Environmental Awareness on Employee Performance in Sustainable Green Tourism in the Hospitality Industry: The Mediating Role of Green Human Resource Management

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Abstract. Research purpose to analyzing the influence of environmental awareness on employee performance in supporting sustainable green tourism with Green human resource management (GHRM) takes on a mediating role in the hospitality indusutry. This study used a quantitative with an explanatory research design. With Cronbach's Alpha values above 0.70 for every construct, the instrument results likewise showed good reliability. Structural equation modeling showed that Environmental Awareness had a positive and significant effect on both GHRM and Employee Performance ($p < 0.05$). GHRM had a significant positive effect on Employee Performance and partially mediated the relationship between Environmental Awareness and Employee Performance. These findings suggest that higher environmental awareness among employes is more likely to to exhibit improved performance when supported by GHRM practices. In conclusion, environmental awareness through the implementation of GHRM contributes significantly to enhancing employee performance in support of sustainable green tourism within the hospitality industry.

Keywords: Environmental Awareness, Employee Performance, GHRM

1 Introduction

One of the main economic areas that significantly contributes to economic growth and job creation is tourism. However, the rapid expansion of the tourism industry has also resulted in a range of environmental challenges, including increased energy consumption, waste generation, and pressure on natural resources. The hospitality industry, as an integral component of the tourism sector, contributes significantly to environmental pressures in Bali. Hotels in Bali consume approximately 400-2,300 litres of water per room per day, considerably exceeding the average domestic water demand of local communities. Consequently, the hotel sector is estimated to account for approximately 56% of the island's total water supply, thereby intensifying the risk of water scarcity in this major tourist destination (Sulistyo, 2025).

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In addition, hotel operations are highly energy-intensive, with approximately 73% of total energy consumption attributed to electricity required to support operational facilities (Laksmi & Saputra, 2025). Environmental concerns are further exacerbated by the substantial volume of municipal solid waste generated in Bali, which reaches approximately 1,800 tonnes per day, prompting the government to encourage hotels to assume greater responsibility for waste management. These conditions indicate that the successful implementation of sustainable green tourism depends not only on technological innovations and organisational policies but also on employees' environmental awareness and the effective implementation of GHRM practices to promote sustainability-oriented employee performance (Jatiwardani et al., 2025a, 2025b). GHRM practices can enhance employees' environmental awareness while fostering an organization culture that supports sustainable business practices within the hospitality industry.

Another important factor influencing the successful implementation of sustainability initiatives is employees' environmental awareness. Individuals considered to be more environmentally conscious tend to be more pro-environmental and supportive of sustainability projects. Within the hospitality context, employees environmental awareness can contribute significantly to operational performance by encouraging energy conservation, effective waste management, and the efficient use of natural resources (Vu et al., 2025).

In the area of sustainable green tourism, few empirical research have looked at how GHRM acts as a mediating mechanism connecting workers' environmental awareness to worker performance. To bridge this gap, this research develops and validates an integrated model that explains how GHRM transforms employees' environmental awareness into improved performance while simultaneously supporting sustainable tourism objectives. By integrating environmental awareness, GHRM, and employee performance into a single framework, this study extends the existing GHRM and sustainable tourism literature and provides new empirical evidence for sustainable hospitality management.

2 Methodology

Therefore, to investigate the causal relations between the research variables and used a quantitative technique with an explanatory research design. The respondents consisted of 167 employees from a five-star hotel in Nusa Dua, Bali, who were selected using a convenience sampling technique. The questionnaire was given out through the Human Resources Department using a *Google Form*. The proposed research model comprised environmental awareness (X), GHRM (M), and employee performance (Y). This method was used to describe how employes' performance in promoting sustainable tourism activities thru the application of environmentally focused HRM practices is influenced by their level of environmental awareness. The data were analyzed using SEM-PLS, the validity of the research instrument was verified using the Pearson coefficient, and the reliability was validated using the Cronbach's alpha coefficient ($p > 0.70$). There were two phases of the analysis. Initially, the measuring constructs'

validity and reliability were assessed using the outer model. Second, the inner model was examined to test the hypothesised relationships among the variables and to evaluate the mediating role of GHRM in the relationship between environmental awareness and employee performance in sustainable green tourism.

3 Result and Discussion

3.1 Result

The research participants in this study were 167 employees. Respondents were categorized according to gender, age, and length of service in Table 1.

Table 1. Data Characteristics

Variable	Respondents
Gender	
Female	88
Male	79
Age (Years)	
20-24	40
25-29	82
30-34	37
≥35	8
Length of Service (Years)	
1-3	39
4-6	69
7-9	52
≥10	7

The study involved 167 employees of the hospitality industry, with a relatively balanced gender distribution consisting of 88 female and 79 male respondents. Most respondents were between 25 and 29 years of age (49.1%), followed by those aged 20-24 years (24.0%) and 30-34 years (22.2%). In terms of organisational tenure, the majority had worked for four to six years (41.3%), followed by seven to nine years (31.1%).

Constructs were deemed to have acceptable convergent validity when the AVE value was higher than 0.50, and indicators were deemed valid when the outer loading surpassed 0.70. Table 2 displays the convergent validity evaluation results in Table 2.

Table 2. Convergent Validity Assessment

Variable	Indicator	*Loading Factor*	AVE
Environmental Awareness (X)	EA1.1	0.757	0.610
	EA1.2	0.806	
	EA1.3	0.795	
	EA2.3	0.836	

Variable	Indicator	*Loading Factor*	AVE
	EA3.2	0.746	
	EA3.3	0.763	
	EA4.1	0.765	
	EA4.3	0.790	
	EA5.3	0.767	
Employee	EP1.1	0.729	0.596
Performance	EP1.2	0.763	
(Y)	EP2.1	0.838	
	EP2.2	0.733	
	EP2.3	0.735	
	EP3.1	0.814	
	EP3.2	0.752	
	EP3.3	0.782	
	EP4.1	0.806	
	EP4.2	0.841	
	EP5.1	0.773	
	EP5.2	0.753	
	EP5.3	0.810	
Green Human	MA1.1	0.766	0.609
Resource	MA1.2	0.813	
Management	MA1.3	0.800	
(M)	MA2.1	0.799	
	MA2.2	0.810	
	MA2.3	0.708	
	MA3.1	0.711	
	MA3.2	0.800	
	MA4.2	0.790	
	MA4.3	0.775	
	MA5.1	0.790	
	MA5.2	0.763	
	MA6.1	0.794	
	MA6.2	0.729	
	MA6.3	0.746	
	MA7.3	0.749	

Constructs were considered reliable when both values exceeded the recommended threshold of 0.70 in Table 3.

Table 3. Reliability test

Variable	Composite reliability	Cronbach's Alpha (α)
Ennviromental Awarness	0.934	0.920
GHRM	0.959	0.950
Employee Performance	0.965	0.946

When the t-value was higher than 1.96 and the p-value was less than 0.05, the hypothesized associations were tested using the bootstrapping process in Table 4.

Table 4. *Coefficient, T-Statistics and P-Value*

Variable	*Coefficients*	T-Statistics	P-Value
Environmental Awareness ⟶ GHRM	0.518	10.234	0.000
Environmental Awareness ⟶ Employee Performance	0.280	3.962	0.000
GHRM ⟶ Employee Performance	0.280	3.657	0.000

Mediating of GHRM was examined by evaluating the indirect impact of environmental consciousness on worker productivity. Table 5 displays the mediation analysis's findings in Table 5.

Table 5. Mediating of GHRM

Variable	*Coefficients*	T-Statistics	P-Value
Environmental Awareness ⟶ GHRM ⟶ Employee Performance	0.145	3.492	0.000

3.2 Discussion

The response characteristics shows that young employees with moderate organizational tenure make up the majority of the hospitality workforce, which reflects the industry's emphasis on a flexible and effective staff. According to Human Capital Theory, employees with greater adaptability and accumulated work experience are more capable of supporting organisational change and sustainable human resource practices, including GHRM (Lee et al., 2023).

With factor loadings ranging from 0.708 to 0.841 and Average Variance Extracted (AVE) values over 0.50 for every construct, the convergent validity assessment showed that every measurement indicator met the suggested threshold. Cronbach's alpha values varied from 0.920 to 0.950, and Composite Reliability scores ranged from 0.934 to 0.965. These findings show that the indicators have an high level of internal consistency of Environmental Awareness, GHRM, and Employee Performance (AlKetbi & Rice, 2024).

Environmental Awareness has a significant effect on GHRM ($\beta = 0.518$, $t = 10.234$, $p < 0.001$). According to this research, employees who are more environmentally conscious are more inclined to support and take part in HR practices that are focused on the environment. Because employees have stronger pro-environmental values and are more likely to align their behavior with the organization's sustainability goals, employes with higher levels of environmental awareness are more likely to support and actively participate in environmentally oriented HR practices. Consistent with the Ability,Motivation,Opportunity (AMO) theory, GHRM provides employees with the knowledge, motivation, and opportunities required to transform environmental awareness into improved employee performance. As a result, employees who care about the environment likely to embrace green work practices that improve the

environmental performance of the company and support the adoption of sustainable green tourism in the hotel sector.

Environmental Awareness was also found to have a significant positive effect on Employee Performance ($\beta = 0.280$, $t = 3.962$, $p < 0.001$). This finding indicates that employees with stronger environmental awareness are more likely to integrate sustainable values into their daily work practices, resulting in higher work quality, greater responsibility, and proactive behaviours that support organisational sustainability goals. These findings suggest that environmental awareness functions as an important behavioural driver that encourages employees to actively contribute to sustainable tourism operations. The previous studies showing that employees' pro-environmental behaviour strengthens the relationship between green management practices and environmental, reinforcing the role of environmental awareness as a strategic resource for achieving Sustainable Green Tourism in the hospitality industry (Elshaer et al., 2023).

GHRM significantly influences Employee Performance ($\beta = 0.280$, $t = 3.657$, $p < 0.001$). The results demonstrates that environmentally oriented HRM practices enhance employee performance by creating an organisational environment that encourages sustainable work behaviours. Consistent with the AMO theory, GHRM develops employees' green competencies, strengthens their motivation, and provides opportunities to apply environmental values in the workplace. As a result, employees are more likely to translate environmental awareness into improved performance, highlighting the strategic role of GHRM in advancing Sustainable Green Tourism within the hospitality industry. The mediation analysis revealed that GHRM significantly mediates the relationship between Environmental Awareness and Employee Performance ($\beta = 0.145$, $t = 3.492$, $p < 0.001$). This results demonstrates that environmental awareness alone is insufficient to maximise employee performance unless it is reinforced by GHRM. While environmental awareness provides the foundation for pro-environmental attitudes, GHRM translates these values into consistent workplace behaviours through green HR practices, resulting in improved employee performance. By integrating employes' environmental ideals with organizational sustainability policies, GHRM has an essential part as a mediating mechanism that contributes to sustainable green tourism.. In other words, environmental awareness provides the cognitive foundation, whereas GHRM transforms that awareness into consistent workplace practices through recruitment, training, performance evaluation, and reward systems (Darvishmotevali & Altinay, 2022).

Environmental Awareness provides employees with the knowledge and values needed to understand the importance of environmental sustainability, it does not automatically improve employee performance. Employees who are environmentally aware are more willing to support and participate in green workplace practices; however, these values need to be reinforced through GHRM. Consistent with the AMO theory, GHRM enhances employee motivation thru green performance evaluation and reward systems and improves employes' skills thru green training, and provides opportunities to integrate environmental knowledge into routine tasks (Mat, et al., 2021). Consequently, environmental awareness is translated into consistent pro-

environmental behaviours that improve employee performance. This finding highlights that GHRM is a useful organizational strategy that converts employees' environmental consciousness into quantifiable performance results rather than just a statistical mediator. Therefore, in order to support the implementation of Sustainable Green Tourism and strengthen sustainable employe behavior, hospitality organizations should incorporate green recruitment, training, performance evaluation, and reward systems.

4 Conclusion

All indicator loadings above 0.70, Average Variance, and the measurement model showed adequate validity and reliability. For every construct, extracted values larger than 0.50 and Cronbach's alpha and Composite Reliability values more than 0.70. Structural equation modelling revealed that Environmental Awareness had a positive and significant effect on GHRM ($\beta = 0.518$, $t = 10.234$, $p < 0.001$) and Employee Performance ($\beta = 0.280$, $t = 3.962$, $p < 0.001$), while GHRM also exerted a significant positive effect on Employee Performance ($\beta = 0.280$, $t = 3.657$, $p < 0.001$). Furthermore, GHRM partially mediated the relationship between Environmental Awareness and Employee Performance ($\beta = 0.145$, $t = 3.492$, $p < 0.001$). In conclusion, these findings indicate that strengthening employees' environmental awareness through GHRM practices can enhance employee performance in supporting sustainable green tourism. Future research should examine additional mediating or moderating variables and validate the proposed model across different hospitality settings.

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