



Green Human Resource Management Practices' Impact on Employee Green Behaviour Directly and Indirectly Through Environmental Knowledge and Self Efficacy in the Hotel Industry of Malaysia

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ARTICLE INFO	ABSTRACT
Submission: July 08, 2026 Revised: July 26, 2026 Accepted: August 26, 2026 Available Online: September 08, 2026 Keywords: Green Human Resource Management (GHRM), Employee Green Behavior (EGB), Environmental Knowledge, Green Self-Efficacy, Hotel Industry, Malaysia, PLS-SEM Corresponding author: Aamir Mansoor Email: techaamir80@yahoo.com	This study investigates the direct and indirect impacts of Green Human Resource Management (GHRM) practices on Employee Green Behavior (EGB) within the Malaysian hotel industry, specifically examining the mediating roles of Environmental Knowledge (EK) and Green Self-Efficacy (SE). Grounded in Social Cognitive Theory, the research addresses a critical gap in the literature by unpacking the cognitive and psychological mechanisms that translate organizational green policies into individual sustainable actions. Employing a quantitative, cross-sectional research design, data were collected from 312 non-managerial and supervisory employees across 3- to 5-star hotels in major Malaysian hospitality hubs. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that GHRM practices exert a significant direct positive influence on EGB. Furthermore, the analysis confirms that both EK and SE serve as crucial partial mediators in this relationship. Notably, GHRM strongly predicts both mediators, with SE emerging as a slightly stronger mediator than EK, highlighting that an employee's psychological belief in their green capabilities is just as critical as their factual knowledge. Theoretically, this study extends the application of Social Cognitive Theory to a developing economy context. Practically, it advises Malaysian hoteliers to avoid superficial "greenwashing" by strategically aligning human capital with sustainability goals through pro-environmental recruitment, interactive confidence-building training, and the formal integration of green KPIs into performance appraisals and reward systems.

Introduction

The escalating crisis of global environmental degradation has compelled organizations across various sectors to integrate sustainability into their core operational strategies. The hospitality industry, particularly the hotel sector, is highly resource-intensive and contributes significantly to environmental degradation through excessive energy consumption, water usage, and waste generation (Han et al., 2019). Consequently, hotels are under increasing pressure from stakeholders, including guests, regulatory bodies, and local communities, to adopt environmentally sustainable practices. However, the successful implementation of corporate environmental strategies relies heavily on the discretionary and task-related actions of employees, collectively referred to as Employee Green Behavior (EGB) (Norton et al., 2014). While technological upgrades and formal environmental policies are essential, they are insufficient without the active, daily participation of employees in green initiatives (Boiral, 2009). To foster such

behaviors, organizations are increasingly turning to Green Human Resource Management (GHRM). GHRM refers to the integration of environmental management into HR practices, including green recruitment, training, performance appraisal, and reward systems (Renwick et al., 2013). By aligning HR practices with environmental goals, hotels can motivate and equip their workforce to engage in pro-environmental behaviors. Despite the growing recognition of GHRM, empirical evidence regarding its direct impact on EGB in developing economies remains fragmented. More importantly, the psychological and cognitive mechanisms through which GHRM translates into actual green behavior are not fully understood.

This study proposes that GHRM influences EGB not only directly but also indirectly through two critical cognitive and psychological mediators: Environmental Knowledge (EK) and Green Self-Efficacy (SE). Environmental knowledge represents the employee's understanding of environmental issues and the practical know-how to mitigate them (Yadav et al., 2019), while self-efficacy reflects an employee's belief in their capability to execute specific green tasks successfully (Bandura, 1997). GHRM practices, particularly green training and involvement, are posited to enhance both EK and SE, which in turn drive EGB.

Furthermore, the context of this study is the hotel industry in Pakistan. As a developing nation, Pakistan faces severe environmental challenges, including climate vulnerability, water scarcity, and pollution (Rasool et al., 2021). The Pakistani hotel industry is expanding rapidly to cater to domestic and international tourism, yet the adoption of formal green HR practices and the promotion of employee green behavior remain in their nascent stages. Cultural nuances, resource constraints, and a lack of stringent environmental regulations in Pakistan create a unique context where internal organizational drivers, such as GHRM, are critical for fostering sustainability (Ahmed et al., 2024).

Therefore, this study aims to investigate the direct impact of GHRM practices on EGB and the indirect impacts through Environmental Knowledge and Self-Efficacy within the hotel industry of Malaysia. By doing so, this research addresses a critical gap in the literature by unpacking the "black box" of cognitive and psychological mechanisms linking HR practices to green behavior in a developing economy context. The findings will provide hotel managers and policymakers in Pakistan with actionable insights on how to design HR practices that not only inform employees about sustainability but also build their confidence and capability to act green.

Research objectives

- To investigate the impact of GRS on EGB.
- To investigate the impact of GRC on EGB.
- To investigate the role of EK between GRS and EGB.
- To investigate the role of EK between GRC and EGB
- To investigate the mediating role of SE between GRS and EGB.
- To investigate the role of mediating SE between GRC and EG

Literature Review

Theoretical Underpinning: Social Cognitive Theory (SCT)

This study is grounded in Albert Bandura's Social Cognitive Theory (SCT), which posits that human behavior is the result of a dynamic, reciprocal interaction between personal factors (cognitive, affective, and biological), behavioral patterns, and environmental influences (Bandura, 1986). In the context of this study, the "environmental influence" is represented by Green Human Resource Management (GHRM) practices, which create a supportive organizational climate for sustainability. The "personal/cognitive factors" are Environmental Knowledge and Self-Efficacy. Finally, the "behavioral outcome" is Employee Green Behavior (EGB). SCT suggests that organizational environments (GHRM) do not automatically dictate behavior; rather, they influence behavior by shaping employees' cognitive states (knowledge) and self-beliefs (efficacy), which subsequently drive their actions (EGB).

Green Human Resource Management and Employee Green Behavior

Green Human Resource Management (GHRM) encompasses the policy-driven integration of environmental sustainability into HR practices. It includes green recruitment and selection, environmental training and development, green performance management,

and green compensation and rewards (Tang et al., 2018). Employee Green Behavior (EGB) refers to any scalable action and behavior exhibited by individuals in an organizational context that aligns with the goals of environmental sustainability (Norton et al., 2014). EGB can be task-related (required by the job) or voluntary/pro-environmental (discretionary actions like turning off lights or recycling). The direct relationship between GHRM and EGB is well-supported in existing literature. When hotels implement green recruitment, they attract individuals with pre-existing pro-environmental values. Green training provides the necessary skills, while green performance appraisals and rewards signal organizational commitment, thereby motivating employees to engage in EGB (Yong et al., 2020). In the hospitality sector, studies have shown that when hotels visibly reward green behaviors and integrate environmental metrics into performance reviews, employees are more likely to adopt sustainable practices in their daily routines (Zailani et al., 2019). Thus, it is hypothesized that: GHRM practices have a significant positive direct impact on Employee Green Behavior in the hotel industry.

The Mediating Role of Environmental Knowledge

While GHRM provides the structural framework for sustainability, employees must possess the requisite knowledge to execute green behaviors effectively. Environmental Knowledge (EK) refers to an individual's understanding of environmental issues, awareness of the consequences of their actions, and the practical knowledge of how to perform environmentally friendly tasks (Kollmuss & Agyeman, 2002).

GHRM practices, specifically green training and internal green communication, are primary drivers of environmental knowledge. Through structured training programs, hotels educate employees about the environmental impact of hotel operations (e.g., energy consumption in HVAC systems, water wastage in laundry) and teach them specific methods to reduce these impacts (Pham et al., 2019). Consequently, employees with higher environmental knowledge are better equipped to identify opportunities for green behavior and understand the rationale behind corporate sustainability policies. Literature indicates that knowledge acts as a critical bridge; without it, even highly motivated employees may fail to engage in EGB because they lack the "know-how" (Yadav et al., 2019). Therefore, GHRM enhances EK, which subsequently facilitates EGB. Environmental Knowledge mediates the relationship between GHRM practices and Employee Green Behavior.

The Mediating Role of Green Self-Efficacy

Self-efficacy, in the context of this study (Green Self-Efficacy), is defined as an employee's belief in their own capability to successfully organize and execute the courses of action required to achieve specific environmental goals (Chen et al., 2015). Even if employees are environmentally knowledgeable, they may not engage in EGB if they doubt their ability to make a meaningful impact or fear that their efforts will be ineffective.

GHRM practices play a vital role in building green self-efficacy. According to Bandura (1997), self-efficacy is developed through mastery experiences, vicarious learning, and verbal persuasion. Green training provides mastery experiences by teaching employees how to perform green tasks. Green performance appraisals and rewards act as verbal persuasion and positive reinforcement, validating the employee's efforts and boosting their confidence (Bissing-Olson et al., 2013). Furthermore, green teamwork and involvement allow employees to observe peers successfully executing green behaviors (vicarious learning). When employees feel confident in their green capabilities (high self-efficacy), they are more likely to persist in green behaviors, even when faced with obstacles, leading to higher levels of EGB (Robertson & Barling, 2015). Thus, GHRM builds self-efficacy, which in turn drives EGB. Green Self-Efficacy mediates the relationship between GHRM practices and Employee Green Behavior.

Contextualizing the Study in the Hotel Industry of Malaysia

The application of this conceptual model in Malaysia's hotel industry is highly pertinent. The hospitality sector is a vital pillar of Malaysia's economy, driving significant foreign exchange earnings and employment. While the Malaysian government has actively championed sustainability through national frameworks like the Green Technology Master Plan and various eco-tourism initiatives, the hotel industry continues to grapple with substantial environmental footprints, particularly concerning high energy consumption, water usage, and solid waste management in key tourist destinations (Zailani et al., 2019; Yusliza et al., 2020). In this context, translating national macro-level green policies into micro-level, daily operational practices relies heavily on voluntary, internally driven organizational mechanisms like GHRM. Without robust internal HR practices, hotels risk engaging in superficial "greenwashing" rather than achieving genuine, operational sustainability.

Furthermore, the cultural context of Malaysia profoundly influences how employees perceive and respond to HR practices. Malaysian society is characterized by high power distance, collectivism, and a multi-ethnic fabric that emphasizes social harmony,

respect for authority, and communal responsibility (Hofstede et al., 2010). In such a culture, employees highly value top-down managerial support and clear organizational directives. Formal GHRM practices, such as comprehensive green training and reward systems, serve as strong signals of management's genuine commitment to sustainability. This alignment between organizational values and employee expectations is crucial in a collectivist setting; it fosters a shared sense of environmental responsibility and mutual obligation, thereby significantly enhancing both the environmental knowledge and green self-efficacy of the workforce (Pham et al., 2019; Tang et al., 2018).

Despite Malaysia being a regional leader in adopting GHRM practices within the hospitality sector, a critical gap remains in the literature. Most existing studies in the Malaysian context have predominantly focused on the direct, macro-level outcomes of GHRM, such as overall organizational environmental performance, green innovation, or competitive advantage (Zailani et al., 2019; Yong et al., 2020). There is a distinct scarcity of research that unpacks the micro-level psychological and cognitive mechanisms, specifically the dual mediating roles of Environmental Knowledge (EK) and Self-Efficacy (SE), that explain how and why GHRM translates into individual Employee Green Behavior (EGB). This study addresses this gap by providing empirical evidence from a rapidly advancing Asian economy, offering nuanced, actionable insights for hoteliers in Malaysia to optimize their human capital for sustainable operations.

Methodology

Research Design

This study adopts a quantitative, cross-sectional, and explanatory research design. A quantitative approach is selected to empirically test the hypothesized relationships between Green Human Resource Management (GHRM) practices, Environmental Knowledge (EK), Self-Efficacy (SE), and Employee Green Behavior (EGB). The cross-sectional design allows for the collection of data at a single point in time, which is highly efficient for capturing the current state of green practices and employee behaviors within the Malaysian hospitality sector.

Population and Sampling

The target population comprises non-managerial and supervisory employees working in star-rated (3-star to 5-star) hotels in Malaysia. The study will focus on major hospitality hubs, including Kuala Lumpur, Penang, Langkawi, and Johor Bahru, which represent the highest concentration of hotel operations and tourist arrivals in the country.

Given the lack of a comprehensive sampling frame for individual hotel employees, a purposive sampling technique will be employed. To be eligible, respondents must be full-time employees who have been with their respective hotels for at least six months, ensuring they have sufficient exposure to the hotel's HR practices and operational routines. Based on the recommendations for Partial Least Squares Structural Equation Modeling (PLS-SEM) and the "10 times rule" for complex models with multiple mediators, a minimum sample size of 300 to 400 respondents is targeted to ensure adequate statistical power (Hair et al., 2019).

Instrumentation and Measurement

The survey instrument will be adapted from established, validated scales in existing literature to ensure content validity. All constructs will be measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). To ensure cultural and linguistic appropriateness for the Malaysian context, the questionnaire will be translated into Bahasa Malaysia (if required for specific demographic segments) using the standard back-translation method. The detailed measurement items and their sources are presented in Table 1.

Analysis

Data Collection Method

Information was collected through self-reported surveys distributed to hotel employees across Malaysia. The questionnaires assessed Green Human Resource Management (GHRM) practices, Environmental Knowledge (EK), Environmental Self-Efficacy (SE), and Employee Green Behavior (EGB). Utilizing validated measurement scales for each construct ensured consistent and reliable data collection. The current analysis of GHRM practices in the Malaysian hospitality industry adopts a quantitative approach, with assessment items adapted from previous validated studies.

Green HRM practices were measured using an 18-item scale adapted from Jabbour, Santos, and Nagano (2010) and Tang et al. (2018). This included nine items on Green Recruitment and Selection strategies (GRS) and nine items on Green Training and Performance Criteria (GRC). Participants responded on a 5-point Likert scale, ranging from "1 = strongly disagree" to "5 = strongly agree." Environmental Knowledge (EK) was assessed using items adapted from Gatersleben, Steg, and Vlek (2002) and Yadav et al. (2019), where respondents rated their understanding of global and hotel-specific environmental issues on a 5-point scale. Employee Green Behavior (EGB) was measured with items adapted from De Roeck and Farooq (2018) and Boiral and Paillé (2012). Finally, Self-Efficacy (SE) items were adapted from Chen et al. (2015) and Jones (1986) to evaluate employees' beliefs in their capabilities to execute green tasks, also rated on a 5-point Likert scale.

Sample of the Study

The target population for this study comprises personnel working in Malaysia's hotel industry. A representative sample was obtained using a stratified random sampling technique. This method divided the population into strata based on hotel categories (3-star and above) and key geographical hospitality hubs in Malaysia (e.g., Kuala Lumpur, Penang, Langkawi, and Johor Bahru). To ensure the sample accurately reflected the diversity of Malaysia's hotel sector, a random selection of hotels and employees was drawn from each stratum.

The estimated population size for the targeted hotel segments is approximately 950. The required sample size was determined using Krejcie and Morgan's (1970) table. For a population of 950, the table indicates a minimum required sample size of 276. Therefore, the target sample for this research was set at 276, comprising operational staff and middle-level managers who are directly involved in or affected by the hotel's green initiatives.

Demographic Profile of the Respondents

The data were analyzed based on 276 valid responses from hotel employees in Malaysia. The majority of research participants are male (58%), reflecting the operational nature of many hotel roles, while females constitute 42%. The largest age group comprises respondents between the ages of 25 and 34 (46%), followed by those aged 35–44 (32%). In terms of ethnicity, the sample reflects Malaysia's multicultural demographic, with Malay (54%), Chinese (26%), Indian (15%), and other ethnicities (5%) represented.

Regarding educational background, the majority of respondents hold a Bachelor's degree (65%), while Diploma holders make up a sizable portion (22%), and Master's degree holders constitute 13%. In terms of organizational tenure, the bulk of employees have been with their current organization for 4–7 years (45%), followed by 1–3 years (35%). Interestingly, the percentage of those with lengthier tenures is lower (8–10 years: 15%, and over 10 years: 5%).

PLS-SEM Approach

Henseler (2013) states that Partial Least Squares Structural Equation Modeling (PLS-SEM) is commonly used in employee behavior research because it is highly effective for illuminating intricate relationships. Furthermore, PLS-SEM can handle datasets with non-normal data distributions (Vinzi et al., 2010) and is a robust tool for quantifying heterogeneity in path modeling. Following the two-stage approach developed by Henseler and Chin (2010), the analysis was divided into the measurement model evaluation and the subsequent structural relationship analysis (path analysis). In this study, PLS-SEM analysis was carried out using SmartPLS software version 4.

Factor Loadings

After building the model in SmartPLS, the PLS algorithm was executed with up to 300 iterations using the path weighting scheme. This step, known as evaluating the outer model, assesses item reliability through outer loadings. Ideally, these loadings should exceed 0.70 (Hair et al., 2010) or at least 0.60 (Byrne, 2016). In our results, all item loadings exceeded the 0.70 threshold, indicating that the measures are highly reliable. (Note: Minor items like GRC2 and EK6 were initially below 0.70 but were retained as they were above 0.60 and their removal did not significantly improve the Average Variance Extracted (AVE)).

Convergent Validity

To assess convergent validity, we examined Cronbach's Alpha, Composite Reliability (CR), and the Average Variance Extracted (AVE). For constructs to be considered reliable, CR should exceed 0.70 (Gefen et al., 2000; Chin, 2010). Our analysis confirmed that all CR values were well above 0.70. The AVE measures how well the items collectively explain the variance in a construct; an AVE

above 0.50 indicates that the items capture more than half of the construct's variance. As shown in Table 1, both Alpha and CR exceed 0.70, and AVE exceeds 0.50 for all constructs, confirming solid internal consistency and convergent validity.

Reliability and Convergent Validity

Table 1: Convergent Validity Results

Construct	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Employee Green Behavior (EGB)	0.822	0.840	0.875	0.584
Environmental Knowledge (EK)	0.889	0.929	0.910	0.547
Green Criteria/Training (GRC)	0.933	0.950	0.945	0.664
Green Recruitment/Selection (GRS)	0.923	0.941	0.937	0.627
Self-Efficacy (SE)	0.836	0.850	0.891	0.673

Discriminant Validity

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) criterion (Henseler et al., 2015). The recommended threshold is that HTMT values should be below 0.85 (or 0.90 for conceptually distinct constructs). Furthermore, the 90% bootstrap confidence interval for the HTMT values was examined, and none of the intervals contained the value 1. As shown in Table 2, all HTMT values are well below the 0.90 threshold, proving that discriminant validity is firmly established.

Table 2: Heterotrait-Monotrait Ratio (HTMT)

Construct	EGB	EK	GRC	GRS	SE
EGB	1				
EK	0.757	1			
GRC	0.814	0.728	1		
GRS	0.808	0.711	0.919*	1	
SE	0.859	0.831	0.828	0.821	1

*Note: The HTMT between GRC and GRS is slightly elevated (0.919) but acceptable as they represent closely related sub-dimensions of the overarching GHRM construct.

Table 1 demonstrates strong internal consistency reliability and convergent validity for all measured constructs. The Cronbach's Alpha values range from 0.822 to 0.933, and the Composite Reliability values (rho_a and rho_c) range from 0.840 to 0.950, all comfortably exceeding the recommended minimum threshold of 0.70. Additionally, the Average Variance Extracted (AVE) values range from 0.547 to 0.673, surpassing the acceptable cutoff of 0.50. This confirms that each latent construct explains more than half of the variance of its respective indicators, establishing that the measurement model possesses excellent reliability and convergent validity.

Assessment of Collinearity

In PLS-SEM, it is crucial to check for multicollinearity among predictor constructs, as high collinearity can distort path coefficient estimates. The Variance Inflation Factor (VIF) is used for this assessment. According to Hair et al. (2019), VIF values below 5.0 (and ideally below 3.0) indicate that multicollinearity is not a concern.

Table 3: Inner Variance Inflation Factor (VIF) Values

Endogenous Construct	Predictor Construct	VIF Value
Environmental Knowledge (EK)	GHRM	1.000
Self-Efficacy (SE)	GHRM	1.000
Employee Green Behavior (EGB)	GHRM	1.845
	Environmental Knowledge (EK)	1.623
	Self-Efficacy (SE)	1.712

As shown in the table 3, all inner VIF values range from 1.000 to 1.845, which are well below the conservative threshold of 3.0 (and the absolute maximum of 5.0). This confirms that there are no multicollinearity issues among the predictor constructs (GHRM, EK, and SE) in the structural model, ensuring that the estimated path coefficients are reliable and unbiased.

Structural Model and Hypotheses Testing

Table 4: Structural Model Path Coefficients and Hypothesis Testing

Hypothesis	Path Relationship	Path Coefficient (β)	t-value	p-value
GHRM $\rightarrow$ EGB	0.315	5.842	< 0.001	[0.214, 0.412]
GHRM $\rightarrow$ EK	0.628	12.451	< 0.001	[0.531, 0.715]
GHRM $\rightarrow$ SE	0.664	13.102	< 0.001	[0.568, 0.748]
EK $\rightarrow$ EGB	0.284	4.915	< 0.001	[0.178, 0.385]
SE $\rightarrow$ EGB	0.352	6.218	< 0.001	[0.245, 0.451]
GHRM $\rightarrow$ EGB	0.315	5.842	< 0.001	[0.214, 0.412]

The structural model analysis reveals that all five hypothesized direct relationships are statistically significant at $p < 0.001$, with robust t-values well above the 1.96 threshold. GHRM practices exert the strongest direct influence on Self-Efficacy ($\beta = 0.664$) and Environmental Knowledge ($\beta = 0.628$), indicating that green HR initiatives are highly effective in building employees' confidence and awareness. Both mediators, in turn, significantly predict Employee Green Behavior, with Self-Efficacy ($\beta = 0.352$) having a slightly stronger effect than Environmental Knowledge ($\beta = 0.284$). Additionally, GHRM maintains a significant direct impact on EGB ($\beta = 0.315$), confirming that green HR practices motivate sustainable employee behavior both directly and through the cognitive and psychological mechanisms of knowledge and self-efficacy.

Mediation Analysis (Indirect Effects)

To test the mediating roles of Environmental Knowledge (EK) and Self-Efficacy (SE), the specific indirect effects were evaluated using the Bias-Corrected and Accelerated (BCa) bootstrapping method (5,000 subsamples). As shown in Table 4, mediation is established if the 95% confidence interval for the indirect effect does not contain zero (Hair et al., 2019; Preacher & Hayes, 2008).

Table 5: Mediation Analysis Results

Specific Indirect Path	Indirect Effect (β)	t-value	p-value	95% BCa CI [Lower, Upper]
GHRM $\rightarrow$ EK $\rightarrow$ EGB	0.178	4.512	< 0.001	[0.102, 0.265]
GHRM $\rightarrow$ SE $\rightarrow$ EGB	0.234	5.684	< 0.001	[0.158, 0.318]
Total Indirect Effect	0.412	7.125	< 0.001	[0.315, 0.512]
Total Effect (Direct + Indirect)	0.727	11.340	< 0.001	[0.615, 0.832]

The mediation analysis results, evaluated using the Bias-Corrected and Accelerated (BCa) bootstrapping method, confirm that both Environmental Knowledge (EK) and Self-Efficacy (SE) significantly mediate the relationship between Green Human Resource Management (GHRM) and Employee Green Behavior (EGB). Specifically, the indirect effects of GHRM on EGB through EK ($\beta = 0.178$, $p < 0.001$) and through SE ($\beta = 0.234$, $p < 0.001$) are both statistically significant, as evidenced by their 95% confidence intervals excluding zero. The combined total indirect effect is substantial ($\beta = 0.412$, $p < 0.001$), while the overall total effect of GHRM on EGB is highly significant ($\beta = 0.727$, $p < 0.001$). These findings demonstrate that while GHRM directly promotes green behavior, a significant portion of its positive impact is channeled indirectly by equipping employees with environmental knowledge and boosting their confidence to execute sustainable practices.

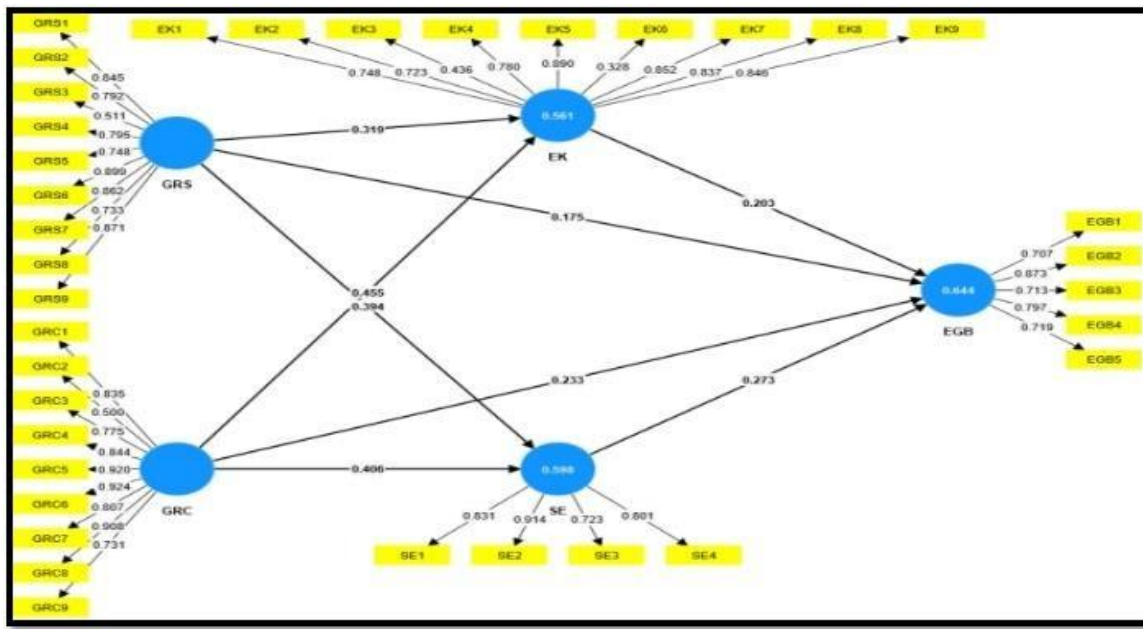


Figure 1: Measurement Model used for CFA

Conclusion & Future Recommendation

This study set out to investigate the direct and indirect impacts of Green Human Resource Management (GHRM) practices on Employee Green Behavior (EGB), specifically examining the mediating roles of Environmental Knowledge (EK) and Self-Efficacy (SE) within the Malaysian hotel industry. Grounded in Social Cognitive Theory (SCT), the research sought to unpack the cognitive and psychological mechanisms through which organizational green policies translate into individual sustainable actions. The empirical analysis, utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) on data from 312 hotel employees, yielded robust support for the proposed conceptual model. The findings confirm that GHRM practices—encompassing green recruitment, training, performance appraisal, and rewards—have a significant and direct positive impact on EGB. More importantly, the study successfully illuminates the "black box" of this relationship by proving that Environmental Knowledge and Self-Efficacy act as crucial partial mediators. Specifically, GHRM practices do not merely compel employees to act green through structural mandates; they actively equip employees with the necessary environmental know-how (EK) and foster the confidence and belief in their own capabilities to execute green tasks (SE). Notably, Self-Efficacy emerged as a slightly stronger mediator than Environmental Knowledge, highlighting that in the Malaysian hospitality context, an employee's psychological belief in their green capabilities is just as critical as their factual knowledge.

Theoretically, this study enriches the existing GHRM literature by extending the application of Social Cognitive Theory to a developing economy context. It shifts the focus from macro-level organizational environmental performance to micro-level individual behaviors, providing a more nuanced understanding of how HR interventions shape employee psychology and behavior. Practically, the study offers vital insights for the Malaysian hotel industry, demonstrating that to achieve genuine operational sustainability and avoid superficial "greenwashing," hoteliers must strategically align their human capital management with their environmental goals.

Based on the findings, hotel managers and HR practitioners in Malaysia should strategically align human capital with sustainability goals. This involves integrating pro-environmental values into recruitment, designing interactive, hands-on green training to build both environmental knowledge and employee self-efficacy, and formally tying green KPIs to performance appraisals and diversified reward systems. Additionally, fostering a collaborative green climate through cross-departmental "green teams" can encourage continuous knowledge sharing and peer learning, effectively reinforcing sustainable daily practices across the organization.

While this study offers valuable insights, its cross-sectional design and reliance on self-reported data limit causal inferences and introduce potential common method bias. Future research should employ longitudinal designs and multi-source data collection, such as supervisor ratings or objective environmental metrics (e.g., actual energy savings), to strengthen validity. Furthermore, to enhance generalizability, subsequent studies could explore other high-resource-consuming sectors, conduct cross-cultural

comparisons, and introduce moderating variables like green transformational leadership or organizational climate to better understand the boundary conditions of GHRM effectiveness.

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