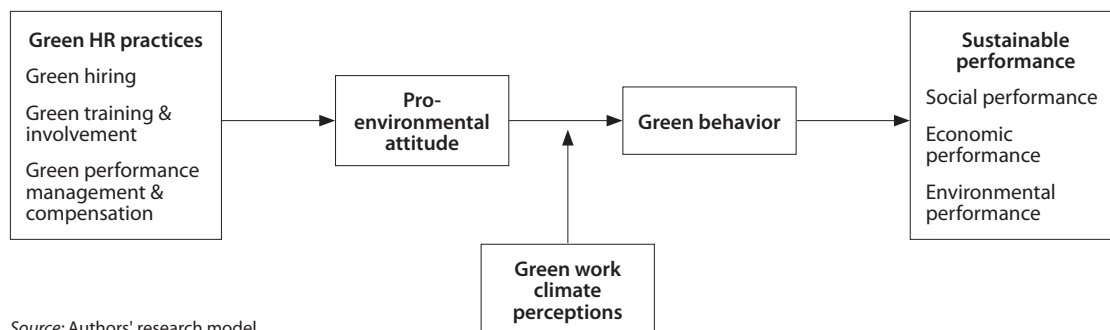
- H5: *Green behavior is significantly related to social performance.*
- H6: *Green behavior is significantly related to economic performance.*
- H7: *Green behavior is significantly related to environmental performance.*

2.2.6. Moderating role of green work climate perceptions

According to Cialdini et al. (1990), the concept of "green work climate perception" is based on the theory of normative conduct, which explains the level at which behavior has acceptability in society. In an organizational environment, work climate perceptions of workers generate social standards, which can be defined as a firm's formal perceived strategies, approaches used for converting policies into implicit instructions, appreciated implementations, and general conduct among personnel (Schneider et al., 2013). Work climate perceptions are considered as valued plans used for interpreting the organizational info (James et al. 2008), adopted values, and behavioral standards by employees (Ashkanasy 2007; Schneider & Reichers 1983). Literature review evident the effect of work climate on staff attitudes & behaviors (Kuenzi & Schminke, 2009; Norton et al., 2015). Moreover, when an organization applies healthy environmental perspectives, that compels employees to adopt environmental protection rules and regulations. Additionally, by following the perceived instructions, workers' involvement in eco-friendly behavior will lead to the green performance of an organization. (Norton et al., 2015). Hence, we propose the following hypothesis.

- H8: *Green Work Climate perception moderates the relationship between pro-environmental attitudes and Green behaviors.*

Figure 1
Theoretical framework



Source: Authors' research model.

3. Methodology

3.1. Sample design and data collection

The study is designed in the Malaysian hospitality context, and the core theme is to address the Green HRM. Accordingly, three regions of Malaysia, namely; Kuala Lumpur, Langkawi, and Selangor, were selected. These were chosen to maintain geographical proximity and collect data from the cities that are regarded as the hub of hospitality. As Noor et al. (2022) stated, these selected cities are among the central states that play a key role in stimulating economic growth. Data were collected from cities chosen ' five, four, and three-star hotels. A list of hotels was obtained from the Malaysian Government Data Portal (2021). Hotels are categorized into two categories, namely, Orkid and Bintang. Only Bintang hotels were selected as they denote the "Star" rating as compared to Orkid. As per the data extracted, there were 174 hotels in Kuala Lumpur, Selangor, and Langkawi. A sample representation of the hotels concerning their category in each city was also calculated. A self-administered questionnaire was employed for data collection from selected hotels. Data were collected from the employees directly engaged with implementing green practices. Surveyors were hired for data collection. Per the instructions to the surveyors, they informed all the respondents regarding the research purpose and then asked them to fill out the questionnaire. After they agreed, they handed over the questionnaire to fill out responses. A total of 650 questionnaires were distributed, of which 375 respondents returned the questionnaires. Finally, 350 valid questionnaires (54%) were used for the data analysis. Tables 1. and 2. show the selected hotels in each category.

Table 1
Number of hotels in each city (rating wise)

City	Hotels	Sample identified
Kuala Lumpur	92	345
Selangor	56	209
Langkawi	26	96
Total	174	650

Table 2
Sample size division according to city and hotel ratings

	Rating	Number of hotels	Respective sample identified	Questionnaires received	Percentage of questionnaires received
Total sample size Kuala Lumpur hotels= 345					
Kuala Lumpur	3s	32	121	80	66.1%
	4s	29	107	40	37.3%
	5s	31	117	70	59.8%
	Total Hotels	92	345		
Total sample size Langkawi hotels= 96					
Langkawi	3s	7	26	10	38.4%
	4s	9	33	15	45.4%
	5s	10	37	20	54%
	Total Hotels	26	96		
Total sample size Selangor hotels= 209					
Selangor	3s	20	75	40	53.3%
	4s	17	63	55	84.6%
	5s	19	71	45	63.3%
	Total Hotels	56	209		
Total			650	375	57.7%

3.2. Measurement and questionnaire validity

The research instrument was adapted according to the research requirements. The items were selected from previous research. Green HR Practices (containing Green Hiring, Green Training & Involvement, and Green Performance Management and Compensation) adapted from a recent study by Mousa and Othman (2020). The scale of Green Hiring comprises six measurement items. Green Training and Involvement and Green Performance Management and Compensation entail eight items. Robertson and Carleton (2018) selected six measurement items for pro-environmental behavior. For a Pro-Environmental Attitude, fifteen measurement items were adapted from Dunlap and Van (1978) and Dunlap et al. (2000). Green Work Climate perception is comprised of eight items collected from Norton et al. (2015). To measure Sustainable Performance, seventeen items were used, subdivided into three constructs: Social Performance with seven items, Economic Performance with four items, and Environmental Performance with six items the study by Mousa and Othman (2020).

Translating the questionnaire into an understandable language to collect data from Malaysia was very important. Therefore, a two-step translation was performed. For this purpose, the back-translation method was used, which was proposed by Brislin (1970) to translate the English Language into Malaysian Language. The first step was to convert from English to the Malaysian Language. For this purpose, professional translator and editor services were taken from the Professional Development Department in the School of Languages, Civilization, and Philosophy at Universiti Utara Malaysia. The first translator converts the original questionnaire into the Malaysian Language. In the second step, the converted scale was then further translated into English by another translator, and after comparing both converted questionnaires, dissimilarities were settled by the translator. To verify the content validity, the instrument was sent to two highly skilled and experienced human resource managers from the hotel sector and two senior academicians in the field of hospitality management. After a few suggested modifications, the measurement instrument was ready for a pilot study. For further assurance, the questionnaire was sent to 30 respondents, and their feedback ensured clarity of the scale. With this, the questionnaire was ready for other processes and analysis. Furthermore, to check internal consistency, a reliability analysis was executed.

3.3. Demographics

A total of 350 questionnaires were used for data analysis. Firstly, frequency analysis was performed to calculate the demographic profile of the respondents. As per the findings, there were 200 males and 150 females in the total number of respondents (350). The frequency also revealed that 100, 180, and 70 respondents belonged to intermediate, bachelor, and master's degrees. In addition, whereas the majority of the respondents, 230, reported having a permanent job, only 120 respondents have contractual job positions.

4. Findings

According to (Ali et al., 2018), the most suitable and widely used modern technique for assessment in all businesses, mainly in the tourism and hotel sector, is PLS-SEM. Therefore, current research deployed PLS-SEM to assess the proposed hypotheses using Smart PLS 3 software. This empirical scholarship aims to test, evaluate, predict, and explain the aforesaid latent variables based on contemporary theory. Recent literature (Hair et al., 2016) highlighted the uniqueness of the PLS-SEM technique as a revolutionized tool for enhancing the effectiveness of the study. The topic is assessed to implement structural modeling, interpreting, and approximating the constructs; likewise, a springy technique for measurement model calculation (Ringle et al., 2005). Another primary reason for using Smart PLS is the sample size, as this software can deal with less sample size compared to other software like Amos and data normality issues (Hair et al., 2016). Therefore, PLS-SEM is used for this research study to avoid issues related to data normality and sample size to check the

internal consistency reliability and construct validity through factor loadings. Two techniques have been used PLS algorithm and bootstrapping (Ali et al., 2018), along with hypotheses testing through path coefficients and concerned significant levels. The complete analysis is done in two main parts. The measurement model was assessed in the first part, and structural model estimations were evaluated using the SEM technique in the second part.

4.1. Data normality

Despite using PLS-SEM that there is no condition of data; normality is required as PLS-SEM is a non-parametric testing instrument. Still, it can't be ignored conducting inferential analysis (Hair et al., 2007). Hence, according to the recommendations (Munro, 2005), Skewness, Kurtosis, and histogram plots were used to measure data normality. Accordingly, the results have shown that the data were normally distributed, and values of all latent variables lay within the established criteria (values must lie between -2 to +2 for skewness and kurtosis). Therefore, the results provided a green signal for further analysis, which PLS-SEM has done.

4.2. Common method bias

In this study, data was collected from a single source (only hotel employees), so it was ubiquitous to have common method biases. According to the literature, this check possessed its importance. So full collinearity check is essential while using structural equation modeling in PLS-SEM to avoid common method bias (Kock, 2015). So, accordingly, Variance Inflation Factors (VIF) have been used to estimate common method bias, full collinearity test. The set criteria for the VIF test are it must be less than 3.3 to ensure that the data is free from common method bias. Fortunately, the results declared that the estimated values of VIF remained between the fixed criteria for all variables above, and there was no error of common method bias in this study. Hence, further analysis can be continued.

4.3. Measurement model assessment

After fulfilling the assumptions, the first analysis phase is a measurement model assessment. It started with the validity and reliability check of the data. The technique used to measure internal consistency reliability was composite reliability (C.R.). Table 3, Figure 2 and 3, expressed that all C.R.'s values of all items of latent variables were between 0.788 to 0.926, which appeared to be expected as the threshold value is more than 0.70 (Hair et al., 2016). Then, the average variance extracted (AVE) measurement was used to extract the convergent validity. To check discriminant validity, the Fornell-Larcker criteria were estimated to evaluate the construct validity of the instrument used in this study (Cheung & Wang, 2017). According to the literature, to measure convergent validity, fixed and most reported criteria are the values of AVEs, and factor loadings must be greater than 0.50 (Hair et al., 2021).

Additionally, the low factor loadings till 0.4 can be retained if they do not disturb the value of AVE. Since the AVE value is good in the present study, one item with a loading of 0.455 was retained (Hair et al., 2021). So, according to table one, the values of factor loadings and AVE ensured the adequacy of the convergent validity of computed data. Additionally, the old technique was the Fornell-Larcker method to add discriminant validity. But, the more reliable method is Heterotrait-Monotrait Ratio (HTMT) which is presented in Table 4. The cuff-off value for evaluating discriminant validity under this method is 0.90 (Henseler et al., 2015). Therefore, in Table 4, all values are less than 0.90, confirming the discriminant validity.

Additionally, the HTMT threshold says that the values in HTMT should be less than 0.90, and the high value reported in the study is 0.857. Therefore, the mentioned value is relatively less than 0.90, and there is no issue with the discriminant validity. Thus, these results evidence the convergent and discriminant validity of this research.

Table 3
Convergent validity

Constructs	Items	Loading	Alpha	CR	AVE
Green hiring	GH1	0.905	0.617	0.882	0.656
	GH4	0.53			
	GH5	0.681			
Green training & involvement	GTI 1	0.87	0.884	0.928	0.812
	GTI 2	0.929			
	GTI4	0.904			
Green performance management & compensation	GPMC1	0.886	0.887	0.917	0.69
	GPMC2	0.799			
	GPMC3	0.891			
	GPMC4	0.861			
	GPMC5	0.7			
Pro-environmental attitude	PEA10	0.816	0.845	0.884	0.527
	PEA11	0.728			
	PEA12	0.455			
	PEA13	0.742			
	PEA14	0.791			
	PEA16	0.698			
	PEA8	0.789			
Green behavior	GB1	0.921	0.913	0.945	0.852
	GB4	0.932			
	GB5	0.916			
Green work climate perception	GWC1	0.95	0.897	0.951	0.907
	GWC2	0.954			
Social performance	SP1	0.806	0.703	0.815	0.526
	SP2	0.696			
	SP3	0.746			
	SP4	0.644			
Economic performance	EP1	0.864	0.815	0.882	0.656
	EP2	0.865			
	EP3	0.59			
	EP4	0.883			
Environmental performance	ENP1	0.827	0.691	0.826	0.613
	ENP3	0.725			
	ENP4	0.794			

Table 4
Discriminant validity (HTMT ratio)

	EP	ENP	GB	GH	GPMC	GWC	GTI	PEA	SP
EP									
ENP	0.283								
GB	0.196	0.556							
GH	0.857	0.349	0.228						
GPMC	0.293	0.615	0.542	0.489					
GWC	0.246	0.524	0.503	0.443	0.719				
GTI	0.291	0.463	0.507	0.422	0.421	0.421			
PEA	0.269	0.668	0.474	0.321	0.66	0.596	0.461		
SP	0.164	0.241	0.229	0.274	0.234	0.178	0.211	0.183	

4.4. Structural model assessment

After the reliability checks and validate the model by measurement model assessments, the second phase of the analysis was to weigh structural modeling calculations to evaluate the hypotheses. Path coefficients, t-values, and standard errors are calculated to determine the model's significance and relationships. Outcome values of path coefficients determined whether hypotheses were accepted or rejected. In Smart-PLS 3, through the bootstrapping method, key and moderating effects were estimated (Ringle et al., 2005). According to Table 5, All Hypotheses were accepted except H4, which was rejected. Hypotheses were accepted based on $t > 1.645$, $t > 1.965$, and $p > 0.05$.

Figure 2
Measurement model assessment

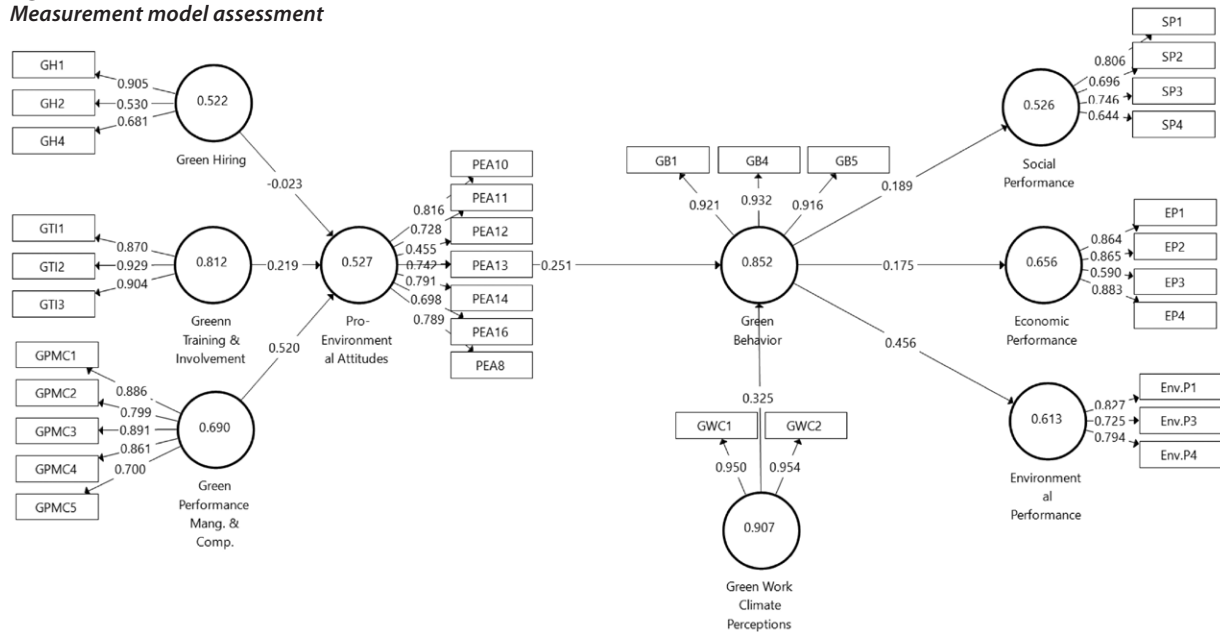


Figure 3
Structural model assessment

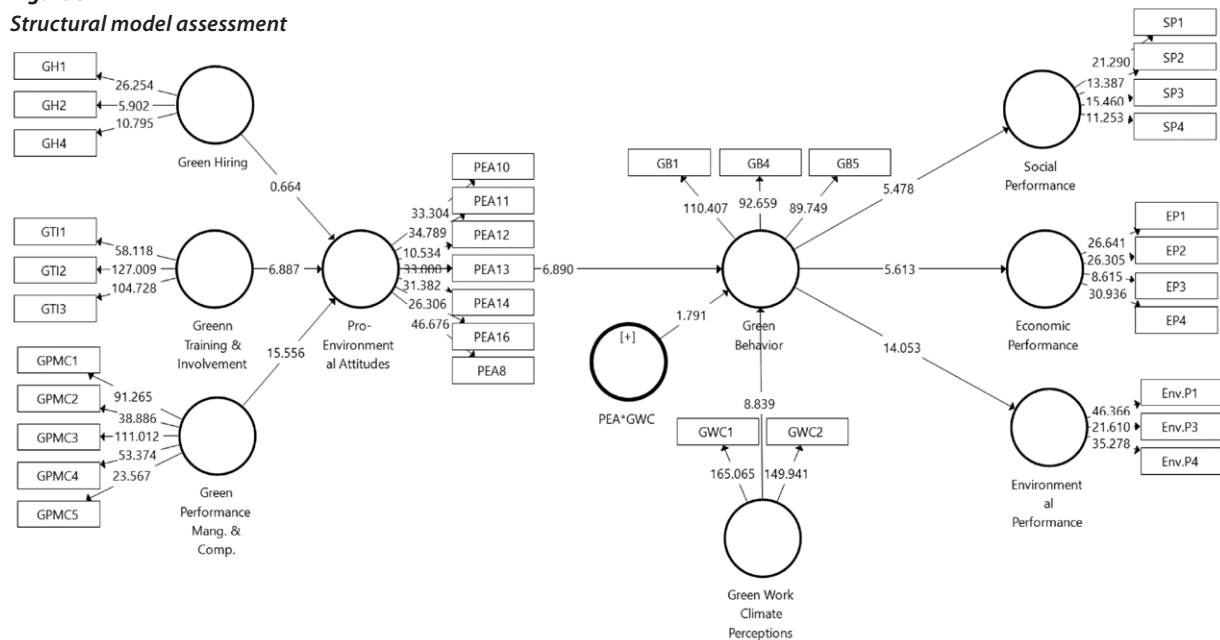


Table 5
Path analysis

	Relationships	B	SD	t	P	LL	UL	Decision
H1	GB -> ECP	0.175	0.031	5.613	0.030	0.122	0.223	Supported
H2	G.B. -> E P	0.456	0.032	14.053	0.005	0.398	0.506	Supported
H3	GB -> SP	0.189	0.035	5.478	0.031	0.122	0.236	Supported
H4	G H -> PE A	-0.023	0.035	0.664	0.575	-0.084	0.035	Not Supported
H5	GPMC -> PEA	0.52	0.033	15.556	0.004	0.466	0.574	Supported
H6	GTI -> PEA	0.219	0.032	6.887	0.024	0.168	0.271	Supported
H7	PEA*GWC -> GB	0.065	0.036	1.791	0.043	0.008	0.127	Supported
H8	PEA-> GB	0.256	0.037	6.890	0.020	0.198	0.318	Supported

5. Discussion

Green HR practices and the performance of organizations remained a hot topic for researchers of this decade. Much work has been done with different dimensions in different contexts (Daily et al., 2009). But still, there is a shortage of knowledge to explore more with different scales and diverted scenarios. The results of this study are presented, which align with the proposed hypotheses. The results highlighted the relationship between green HRM and a pro-environmental attitude. The hypotheses for green performance management, compensation, green training, and involvement with a pro-environmental attitude have been supported. However, no relationship has been found between green hiring and a pro-environmental attitude. This shows a negative relationship, but literature found this association positive (Nisar et al., 2021). This means that organizations need green performance management and compensation and green training and involvement to develop a green attitude within the organizational environment. Through green HRM practice, organizations can hire people with supportive training and involvement and an enhanced performance management and compensation system. In such a way, organizations support the achievement of organizational goals for green management, which also can convert employees into green employees. Earlier studies (Cherian & Jacob, 2012; Jabbour, 2011; Jackson & Seo, 2010; Renwick et al., 2013) exhibited green HRM practices and employee behavior, but no study had been found to attempt green HRM practices and pro-environmental attitude relationship. Recent work in the hospitality field came with the voluntary green behavioral impact, which explains that specific volunteer behavior depends on how much ecological HRM is concerned and how many workers remain involved (Pham et al., 2019). This research has become the first one to fill the gap in the literature and a source of addition to the body of knowledge.

This study also unveils the relationship between pro-environmental attitudes and green behavior, which work as mediators in this study. Results revealed that there exists a relationship between both mediators. Attitudes lead to behaviors. People exhibit what they feel, so the behavior depends upon employees' attitudes. The outcomes of this research paper have demonstrated this fact in the context of hotels. Green behavior depends upon the pro-environmental attitudes of employees. In addition to the mediation relationship, results depict that there is also a strong relationship between green behavior and environmental, economic, and social performance which means all three hypotheses are accepted in this regard. These outcomes are similar to previous studies that evidence the relationship between HRM practices and environmental, economic, and social performance (Kim et al., 2019, Mousa & Othman, 2020, Pham et al., 2019) as well as sustainability in performance (Genty, 2021). All the results mentioned above highlight that there exists mediation between Green HRM and the sustainable performance of the firm. Pro-environmental attitude and green behavior mediate the relationship between green HRM practices and sustainable performance. Therefore, only green hiring (hypothesis one) is not supported. The study uncovered the moderation results. According to this research, the hypothesis accepted and endorsed the moderation effect—the Green work climate perception moderates between pro-environmental attitude and green behavior.

According to the above discussion and results, this study includes conclusive remarks. With Green HRM practices, organizations could attain sustainable performance in each regard; economically, environmentally, and socially. Employee attitudes, behavior, and work climate perceptions are the influential factors. According to Tsui et al. (1997), HRM practices are personalized organizational commitments to employees, and employees reciprocate through positive attitudes and behaviors to the organization. Furthermore, literature marked the importance of Green HRM practices as a facilitator that architects the work climate in a way to combine green individuals in positive lines, which enhances and speeds up the organizational performance with the best in every regard (Daily et al., 2009; Datta 2015; Muster & Schrader, 2011; Paillé et al., 2014). Lastly, this study confirms that Green HRM practices (except Green Hiring) significantly and indirectly impact the attainment of sustainable performance. Employee attitudes and behaviors act as mediators, and green work climate perception works as a moderator, facilitating Green HRM practices in the hospitality sector in Malaysia.

6. Conclusion

Based on the study results, it is concluded that the Green HRM practices, such as green training and development and green performance management and compensation, resulted in green employee behaviors aligned with literature associations (Saeed et al., 2019). Moreover, it perfectly matches the based theory "Social Cognitive theory," which established a relationship with the presented model. Theoretically, individuals perceive influence from environment, behavior, and personal attributes (Bandura, 1994). Therefore, when organizations hire environmentally aware employees and provide them with training focusing on green initiatives, they will be more inclined to develop an environment-oriented approach. However, the results did not support the relationship between green hiring and environmental attitude.

Additionally, the findings also affirm that the initiatives, when rewarded, tend to enhance the positive attitude towards the environment. Further, the study concludes that sustainable performance is achieved when employed individuals are suitable to the sustainable organizational goals. Moreover, appropriate training and reward for their initiatives can foster an environment-oriented approach, resulting in green behaviors.

6.1. Theoretical contributions

Theoretically, the contribution goes to be magnificent by way of filling the literary gap in the field of attitudinal impact in the field of Green HRM. Green HRM practices have been studied in different contexts and dimensions with many mediation and moderation variables. However, there remains a dearth of knowledge in understanding which mechanism HRM practices influence the sustainable performance of firms (Jiang, 2012). The upshot of this investigation work is a considerable attempt to highlight and understand that mechanism in Green HRM practices. Another contribution is to study all economic, environmental, and social performance under one roof. Previously, researchers have studied mainly in a single dimension as an outcome variable. This study summed up these dimensions mentioned above under one variable: sustainable performance.

Furthermore, under one construct, the firm's performance is studied in all aspects, including financial, societal, and ecological factors. The moderation analysis highlights the uniqueness of this empirical analysis. The moderator green work climate perception has been used less in literature.

This empirical assessment results also indicate that Green HRM practices indirectly influence a hotel's sustainable performance, and green attitudes and behaviors work to boost the relationship. Additionally, green work climate perception strengthens that instrument, enhancing the relationship described above. The Malaysian Ministry of Human Resource Management can contribute to the ecological environment in organizations through green policies and practices. Such practices automatically impact employees' green attitudes, leading

toward green behaviors, constructing a green climate within the organization, and ascending sustainable performance. Literature marked the lack of empirical examination in the hospitality sector as the most ignored area in research (Munir, 2019). There is always a need to examine this sector because hotel services are on the way to growth and require more studies in various dimensions. The base of the services industry is their labor, so it is essential to understand the employee and organization correlation to give a comfortable work environment. Ecological outcomes can be attained through green individuals, green work environments, and green behaviors.

6.2. Practical implications

This study is a significant input in the progression of green hotels. Hotels HRM can maintain green policies as green strategies that can finally impact employees and the work environment to attain a sustainable goal. Human resource management can hire individuals who can serve as passionate green workers. There can be policies, rules, and SOPs, with a reward and punishment system so that no worker can violate the ecological rules within the organization. An orientation and weekly or monthly training system must involve practical training for environment-friendly work and organizational environments. This study might support decision-makers in understanding the role of Green HR practices in greening the workforce in the hospitality industry context.

6.3. Future research opportunities

There remain some limitations in every research. Shortcomings are part of the analysis, which remains addressed for the future. Primarily, the respondents were selected only from the hospitality sector as a service-oriented area. Therefore, other service sectors and corporate divisions present the potential for future study. Limited types of employees and restricted kinds of hotels have been selected for the survey. All types of hotels, restaurants, tourism and traveling can enhance the results and clarify the situation and their contribution to the green environment. Comparison can improve the outcomes among different service sectors. In future sanctions, the role of Green HRM in employee turnover is another unique topic to study. In Malaysia, the hospitality sector is facing a high turnover rate (Abo-Murad & Abdullah, 2019; Zainol, 2015), and the role of HRM is primarily in this regard.

Moreover, most previous studies focused on pro-environmental behaviors, and less attention has been paid to green attitudes, presenting the opportunity for future studies. Because the organization's HRM policies and strategies predominantly affect an extended serving period of employees. Lastly, other moderating and mediating variables, like psychological factors, can be studied to enhance the knowledge of eco-friendly management. Waste management is another important topic that needs to be addressed as an outcome variable in hospitality.

References

- Abdou, A.H., Hassan, T.H., Dief, E., & Moustafa, M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability*, 12(22), Article 9624. <https://doi.org/10.3390/su12229624>
- Abdulaali, H.S., Usman, I.M.S., Al-Ruwaishedi, M.R.K., (2019). A review on sustainable and green development in the tourism and hotel industry in Malaysia. *Journal of Advanced Research in Dynamical and Control Systems*, 11(10), 854-867. <https://doi.org/10.5373/JARDCS/V11SP10/20192881>
- Abo-Murad, M., & Abdullah, K. (2019). Turnover culture and crisis management: Insights from Malaysian hotel industry. *Academy of Strategic Management Journal*, 18(2), 1-14. <https://doi.org/1939-6104-18-2-342>
- Afrasyab Khattak, H., Rahman, K., Cavaliere, L.P.L., Imran, M., Hussain, B., & Asadullah, M.F. (2021). Linking them with environmental performance: Importance role of task-related pro-environmental behavior. *Multicultural Education*, 7(5), 155-163. <https://doi.org/10.5281/zenodo.4750671>

- Aggarwal, U., & Bhargava, S. (2009). Reviewing the relationship between human resource practices and psychological contract and their impact on employee attitude and behaviors. *Journal of European Industrial Training*, 33(1), 4-31. <https://doi.org/10.1108/03090590910924351>
- Ahmad, A.H., Ibrahim, A., Ahmad, Z.H., & Masri, R. (2019). The predictors of sports tourism involvement in Malaysia: An extreme sport overview. *Humanities & Social Sciences Reviews*, 7(2), 449-453. <https://doi.org/10.18510/hssr.2019.7252>
- Ahmed, M., Guo, Q., Qureshi, M.A., Raza, S.A., Khan, K.A., & Salam, J. (2021). Do green H.R. practices enhance green motivation and proactive environmental management maturity in hotel industry? *International Journal of Hospitality Management*, 94, Article 102852. <https://doi.org/10.1016/j.ijhm.2020.102852>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Ali, F., Rasoolimanesh, S.M., Sarstedt, M., Ringle, C M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, 30(1), 514-538. <https://doi.org/10.1108/IJCHM-10-2016-0568>
- Amjad, F., Abbas, W., Zia-Ur-Rehman, M., Baig, S.A., Hashim, M., Khan, A., & Rehman, H.U. (2021). Effect of green human resource management practices on organizational sustainability: The mediating role of environmental and employee performance. *Environmental Science and Pollution Research*, 28(22), 28191-28206. <https://doi.org/10.1007/s11356-020-11307-9>
- Amrutha, V., & Geetha, S. (2021). Linking organizational green training and voluntary workplace green behavior: Mediating role of green supporting climate and employees' green satisfaction. *Journal of Cleaner Production*, 290, Article 125876. <https://doi.org/10.1016/j.jclepro.2021.125876>
- Anwar, A., Siddique, M., Dogan, E., & Sharif, A. (2021). The moderating role of renewable and non-renewable energy in environment-income nexus for ASEAN countries: Evidence from Method of moments quantile regression. *Renewable Energy*, 164, 956-967. <https://doi.org/10.1016/j.renene.2020.09.128>
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37(3), 670-687. <http://dx.doi.org/10.2307/256705>
- Ashkanasy, N. M. (2007). Organizational climate. In S.R. Clegg & J.R. Bailey (Eds.), *International encyclopedia of organization studies* (Vol. 3, pp. 1028–1030). Sage.
- Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27(1), 14-25. <https://doi.org/10.1016/j.jenvp.2006.12.002>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Bandura, A. (1994). Social cognitive theory and exercise of control over HIV infection. In R.J. DiClemente & J.L. Peterson (Eds.), *Preventing AIDS: Theories and methods of behavioral interventions* (pp. 25-59). Springer.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media psychology*, 3, 265-299.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), 779-801. <https://doi.org/10.5465/256712>
- Bissing-Olson, M.J., Iyer, A., Fielding, K.S., & Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *Journal of Organizational Behavior*, 34(2), 156-175. <https://doi.org/10.1002/job.1788>
- Boiral, O., Paillé, P., & Raineri, N. (2015). The nature of employees' pro-environmental behaviors. In J.L. Robertson & J. Barling (Eds.), *The psychology of green organizations* (pp. 12–32). <https://doi.org/10.1093/acprof:oso/9780199997480.003.0002>
- Brislin, R.W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185-216. <https://doi.org/10.1177/135910457000100301>
- Cherian, J., & Jacob, J. (2012). A study of green HR practices and its effective implementation in the organization: A review. *International Journal of Business and Management*, 7(21), 25-33.

- Cheung, G.W., & Wang, C. (2017). Current approaches for assessing convergent and discriminant validity with SEM: Issues and solutions. *Academy of Management Proceedings*, 2017(1), Article 12706. <http://doi.org/10.5465/AMBPP.2017.12706abstract>
- Chowdhury, S.R., Sanju, N.L., & Asaduzzaman, A.K.M. (2017). Green HRM practices as a means of promoting CSR: Suggestions for garments industry in Bangladesh. *Global Journal of Management and Business Research: An Administration and Management*, 17(6), 29-35. <https://journalofbusiness.org/index.php/GJMBR/article/view/2289>
- Cialdini, R.B., Reno, R.R., & Kallgren, C.A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026. <https://psycnet.apa.org/doi/10.1037/0022-3514.58.6.1015>
- Cordano, M., & Frieze, I.H. (2000). Pollution reduction preferences of U.S. environmental managers: Applying Ajzen's theory of planned behavior. *Academy of Management Journal*, 43(4), 627-641. <https://doi.org/10.5465/1556358>
- Cordano, M., Marshall, R.S., & Silverman, M. (2010). How do small and medium enterprises go "green"? A study of environmental management programs in the U.S. wine industry. *Journal of Business Ethics*, 92(3), 463-478.
- Daily, B.F., Bishop, J.W., & Govindarajulu, N. (2009). A conceptual model for organizational citizenship behavior directed toward the environment. *Business & Society*, 48(2), 243-256.
- Datta, M.A. (2015). Green work-life balance: A new concept in green HRM. *International Journal of Multidisciplinary Approach & Studies*, 2(2), 83-89.
- de Oliveira Menezes, V., & da Cunha, S. K. (2016). Eco-innovation in global hotel chains: Designs, barriers, incentives and motivations. *Brazilian Business Review*, 13(5), 108-128. <https://doi.org/10.15728/bbr.2016.13.5.5>
- Diana, G.C., Jabbour, C.J.C., de Sousa Jabbour, A.B.L., & Kannan, D. (2017). Putting environmental technologies into the mainstream: Adoption of environmental technologies by medium-sized manufacturing firms in Brazil. *Journal of Cleaner Production*, 142, 4011-4018. <https://doi.org/10.1016/j.jclepro.2016.10.054>
- Dias, Á., Costa, R., Pereira, L., & Santos, J. (2021). Implementation of eco-innovation in hotels: A dynamic capabilities approach. *Tourism: An International Interdisciplinary Journal*, 69(1), 58-72. <https://doi.org/10.37741/t.69.1.5>
- Dubey, S., & Gupta, B. (2018). Linking green HRM practices with organizational practices for organizational and environmental sustainability. *International Journal of Engineering and Management Research*, 8(2), 149-153. <http://dx.doi.org/10.31033/ijemr.v8i02.11603>
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613-627. <https://doi.org/10.1002/hrm.21792>
- Dunlap, R.E., & Van Liere, K.D. (1978). The "new environmental paradigm". *The Journal of Environmental Education*, 9(4), 10-19. <https://doi.org/10.1080/00958964.1978.10801875>
- Dunlap, R.E., Van Liere, K.D., Mertig, A.G., & Jones, R.E. (2000). New trends in measuring environmental attitudes: Measuring endorsement of the new ecological paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3), 425-442. <https://doi.org/10.1111/0022-4537.00176>
- Ellahi, A., & Rashid, A. (2010). *Domestic or international hotels: The frontrunner of service innovation and customer choice in Pakistan*. Munich Personal RePEc Archive. <https://mpra.ub.uni-muenchen.de/id/eprint/26160>
- Elshaer, I.A., Sobaih, A.E.E., Aliedan, M., & Azzaz, A. (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>
- Florida, R., & Davison, D. (2001). Gaining from green management: Environmental management systems inside and outside the factory. *California Management Review*, 43(3), 64-84. <https://doi.org/10.2307%2F41166089>
- Genty, K.I. (2021). Green Human resource management practices and organisational sustainability. In S.O. Atiku & T. Fapohunda (Eds.), *Human resource management practices for promoting sustainability* (pp. 1-19). IGI Global. <https://doi.org/10.4018/978-1-7998-4522-5.ch001>
- 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(6), 1725-1736. <http://dx.doi.org/10.5267/j.msl.2021.2.010>

- Goldstein, K.A., & Primplani, R.V. (2012). *Current trends and opportunities in hotel sustainability*. HVS Sustainability Services. <http://www.hvs.com/article/5655/current-trends-and-opportunities-in-hotel-sustainability/>
- Guthrie, J.P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-190. <https://doi.org/10.5465/3069345>
- Hair Jr, J.F., Hult, G.T.M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hair Jr, J.F., Sarstedt, M., Matthews, L.M., & Ringle, C.M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: Part I—method. *European Business Review*, 28(1), 63-76. <https://doi.org/10.1108/EBR-09-2015-0094>
- Hair, J.F., Money, A.H., Samouel, P., & Page, M. (2007). Research methods for business. *Education + Training*, 49(4), 336-337. <https://doi.org/10.1108/et.2007.49.4.336.2>
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2021). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12. <https://ssrn.com/abstract=2233795>
- Haque, A., Azam, S.F., & Chowdhury, N.A. (2019). Factors affecting purchase behaviour of Shariah compliant hotels: A study from Muslim consumers' perspective. *International Journal*, 4(2), 104-123. <https://dx.doi.org/10.1504/IJIMB.2019.10026246>
- Harris, C., & Tregidga, H. (2012). HR managers and environmental sustainability: Strategic leaders or passive observers? *The International Journal of Human Resource Management*, 23(2), 236-254.
- Hawcroft, L.J., & Milfont, T.L. (2010). The use (and abuse) of the new environmental paradigm scale over the last 30 years: A meta-analysis. *Journal of Environmental Psychology*, 30(2), 143-158. <https://doi.org/10.1016/j.jenvp.2009.10.003>
- 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>
- Hoang, M.G., Fujiwara, T., & Phu, S.T.P. (2017). Municipal waste generation and composition in a tourist city — Hoi An, Vietnam. *Journal of JSCE*, 5(1), 123-132. https://doi.org/10.2208/journalofjsce.5.1_123
- Huselid, M.A., 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635-672. <http://dx.doi.org/10.2307/256741>
- Jabbour, C.J.C. (2011). How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study. *Industrial and Commercial Training*, 43(2), 98-105. <https://doi.org/10.1108/00197851111108926>
- Jabbour, C.J.C. (2013). Environmental training in organisations: From a literature review to a framework for future research. *Resources, Conservation and Recycling*, 74, 144-155. <https://doi.org/10.1016/j.resconrec.2012.12.017>
- Jackson, S.E., & Seo, J. (2010). The greening of strategic HRM scholarship. *Organization Management Journal*, 7(4), 278-290. <https://doi.org/10.1057/omj.2010.37>
- James, L.R., Choi, C.C., Ko, C.H.E., McNeil, P.K., Minton, M.K., Wright, M.A., & Kim, K.I. (2008). Organizational and psychological climate: A review of theory and research. *European Journal of Work and Organizational Psychology*, 17(1), 5-32. <https://doi.org/10.1080/13594320701662550>
- Jiang, K., Lepak, D.P., Hu, J., & Baer, J.C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294. <https://doi.org/10.5465/amj.2011.0088>
- Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, 26(1), 5-17. <http://dx.doi.org/10.1108/IJCHM-10-2012-0180>
- Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 28(1), 36-67. <https://doi.org/10.1108/IJCHM-11-2014-0572>
- Kaiser, F.G., Wölfling, S., & Fuhrer, U. (1999). Environmental attitude and ecological behaviour. *Journal of Environmental Psychology*, 19(1), 1-19. <https://doi.org/10.1006/jev.1998.0107>
- Karim, W., Haque, A., Anis, Z., & Ulfy, M.A. (2020). The movement control order (MCO) for COVID-19 crisis and its impact on tourism and hospitality sector in Malaysia. *International Tourism and Hospitality Journal*, 3(2), 1-7. <https://doi.org/10.37227/ithj-2020-02-09>

- Kianto, A., Hurmelinna-Laukkanen, P., & Ritala, P. (2010). Intellectual capital in service-and product-oriented companies. *Journal of Intellectual Capital*, 11(3), 305-325. <https://doi.org/10.1108/14691931011064563>
- 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, 83-93. <https://doi.org/10.1016/j.ijhm.2018.04.007>
- Kitazawa, S., & Sarkis, J. (2000). The relationship between ISO 14001 and continuous source reduction programs. *International Journal of Operations and Production Management*, 20(2), 225-248. <https://doi.org/10.1108/01443570010304279>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1-10. <http://doi.org/10.4018/ijec.2015100101>
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260. <https://doi.org/10.1080/13504620220145401>
- Kramar, R. (2014). Beyond strategic human resource management: Is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069-1089. <https://doi.org/10.1080/09585192.2013.816863>
- Kuenzi, M., & Schminke, M. (2009). Assembling fragments into a lens: A review, critique, and proposed research agenda for the organizational work climate literature. *Journal of Management*, 35(3), 634-717. <https://doi.org/10.1177%2F0149206308330559>
- Legrand, W., Chen, J., & Sloan, P. (2005). Environmental performance analysis of German hotels. *Tourism Review International*, 9(1), 61-68. <https://doi.org/10.3727/154427205774791799>
- Malaysia Open Data Portal. (2021). *Hotel classification*. Portal Data Terbuka Malaysia. https://www.data.gov.my/data/ms_MY/dataset/pengelasan-hotel/resource/9f80ef3e-761a-483f-8299-c75f29ccfd18
- Malik, M.S., Ali, K., Kausar, N., & Chaudhry, M.A. (2021). Enhancing environmental performance through green HRM and green innovation: Examining the mediating role of green creativity and moderating role of green shared vision. *Pakistan Journal of Commerce and Social Sciences*, 15(2), 265-285. <http://hdl.handle.net/10419/237078>
- Martínez-Pérez, Á., García-Villaverde, P.M., & Elche, D. (2015). Eco-innovation antecedents in cultural tourism clusters: External relationships and explorative knowledge. *Innovation*, 17(1), 41-57. <https://doi.org/10.1080/14479338.2015.1011058>
- Martins, J.M., Aftab, H., Mata, M.N., Majeed, M.U., Aslam, S., Correia, A.B., & Mata, P.N. (2021). Assessing the impact of green hiring on sustainable performance: Mediating role of green performance management and compensation. *International Journal of Environmental Research and Public Health*, 18(11), Article 5654. <https://doi.org/10.3390/ijerph18115654>
- Mccormick, M.J., & Martinko, M.J. (2004). Identifying leader social cognitions: Integrating the causal reasoning perspective into social cognitive theory. *Journal of Leadership and Organizational Studies*, 10(4), 2-11. <https://doi.org/10.1177/107179190401000401>
- Melissen, F., van Ginneken, R., & Wood, R.C. (2016). Sustainability challenges and opportunities arising from the owner-operator split in hotels. *International Journal of Hospitality Management*, 54, 35-42. <https://doi.org/10.1016/j.ijhm.2016.01.005>
- Merriman, K.K., & Sen, S. (2012). Incenting managers toward the triple bottom line: An agency and social norm perspective. *Human Resource Management*, 51(6), 851-871. <https://doi.org/10.1002/hrm.21491>
- Ministry of Tourism, Arts and Culture. (2020). *Rated green hotel*. <http://www.motac.gov.my/en/check/green-hotel>
- Mishra, P. (2017). Green human resource management: A framework for sustainable organizational development in an emerging economy. *International Journal of Organizational Analysis*, 25(5), 762-788. <https://doi.org/10.1108/IJOA-11-2016-1079>
- Mousa, S.K., & Othman, M. (2020). The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of Cleaner Production*, 243, Article 118595. <https://doi.org/10.1016/j.jclepro.2019.118595>

- Munir, S., Bibi, A., Siddiqui, A., & Butt, Q. (2019). An empirical analysis of the relationship between human capital and organizational performance in hospitality sector in Pakistan. *Journal of Management and Research*, 6(2), 167-208. <https://doi.org/10.29145/jmr/62/060207>
- Munro, B.H. (2005). *Statistical methods for health care research* (Vol. 1). Lippincott Williams & Wilkins.
- Muster, V., & Schrader, U. (2011). Green work-life balance: A new perspective for green HRM. *German Journal of Human Resource Management*, 25(2), 140-156. <https://doi.org/10.1177/239700221102500205>
- Newman, A., Miao, Q., Hofman, P.S., & Zhu, C J. (2016). The impact of socially responsible human resource management on employees' organizational citizenship behaviour: The mediating role of organizational identification. *The International Journal of Human Resource Management*, 27(4), 440-455. <https://doi.org/10.1080/09585192.2015.1042895>
- Nielsen, T.M., Hrivnak, G.A., & Shaw, M. (2009). Organizational citizenship behavior and performance: A meta-analysis of group-level research. *Small Group Research*, 40(5), 555-577. <http://dx.doi.org/10.1177/1046496409339630>
- Nisar, Q.A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & Gill, S.S. (2021). Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behavior. *Journal of Cleaner Production*, 311, Article 127504. <https://doi.org/10.1016/j.jclepro.2021.127504>
- Nishii, L.H., Lepak, D.P., & Schneider, B. (2008). Employee attributions of the "why" of H.R. practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel psychology*, 61(3), 503-545. <https://doi.org/10.1111/j.1744-6570.2008.00121.x>
- Noor, A.N.M., Ahmad, Z., & Baharudin, N.F. (2022). Green human resource management practices and pro-environmental behaviour: Pathways towards organisational sustainability. *Malaysian Journal of Consumer and Family Economics*, 29, 135-153. <https://www.majcafe.com/volume-29-2022-forth-coming/>
- Noronha, L., Manjush, H., & Monteiro, M. (2016). A study on the green human resource management at gateway hotel, Mangalore. *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(1), 843-852. <https://ssrn.com/abstract=2959200>
- Norton, T.A., Parker, S.L., Zacher, H., & Ashkanasy, N.M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organization and Environment*, 28(1), 103-125. <https://doi.org/10.1177/1086026615575773>
- Ojo, A.O., & Raman, M. (2019). Role of green HRM practices in employees' pro-environmental I.T. practices. In Á. Rocha, H. Adeli, L. Reis, & S. Costanzo (Eds.), *New knowledge in information systems and technologies. World conference on information systems and technologies* (pp. 678-688). Springer International Publishing. https://doi.org/10.1007/978-3-030-16181-1_64
- Ojo, A.O., Tan, C.N.L., & Alias, M. (2020). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 18(1), 678-688. <https://doi.org/10.1108/SRJ-12-2019-0403>
- Otoma, S., Hoang, H., Hong, H., Miyazaki, I., & Diaz, R. (2013). A survey on municipal solid waste and residents' awareness in Da Nang city, Vietnam. *Journal of Material Cycles and Waste Management*, 15(2), 187-194. <https://doi.org/10.1007/s10163-012-0109-2>
- 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(3), 451-466. <https://doi.org/10.1007/s10551-013-1732-0>
- Pham, N.T., Tučková, Z., & Jabbour, C.J.C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72, 386-399. <https://doi.org/10.1016/j.tourman.2018.12.008>
- Pinzone, M., Guerci, M., Lettieri, E., & Huisingh, D. (2019). Effects of 'green'training on pro-environmental behaviors and job satisfaction: Evidence from the Italian healthcare sector. *Journal of Cleaner Production*, 226, 221-232. <https://doi.org/10.1016/j.jclepro.2019.04.048>
- Ramus, C.A., & Steger, U. (2000). The roles of supervisory support behaviors and environmental policy in employee "Ecoinitiatives" at leading-edge European companies. *Academy of Management Journal*, 43(4), 605-626. <https://doi.org/10.5465/1556357>

- Renwick, D.W., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1-14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>
- Ringle, C., Wende, S., & Will, A. (2005). *Smart-PLS version 2.0 M3*. University of Hamburg.
- Robertson, J.L., & Carleton, E. (2018). Uncovering how and when environmental leadership affects employees' voluntary pro-environmental behavior. *Journal of Leadership and Organizational Studies*, 25(2), 197-210. <https://doi.org/10.1177/1548051817738940>
- 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>
- Rubel, M.R.B., Kee, D.M.H., & Rimi, N.N. (2021). Green human resource management and supervisor pro-environmental behavior: The role of green work climate perceptions. *Journal of Cleaner Production*, 313, Article 127669. <https://doi.org/10.1016/j.jclepro.2021.127669>
- Saeed, B.B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M.A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424-438. <https://doi.org/10.1002/csr.1694>
- Sarwar, A. (2013). Medical tourism in Malaysia: Prospect and challenges. *Iranian Journal of Public Health*, 42(8), 795-805. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4441909/>
- Sawitri, D.R., Hadiyanto, H., & Hadi, S.P. (2015). Pro-environmental behavior from a social cognitive theory perspective. *Procedia Environmental Sciences*, 23, 27-33. <https://doi.org/10.1016/j.proenv.2015.01.005>
- Schneider, B., & Reichers, A.E. (1983). On the etiology of climates. *Personnel Psychology*, 36(1), 19-39. <https://doi.org/10.1111/j.1744-6570.1983.tb00500.x>
- Schneider, B., Ehrhart, M.G., & Macey, W.H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64(1), 361-388. <https://doi.org/10.1146/annurev-psych-113011-143809>
- Singh, S.K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150, Article 119762. <https://doi.org/10.1016/j.techfore.2019.119762>
- Siti-Nabiha, A., George, R., Wahid, N.A., Amran, A., Abustan, I., & Mahadi, R. (2011). A field survey of environmental initiatives at selected resorts in Malaysia. *World Applied Sciences Journal*, 12(1), 56-63.
- Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31-55. <https://doi.org/10.1111/1744-7941.12147>
- Temminck, E., Mearns, K., & Fruhen, L. (2015). Motivating employees towards sustainable behaviour. *Business Strategy and the Environment*, 24(6), 402-412. <https://doi.org/10.1002/bse.1827>
- Thapa, B. (2012). Environmental management in the lodging and hospitality industries: A review. *Tourism: An International Interdisciplinary Journal*, 60(3), 339-345. <https://hrcaak.srce.hr/en/file/136907>
- Tian, H., Zhang, J., & Li, J. (2020). The relationship between pro-environmental attitude and employee green behavior: The role of motivational states and green work climate perceptions. *Environmental Science and Pollution Research*, 27(7), 7341-7352. <https://doi.org/10.1007/s11356-019-07393-z>
- Tsui, A.S., Pearce, J.L., Porter, L.W., & Tripoli, A.M. (1997). Alternative approaches to the employee-organization relationship: Does investment in employees pay off? *Academy of Management Journal*, 40(5), 1089-1121. <https://doi.org/10.5465/256928>
- Uyun, Q. (2021). The effect of green HRM on business sustainability with the mediation role of pro-environmental behavior. *Calitatea*, 22(183), 163-170. https://www.srac.ro/calitatea/en/arhiva/2021/QAS_Vol.22_No.183_Aug.2021.pdf
- Yusof, Z.B., & Jamaludin, M. (2013). Green approaches of Malaysian green hotels and resorts. *Procedia-Social and Behavioral Sciences*, 85, 421-431. <https://doi.org/10.1016/j.sbspro.2013.08.371>
- Zainol, N., Ahmad Rozali, A., Nordin, N., Tazijan, F., & Ab Rashid, P. (2015). *Employees dissatisfaction and turnover crises: A study of hotel industry, Malaysia*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2576603

Zhou, S., Zhang, D., Lyu, C., & Zhang, H. (2018). Does seeing "mind acts upon mind" affect green psychological climate and green product development performance? The role of matching between green transformational leadership and individual green values. *Sustainability*, 10(9), Article 3206. <https://doi.org/10.3390/su10093206>

Zimmerman, B.J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3), 329–339. <https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-0663.81.3.329>

Submitted: April 27, 2021

Revised: September 26, 2022

Accepted: January 13, 2023