Green Human Resource Competence of Environmental Skills and Employee Behaviour in Five-Star Hotels in Nairobi Metropolitan, Kenya

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Abstract

The study investigates the influence of employee environmental skill on employee environmental behaviour in five-star hotels. It assessed the role of Hotel Environmental Policy implementation as a moderating variable in the relationship. The study hypothesized that employee environmental skills significantly influence employee environmental behaviour in five-star hotels, and hotel environmental policy significantly moderates the relationship between environmental skills and employe behaviour. It is grounded in Ability-Motivation-Opportunity Theory, Natural Resource-Based View and Conservation of Resources Theory. A post-positivist philosophy, a quantitative paradigm, and a cross-sectional descriptive design were employed by the study. A sample of 312 employees, drawn from a population of 1,069 using stratified and simple random sampling, yielded 270 valid responses. Data were analyzed using descriptive and inferential statistics, with hypotheses tested using Structural Equation Modelling using AMOS. Findings revealed that environmental skills significantly and positively influence employee environmental behavior. While the relationship was positively influenced and strengthened, hotel environmental policy implementation only moderately strengthened this relationship, with small and statistically insignificant effect. It concludes that employee environmental skills are critical competence for demonstrating sustainable work behaviour and conservation of resources like energy and water. The results provide a foundation for informed decision-making for government agencies, regulatory bodies, and hotel industry leaders dedicated to environment al sustainability. It further concludes that policies on the environment that enhance employee consciousness are of great importance. The study recommends that managers promote green human resource competencies that enhance employee environmental skills through targeted training aimed at sustainable practices and resource conservation. Managers should seek to develop the right skills that will enable employees to fully participate in working sustainably, engage in conservation practices, as well as take initiative in green practices.

Key words: Green HR competences (GHRC) for employees, Employee Environmental Skills, Employee Environmental Behaviour, Five-Star Hotel**,** Conservation of Resource Theory

1.0 Introduction

Despite growing global and regional commitments to environmental sustainability, five-star hotels in the Nairobi Metropolitan region continue to grapple with aligning employee behavior to green practices, even as they play a vital role in Kenya's economy and tourism. The hotels are major

consumers of energy and water and generate significant amounts of food and solid waste, up to 20 to 30 kg of food daily per hotel, amounting to about 20,000 tons annually (Owusu et al*.,* 2023), making environmentally responsible behavior among employees critical to sustainability efforts.

While green competencies such as environmental skills are known to enhance employees' motivation to reduce their ecological footprint (Tian & Robertson, 2019), a persistent gap remains between policy and practice (Barakagira & Paapa, 2023; Ogunyomi & Bruning, 2023). This disconnect is often linked to limited technical know-how and weak eco-conscious attitudes (Osiako & Okummitha, 2020; Waweru, 2020), a challenge reflected in Kenya's declining Environmental Performance Index, which fell from 62.49% in 2016 to 30.8% in 2022 (Wolf et al., 2022). While research on green HRM exists in West Africa and Asia, few studies in Kenya focus on individual employees' environmental skills and behaviors in five-star hotels (Nisar et al*.,* 2021; Yusoff et al*.,* 2020).
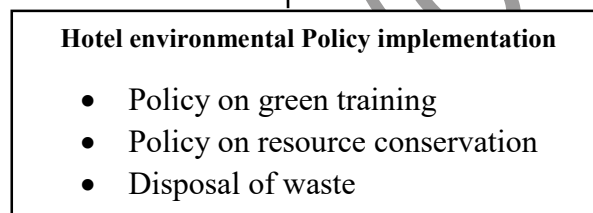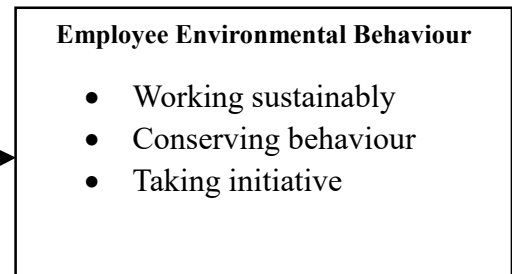
Furthermore, theoretical gaps also persist, with limited use of frameworks like AMO and COR theories to trace how environmental skills translate into behavior (Muisyo et al*.,* 2022; Uslu et al., 2023). Most existing research has focused on green practices at the organizational level, with hotels frequently serving as the primary unit of analysis (Nisar et al*.,* 2021; Yusoff et al*.,* 2020). Although some study examines employee perspectives, few studies have focused on the individual employee, particularly their environmental skills and behaviors.

Conceptual Framework

The conceptual framework suggests that the influence of environmental skills on employees' green behavior is both direct and moderated by hotel policy on the environment. Environmental Skills empowers employees to adopt pro-environmental behaviors, while the implementation of policies enhances this relationship. Furthermore, the conceptual framework is drawn from the theoretical underpinnings of Ability Motivation and Opportunity theory, Conservation of Resources theory and Natural Resource-Based View. These theories affirm that employee environmental behaviors can be heightened through enhancing green abilities, motivating employees to develop a positive attitude, through employee policy on the environment and providing opportunities for employees to demonstrate environmental behaviors.

Employees' environmental skills drive an employee towards actions that tend to conserve natural resources, prevent pollution and act as environmental stewards by engaging in environmental actions. The research suggests that to understand the impact of employee environmental behaviors, it is essential to examine the elements of GHR competency of environmental skills individually. This approach aims to provide a more thorough insight into the importance of green skills in shaping employee environmental behavior.

Environmental skills include: Skills in waste management and resource utilization. The dependent variable, which is environmental behaviors entailed: working sustainably, conserving behavior and taking initiative. Different environmental policies among participating firms in green training, resource use and waste disposal formed the core for the study. The interrelationships are presented in the conceptual in Figure 1.0.

INDEPENDENT VARIABLE

GHR competence

DEPENDENT VARIABLE

Employee Environmental Skills

- Skills on management of waste
- Resource utilization skills

Employee Environmental Behaviour

- Working sustainably
- Conserving behaviour
- Taking initiative

Hotel environmental Policy implementation
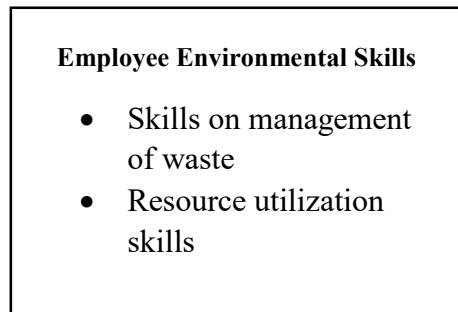
- Policy on green training
- Policy on resource conservation
- Disposal of waste

MODERATING VARIABLE

Note. Author (2025)

Figure 1.0: Conceptual Framework : GHR competence, hotel environmental policy and employee environmental behaviour

2.0 Literature Review

Conservation of Resources Theory (COR)

The idea of Conservation of Resources (COR) was founded by Hobfoll in 1988. According to theory, people aim to acquire, protect and hold on to resources they value, including things and intangible skills. Stress happens when there is a risk to losing these resources or if these rewards are not adequate. In green HRM, environmental knowledge and skills are seen as vital resources. According to Gilal et al. (2019), employees who possess environmental competencies are more likely to participate in environmental behaviors like waste reduction, energy conservation, and support for sustainable practices. These behaviors are in line with the COR principle, which states that having access to valuable resources like green skills increases resilience and creates gain cycles, whereby environmentally conscious actions encourage more green engagement (Rudyanto & Pirzada, 2020).

Applied to the influence of environmental skills on employee environmental behavior in five-star hotels, COR theory explains that green competencies empower employees to perceive the value of conserving resources like water and energy, not only at work but in daily life. When moderated by hotel environmental policy, which acts as a supportive resource, employees are more likely to channel their environmental knowledge into consistent eco-friendly actions (Aboramadan et al., 2021; Ahmad et al., 2021). Besides, lacking ecological education or helpful rules lowers staff capabilities to become greener (Hameed et al., 2020). Therefore, COR offers a paradigm to comprehend how environmental skills promote sustainable employee behaviors and aid in preventing the loss of organizational resources

Natural Resource-Based View (NRBV)

The Natural Resource-Based View (NRBV) is an update to the usual Resource-Based View (RBV). It argues that organizations can maintain a sustainable advantage by building green skills that others find rare, valuable and essential. Stewardship of products, control of pollution and sustainable development are the three strategic capabilities in tourism (Hart, 1995). Pollution prevention and stewardship explain employee environmental behaviour, whereas the sustainable development aspects explain more the moderating influence of hotel environmental policies in the link between Green Human Resource competences and employee environmental behaviour. The stewardship component explains more of employee environmental behaviour.

Linked to the study, the NRBV paradigm suggests that employees' environmental abilities, like eco-friendly service methods, waste reduction, and sustainable resource usage, are valuable, rare, unique, and non-replaceable in the setting of five-star hotels (Barney, 1991; Hart, 1995). Because of these skills, people can help the organization meet its ecological goals. A key component of the NRBV is the creation of internal resources that are in line with ecological and economic performance goals, which is achieved when hotels invest in the development of these green competencies (Leonidou et al., 2017). Implementing hotel environmental policies serves as a crucial moderating factor that affects how well staff environmental abilities are converted into behavior. Environmental policies that are unambiguous, uniform, and upheld institutionalize expectations and offer contextual assistance that strengthens the use of skills (Delmas & Toffel, 2008).

The Ability-Motivation-Opportunity (AMO) theory

Ability-Motivation-Opportunity (AMO) theory, measure performance as a function of these three aspects (P = f [AMO] (Blumberg & Pringle, 1982). Initially focused on individual dimensions of performance, the theory evolved to incorporate the external environment, arguing that all three elements ability (skills and competencies), motivation (willingness and positive attitude), and opportunity (contextual and structural support) must be present for optimal performance. Appelbaum et al. (2001) and many other researchers (Boxall, 2003; Bailey et al., 2001; Boselie, 2010; Boxall & Purcell, 2022) bring attention to how high-performance work systems help improve outcomes in organizations.

The theory asserts that when employees possess the required skills, are motivated, and are given opportunities to participate, performance improves. In the context of environmental sustainability, this model is applicable as it explains how green HRM practices, such as training and learning systems that focus on ecological awareness, build environmental competence (Dumont et al., 2017).

Regarding this study, the AMO theory offers a solid foundation for comprehending how environmental skills (ability) affect five-star hotel employees' green behavior. Green HR competencies and awareness initiatives can help employees' pro-environmental attitudes, which are a reflection of their motivation (Wang & Shen, 2016). Opportunity is evident when staff are allowed to engage in environmental initiatives and decision-making processes, aligning their values with the hotel's green objectives (Renwick et al., 2013).

The application of hotel environmental policies serves as a moderating factor by influencing the opportunity and motivational aspects. Effectively communicated and consistently enforced policies improve the contextual support required for staff members to successfully apply their environmental skills (Jabbour et al., 2015; Pinzone et al., 2016). His integration of the AMO model with the study variables provides a robust lens for analyzing employee environmental performance in hospitality settings. Accordingly, employees who are skilled, motivated, and supported by green-aligned hotel policies are more likely to exhibit environmental behaviors both within and outside of their formal roles (Dumont et al., 2017).

Environmental Skills and Employee Environmental Behavior

Chen (2016) examined the environmentally friendly skills of hotel staff and how they enhance the overall performance of the hotel in Taiwan. The study variables focused on the organization as a unit of analysis and Hotels' green abilities. Using alumni from a tourism and hospitality program, the study sampled 233 respondents. According to the study's hypothesis, hotels' green ability was positively impacted by the green ability of their staff, which included consciousness of the environment, environmental knowledge and environmental skills. The findings show that staff members account for about a fifth of hotels' capacity to adopt more environmentally friendly procedures. Despite recognizing environmental skills as a part of green ability, the study did not look at how organizational policies might have influenced or reinforced that influence. Furthermore, the study focused on hotel performance rather than employee environmental behavior as a separate outcome, which left a gap in knowledge on how particular environmental

competences transfer into environmental actions at the individual level, a gap that this study sought to fill.

A study by Muisyo et al. (2022) focused on the Role of green HRM in driving hotels' green creativity. By examining how GHRM practices affect hotel staff green creativity in three to five-star hotels in Kenya, the study underlines the role of GHRM practices in cultivating an environmentally sustainable culture in the hotel industry. The research was grounded on the Social Exchange Theory (SET) and Environmental Stewardship. Data collected was analyzed using a quantitative technique, including multilevel structural equation modeling (SEM). The findings revealed GHRM strategies like as green training, green recruitment, and green performance management have a good impact on employee green creativity. The study highlights the moderating influence of servant leadership and green culture in encouraging environmentally conscious behavior, but it ignores certain green abilities in favor of creativity. By going beyond standard GHRM procedures and looking at individual environmental capabilities and behavior, tempered by hotel environmental policy, the current research closes this gap.

An empirical study by Nisar et al. (2021) looked at how environmental performance in Malaysian hotels with green certification was affected by Green Human Resource Management practices. The study focused on ways in which pro-environmental behavior and green intellectual capital by employees moderate the link between GHRM practices and environmental outcomes. PLS-SEM was employed to look at the responses from 374 interviewed hotel staff who completed the questionnaire. Green training and development and green disciplinary methods were thoroughly assessed. The findings showed that green intellectual capital is greatly increased by GHRM practices, which in turn encourages employees to act in an environmentally friendly manner, which was found to be a crucial component in enhancing hotels' environmental efficiency.

According to the study's findings, supporting eco-friendly practices and cultivating green skills via training are crucial tactics for sustainability in the hotel sector. The authors suggest rigorous green discipline and training procedures, but they fail to consider employee environmental skills as unique predictors of behavior and how hotel environmental rules may limit their expression.

The research conducted by Uslu et al. (2023) examined how Green Human Resource Management (GHRM) practices affect hotel employees' green psychological climate (GPC) and environmental green behavior (EGB). It found that GHRM practices such as recruitment, training and performance improved employee's perceptions of their organization's commitment to sustainability, leading to employee engagement in environmentally responsible behaviors. Besides personal traits, and explicitly environmental sensitivity and altruism improve GPC's effect on green behavior. Employees who are inherently more environmentally conscious or philanthropic are more inclined to pro-environmental behavior, when they perceive a supportive green climate. This perception, fostered greater behavioral. Employees who are naturally more environmentally concerned or altruistic are more likely to act in environmentally friendly ways when they perceive a supportive green climate. In contrast, the current study investigates how green skills employees' actual environmental knowledge and competencies influence their environmental behavior, with hotel environmental policy implementation serving as a moderator. This fills a gap left by Uslu et al. (2023), who emphasized personal ideals and views over actual skills and institutional policy structures.

Hotel environmental policies

Kim et al. (2017) investigated how environmental-transformational leadership and the presence of environmental policies affect employees' organizational citizenship behaviors toward the environment (OCBE). The findings show that when hotels implement environmental regulations and demonstrate great environmental leadership, employees are more likely to form favorable environmental values. Such ideas drive people to adopt eco-friendly actions outside of their professional responsibilities. Although the study does not specifically address employee green skills as competencies, it does underline the importance of environmental regulations in building a workplace culture that encourages ecologically responsible conduct. Current research analyzes the influence of employees' green skills, defined as environmental abilities, on their environmentally friendly activities, rather than focusing merely on beliefs or discretionary behaviors.it also introduces a significant moderating variable: the extent to which hotel environmental policies are enforced. This provides a more precise knowledge of how institutional structures facilitate or impede the transfer of skills into behavior.

Additionally, the current study introduces a critical moderating factor: the extent to which hotel environmental policy is implemented. While Kim et al. (2017) establish that environmental policies influence beliefs and OCBE, they do not explore the interaction between green skills and policy implementation. This study fills this gap by providing context-specific knowledge from five-star hotels in Nairobi, a location that is underrepresented in the existing literature on green HRM and in hospitality.

Yusoff et al. (2020) focused on Green Human Resource Management Practices and Environmental Performance in Malaysian Green Hotels, specifically through the mediating roles of green intellectual capital and pro-environmental behavior. The study underlines that GHRM methods, such as green training, development, and recruiting, produce green intellectual capital (knowledge, skills, and values), which promotes ecologically responsible actions among hotel employees. In contrast, the current study examines how employee' green skills, actual knowledge and competencies directly affect their environmental behavior, with an emphasis on how the implementation of hotel environmental policies moderates this relationship.

Even though Yusuff et al. (2020) suggest that policy support is important, they did not study it as a moderating factor Empirically. In contrast, the current study specifically investigates the direct influence of employee green skills, actual knowledge on their environmental behavior, with a particular focus on how hotel environmental policy implementation moderates this relationship. The current study fills this methodological and conceptual gaps and adds fresh data to our knowledge of how institutional frameworks enhance the behavioral impact of employee abilities. Moreover, the current context of five-star hotels in the Nairobi Metropolitan area adds geographically diverse insights that are lacking in the Malaysian-focused study, advancing the global relevance of green HRM scope.

The dominant themes across previous studies are drawn from resources in Malaysia, Taiwan and Turkey (Chen, 2016; Nisar et al., 2021; Uslu et al., 2023; Yusoff et al., 2020). While these studies offer valuable insights, their findings may not fully apply to African settings, where factors like

environmental policy enforcement, training systems, and organizational culture differ considerably. This presents a notable contextual gap, especially in the Nairobi Metropolitan area, where both tourism and environmental sustainability are critical, yet the institutional environment is unique.

3.0 RESEARCH METHODOLOGY

Research Philosophy and Design

A post-positivist research philosophy was used in the study because it takes an objective standpoint. Shafi (2013) states that post-positivism allows researchers to detach from the study, allowing the main focus of the research to rest only on the phenomenon being examined. The philosophical approach is consistent with realism which believes reality is real even if we do not perceive it (Scotland, 2012). This design enables the collection of data at a single point in time, allowing for the examination of relationships among study variables across a broad population (Ngigi *et al.,* 2016). It also ensures consistency in data collection across multiple respondents. Notably, earlier researchers effectively used this methodology to investigate how green HRM practices affect eco-friendly hotel practices (Karmoker et al, 2020), confirming its suitability and dependability for comparable study contexts.

Target Population and Sampling

The study focused on full-time workers in the Nairobi Metropolitan area's operational divisions of five-star hotels. All the people who would benefit from the study's findings are called the target population, according to Zhao et al. (2013). In this case, employees working in important service sectors, including the kitchen, laundry, entertainment, and lodging departments, were among the target group. These employees serve as critical agents in implementing green initiatives, as they are directly involved in the day-to-day operations and are positioned at the frontline of the hotel's service delivery. They play a crucial part in achieving the hotel's environmental goals since they make sure that operations are conducted effectively and sustainably. To improve representativeness, a mix of simple random sampling and stratified sampling methods was used. Using Wright's (2014) sample allocation approach, 312 employees were chosen from a total of 1,069 employees from 10 five-star hotels in order to determine proportionate representation from each hotel. Out of the distributed questionnaires, 270 valid responses were obtained and included in the final analysis.

Table 1: *Population and Sampling Techniques*

Hotel	Target Population Employees	$n_h = (n_h/N)n$ sample size
Sovereign Suites	90	26
Ole Sereni Hotel	101	29
Panari Hotel	102	30
The Boma Hotel	136	40
The Windsor Hotel	100	29
The Safari Park Hotel	150	44
The Nairobi Safari Park	83	24
The Sarova Stanley Hotel	82	24
Crown Plaza	126	37
Villa Rosa Kempinski	99	29
TOTAL	**1,069**	**312**

Research Instrument

The study used structured questionnaires to collect pertinent information for the study. The use of questionnaires is expected to offer objective responses due to their standardized way of data collection and provides an opportunity for anonymity. The structured questionnaires with a 5-point Likert scale ranged from "1=strongly disagree to 5 =strongly agree" to indicate levels of agreement. In addition, structured questionnaires were used to make statistical analysis manageable. The questionnaire consisted of items on Environmental skills, Hotel environment policy and employee environmental behavior.

Data Collection Procedures

Prior to data collection, the researcher obtained ethical and institutional clearance from the Department of Graduate Business, School of Business and Economics at the Catholic University of Eastern Africa (CUEA), as well as a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). These approvals authorized the researcher to conduct the study in the selected five-star hotels within Nairobi County.

To ensure the reliability and clarity of the research instrument, a pilot study was conducted involving at least 30 employees, representing 9.62% of the total sample size. The suggestion by Cooper and Schindler (2011) is supported when pilot testing is done on between 5% and 10% of the target sample. After piloting the questionnaire, the comments were used to make needed improvements before collecting all the data.

Data Analysis and Presentations

The research employed both descriptive and inferential statistical analyses on the collected data. The information on the sample was summed using both mean scores and standard deviations. Hypotheses were examined with Structural Equation Modeling on the AMOS (Analysis of Moment Structures) software. Furthermore, verification for response bias and common methods was done including tests for assumptions of SEM such as normality, missing data, test for linearity, multicollinearity and homoscedasticity. As a result of these actions, the data were suitable for reliable and genuine statistical analysis.

Ethical Considerations

Many ethical standards were applied during the investigation. Respondents were not allowed to write their names onto the survey when filling it out. All participants were informed that they could choose not to finish the survey without consequences. Experts checked all the information in the research paper to ensure it was original. The National Commission for Science, Technology, and Innovation (NACOSTI) granted the researcher official authorization before the start of data collection.

4.0 RESULTS AND DISCUSSION

Descriptive Analysis of Variables

The study used mean scores to rank the items under each research variable. Oxford (1990) states that mean scores fall into three categories: low, medium, and high likelihood of a particular event or response. The ranges for low and medium incidences are 1.0 and 2.0, 2.5 and 3.4, and 3.5 and 5.0 for high occurrence, respectively.

Environmental Skills

Environmental skills included four items, which were coded from ES1 to ES4. ES1 (mean= 4.24) was on the employee being able to manage waste and recycle reusable items, ES2 inquired whether the employee had the ability to minimize water consumption in his or her area of work. In addition, ES3 was to establish whether the employee could recognize the effect of environmental hazards in the hotel. Lastly, ES4 inquired whether the employee could minimize and maximize the efficiency of energy consumption. All the items met the Cronbach's alpha coefficient of at least 0.7. For this study the results are presented in Table 2.

Table 2: Results on Mean score, on Environmental skills

Variable	Mean scores	Level of occurrence	Cronbach's Alpha If Item Deleted
ES1	4.237037	High	0.701
ES2	4.311111	High	0.703
ES3	4.188889	High	0.700
ES4	4.244444	High	0.702
AVERAGE	4.24537	High	

Note: Author (2025)

The results in Table 2 show that items on environmental skills were all highly ranked, as the mean scores ranged from 4.1 to 4.3. However, the ES2 was the highest in ranking (4.311), while ES3 (4.311), that's employees having the ability to minimize water consumption in the area of work. While ES3, which involved recognizing the effect of environmental hazards, was the lowest in the rank. The findings imply to a great extent, that employees had environmental skills and it is expected that this would translate to the demonstration of green behaviours. Thus, environmental skills were explained by all four items, SE1, SE2, SE3, and SE4. The results' implication is that employees possess strong environmental skills, especially in minimizing water consumption. this is consistent with Safari et al. (2020) findings that environmental knowledge and awareness have a significant impact on employees' green behaviour, implying that skill acquisition leads to pro-environmental activities.

Hotel Environment Policy

Table 3: Results on mean scores, standard deviations for hotel environmental policy and Employee environmental behaviour

Item Statistics				
	Mean score	Mean	Std. Deviation	N
My hotel has clear policy on the environment has made me conscious of environmental effects	4.2	4.16	0.762	270
I have benefited from the environmental information posted on the hotel website	4.0	4.04	0.859	270
Hotel policy on resource conservation has influenced my use of energy and water conservation skills	4.1	4.1	0.757	270
Hotel policy on waste management has enhanced my knowledge, attitude, and skills in waste management	4.1	4.07	0.777	270

Note. Author (2025)

The result in Table 3 indicates the mean scores and standard deviations. All items were ranked high by the respondents, with mean scores ranging from 4.0 to 4.2. All the items met the minimum threshold of a reliability coefficient of at least 0.7. The item with the highest ranking had a mean

score of 4.2(SD=0.762), seeking to find out whether the hotel had a clear policy on the environment that made them conscious of environmental effects. This indicates that due to clear communication of policies, the majority of employees are well aware of environmental concerns. The second item sought to establish whether employees benefited from environmental information posted on the website was least ranked with mean score of had the lowest mean score of 4.04 (SD =0.859). The item, Hotel policy on resource conservation, has influenced my use of energy and water conservation skills, yielded a mean score of 4.10 (SD = 0.757) and lastly item on hotel policy on waste management has enhanced my knowledge, attitude and skills in waste management scored mean 4.07 (SD = 0.777). These results are consistent with prior studies that confirm this analysis of high mean scores (4.0-4.2) and great internal reliability ($\alpha \geq 0.7$) for hotel employees' awareness and response to environmental rules. Similarly, Omune *et al.* (2021) research in Kenyan hotels reveals that techniques such as energy and water saving are widely followed, indicating good communication and staff participation with environmental regulations. The results imply that hotel policy has a significant impact on the relationship between HR competence of environmental skills and employee behavior.

Table 4: *Descriptive analysis on Environmental Behaviour (EEB)*

	Mean	Std. Deviation	N
Working Sustainably behavior (WS)			
I avoid processes that are energy inefficient	4.09	0.748	270
I optimize use of detergents when doing cleaning	4.11	0.738	270
I choose virtual meetings instead of travel	4.10	0.772	270
I use stairs instead of elevators when going from floor to floor in the hotel	4.01	0.783	270
Conserving Behavior (CON)			270
I turn off the electric appliances, such as computers, TV monitor, etc. before I get off work.	4.37	0.778	270
When I leave a room that is unoccupied, I turn off light	4.11	0.723	270
I reuse disposable plastic bottles, materials	4.10	0.724	270
I recycle cans., Bottles and paper	3.90	0.982	270
I separate recyclable materials from thrash	4.11	0.736	270
Taking initiative Behavior (TI)			
I champion for energy reduction policy in my hotel	4.11	0.741	270
I'm willing to compromise comfort to reduce energy	4.11	0.743	270
Argue for environmental issues on board	3.33	0.735	270
I turn down an environmentally unfriendly proposal	4.08	0.762	270
Valid N (listwise)			270

Note. Author (2025)

Furthermore, the item on whether employees avoided processes that were energy inefficient had (mean score=4.09, SD= 0.748) , employee seeking to optimize the use of detergents during the cleaning (mean score=4.11, SD= 0.738) , and item on whether employee prefers to choose virtual meetings instead of travel had (mean score=4.10, SD= 0.772), while the other item sought to establish employee preference on using stairs instead of elevators when moving from floor to floor in the hotel had (mean score=4.10, SD= 0.783). These results imply employees on great extend demonstrated working sustainably behavior particularly on optimization on use of detergents which had highest occurrence and results concur with Fatoki (2019) who observed that employees in most often embrace green practices when organizations policies support them.

 Furthermore, on conserving behaviour, the first item sought to find out if employees turn off electric appliances, such as computers (mean score=4.37, SD= 0.778), TV monitors before getting off work, second item investigated whether employee before leaving the room that was unoccupied had practice of turning off lights (mean score=4.11, SD=0.778). In addition, third item sought to find out whether employee reuses disposable plastic bottles and paper and other materials (mean score=4.10; SD= 0.723). Furthermore, fourth item sought to establish whether employee recycles cans, bottles and paper (mean score=3.90; SD=0.982), indicate employees may not recycle frequently. Whereas, fifth item investigated whether employee separates recyclable materials from thrash (mean score=4.11; SD= 0.736). The means cores for conserving items imply employees had demonstrated green behaviors of conserving with employee's behavior of turning off lights being the highest in the rank while recycling of cans and bottles being the least in the rank. The results imply generally employees demonstrated conserving behavior.

The findings are supported by Elziny (2019) who reported that employees practice of saving energy had positive impact due to explicit environmental regulations of the hotel. Other items were on taking initiative (TI). For instance, TI1 sought to investigate whether employee champions for energy reduction policy in his hotel (mean score=4.11; SD= SD=0.741), TI2 sought to establish employee's willingness to compromise comfort to reduce energy (mean score=4.11; SD=0.743), TI3 on the other hand sought to find out whether employee turns down an environmental unfriendly proposal (mean score=3.33; SD= 0.735) and TI4 sought to investigate whether employee had opportunity to argue for environmental issues on board (mean score=4.08; SD= 0.762). This result is in line with a study by Fatoki (2019), which showed that although workers may be in favor of environmental legislation, there can be differences in how actively they participate in environmental conversations.

Inferential Results

4.4.1 Environmental Skills and Employee Environmental Behavior

The study hypothesised that Environmental Skills would positively and significantly influence employee environmental behaviour. The results are presented in Figure 4.4 and table 4.16.

Table 5 : Results on the relationship between   Environmental Skills competency and employee environmental behaviour as composite variable

Variable relationship		Estimate	S.E.	C.R.	P	Standardized estimates
EEB <---	ES	.319	.070	4.526	***	0.329

Note. *** means P<0.001

The findings in Table 5 showed that employees' environmental behavior changed by 0.319 for every unit change in environmental abilities. This relationship was significant at p-value <0.001 and had a critical ratio of 4.526. Hence, Hypothesis $_{Ha1}$ was accepted. The findings indicate that environmental skills positively and significantly influenced employee environmental behaviour. Besides, standardized estimates for the path coefficients from ES to EEB is 0.329. This means environmental skills contribute 33% of employees' environmental behaviours. These results imply that green competency of environmental skills is significant in growing employees' behaviour. It is important to ensure that Green Human Resource competences in the form of green skills, such as being able to manage waste appropriately, minimizing use of water and energy without compromising quality, being able to recognize environmental hazards in hotels, and minimizing and maximizing energy consumption, are critical in influencing employee environmental behaviour. The current results affirm this result by recognising the need for capacity building of TVET trainers for growing green skills among the trainees. his finding supports and extends prior research (e.g., Nisar et al*.,* 2021), affirming that environmental competency, such as skills in energy conservation, waste reduction, and sustainable practices are critical drivers of behavioral change in organizational settings. This implies investment in the development of environmental skills among hotel employees can yield measurable improvements in sustainable workplace behavior.

The study results contradict those of Astawa et al. (2012), who reported that green skills were weakly influenced. Furthermore, the results mirror previous studies   (Next Tourism Generation [NTG] Alliance, 2019), who highlights the link between improved task organization and more effective operations and training in green skills for the hospitality industry, and Olga et al. (2011), who observed the significance of workers being skilled in activities that are likely to lead to environmental friendliness.

Table 6: Results on the moderation effect of Hotel Environmental Policy, GHR competences (EK, EA, and ES), and Employee Environmental Behaviour (EEB)

Regression Weights: (Group number 1 - Default model

|		Estimate	S.E.	C.R.	P	Standardized estimates
EEB <---	ES	0.222	.091	2.439	.015	0.211
EEB <---	HEP	.657	.089	7.411	***	0.638
EEB <---	Interaction ESxHEP	.061	.054	1.125	.261	0.054

Note. Author (2025)

Environmental Skills, Hotel Environmental Policy and Employee Environmental behaviour

The study further hypothesized that hotel policy on environment would significantly moderates the relationship between environmental skills and employee environmental behaviors in hotels (Ha2). It was found that hotel environmental policy showed a moderating influence that was both positive and non-significant on the relationship between environmental skills and employee environmental behavior (estimates=0.061, significance level, P=0.261). Therefore, Ha2 is rejected. However, the strength of the relationship was reduced by 0.161 from direct estimates 0.222 to interaction term estimates of 0.061. Despite these shifts, the findings indicate that the implementation of Hotel Environmental Policy has no significant moderating impact in the relationship between ES and EEB. Although the relationship was strengthened, the strength was insignificant. The results of the standardized estimates show environmental skills interaction with HEP contributes 5.4%.to relationship between environmental skills and employee green behaviour.

The research results concur with earlier investigations by Astawa et al. (2021), who found that green skills had a weak influence on intentions to implement green behaviour or practice. The study results are supported by those of Chan et al.*(*2014), who pointed out that having awareness of environmental problems and lacking green ability to execute is due to the failure to have an autonomous decision-making process, especially for junior employees may lead to negative results. This implies that inadequate information and awareness may cause individuals to interpret situations relatively in a manner that does not encourage staff to embrace more eco-friendly practices. The current study therefore contradicts previous literature such as Dumont et al.*(*2017), who reported that organizations' green culture or policies on environmental provide opportunity for employees to acquire environmental knowledge and skills for green activities and voluntary participation in green tasks.

Furthermore. the results on graphical representation reveal that hotel environmental policy strengthens the positive relationship between environmental skills (ES) and employee environmental behaviour (EEB) as shown in Figure 4.1
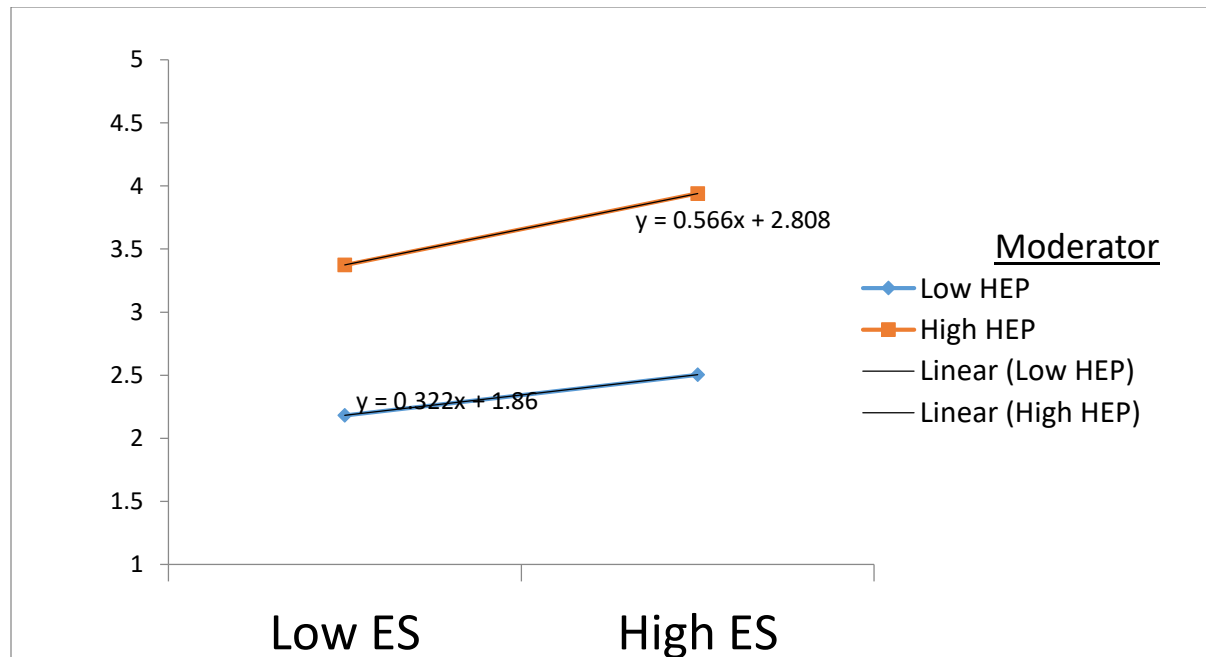
Note : Author (2025),

Figure 4.1: *Slope on the moderating influence of Hotel Environmental Policy in the relationship between ES and EEB*

Additionally, the results of the moderating effect reveal that hotel environmental policy strengthens the positive relationship between environmental skills and employee environmental behaviour. Although, appositive influence was observed and the strength of the relationship was strengthened, the results indicate that Hotel Environmental Policy did not significantly reduce the influence of the relationship between environmental skills and employee environmental behaviour. Furthermore, the effect size of hotel environmental policies on the connection between ES and EEB was (f2 was -0.007) was small and negligible.

Conclusions and Recommendations

In conclusion, green skills play a vital role in shaping how employees engage with environmental practices, especially in five-star hotels within Nairobi's metropolitan region. Hotels, as key economic players, face increasing pressure to adopt sustainable practices, and empowering staff with the right environmental technical abilities is central to this effort. Yet, the lack of attention paid to individual green capabilities is due to the weak link between hotel environmental policies and employee actions. Strengthening these through frameworks like AMO, NRBV, and COR can bridge this gap, improve environmental behaviour, and increase the hospitality industry's contribution to Kenya's broader sustainability goals.

By highlighting the critical link between green competencies and effective hotel environmental policies, the study provides a foundation for informed decision-making for government agencies, regulatory bodies, and hotel industry leaders who are committed to promoting environmental sustainability. as well as fostering pro-environmental behavior among employees. It recommends

collaboration between academic institutions and the hospitality sector to update curricula and provide training that encourages environmentally friendly behavior. Ultimately, this research contributes to ongoing efforts to embed sustainability into both policy and practice, paving way for a more environmentally conscious hospitality industry.

The study concludes that environmental skills positively and significantly influence employee environmental behaviour. In this regard, environmental skills related to being able to manage waste and recycle reusable items, minimizing water consumption, the ability to recognize health hazards in hotels as well as having the ability to minimize the use of energy, play an important role in enhancing employee environmental behaviours.

The study also concludes that employees' ability to conserve resources through day-to-day routine behaviour, such as turning of electrical appliances such as televisions and computers, putting out lights when leaving the room, being able to recycle and reuse bottles and separate recyclable material from trash are key are important aspects of employee green behaviours.

Furthermore, the research concludes that policies on the environment that enhance employee consciousness are of great importance. Therefore, posting of environmental information on the websites, and considering policies that lead to resource conservation in terms of energy and water, waste management were of great significance to development of attitude and skills required. It is therefore paramount that employees are provided with the opportunity to champion for resource conservation policies, to argue for environmental issues in their hotel. proposals.

The study recommends managers to focus on training that seeks to develop the right skills that will enable employees to fully participate in waste management, recycling behaviour, as well as processes that seek to minimize and optimize resource utilization such as energy, water, and the ability to avoid health hazards, should be put into consideration. This can be done by encouraging up-skilling through off-the-job training and on-the-job training through green mentorship programs.

Hotel managers to ensure hotel environmental policies that enhance employees towards feeling positive about environmental protection and feeling proud of environmental practices within the hotel are enforced. Future studies should also compare environmental skills among hotel managers across hotel star levels.

References

Aboramadan, M., Albashiti, B., Alharazin, H., & Alrowwad, A. (2021). Green human resource management, employee green behavior, and environmental performance: The mediating roles of employee engagement and personal environmental norms. Business Strategy and the Environment, 30(1), 13–25. https://doi.org/10.1002/bse.2587

Ahmad, I., Donia, M. B. L., Khan, A., & Waris, M. (2021). Do green human resource management practices predict employee pro-environmental behavior? The role of green behavioral intentions and individual green values. Business Strategy and the Environment, 30(7), 2823–2834. https://doi.org/10.1002/bse.2784

Ansong, A., Andoh, R. P. K., Ansong, L. O., Hayford, C., & Owusu, N. K. (2025). Toward employee green creativity in the hotel industry: implications of green knowledge sharing, green employee empowerment and green values. Journal of Hospitality and Tourism Insights. Advance online publication. https://doi.org/10.1108/JHTI-08-2024-0867

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). Manufacturing advantage: Why high-performance work systems pay off. Cornell University Press.

Astawa, I. K., Budarma, I. K., Widhari, C. I. S., & Suardani, A. A. P. (2021). Building Green Hotel Image Through Employee's Green Behaviour in Five Star Hotel in Bali. Technium Soc. Sci. J., 23, 528.

Bailey, M. (2011). Policy, professionalism, professionality and the development of HR practitioners in the UK. Journal of European Industrial Training, 35(5), 487-501.

Barakagira, A., & Paapa, C. (2023). Green practices implementation for environmental sustainability by five-star hotels in Kampala, Uganda. Environment, Development and Sustainability, 15(3), 1–17. https://doi.org/10.1007/s10668-023-03101-7

Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. International Journal of Manpower.

Boxall, P. (2003). HR strategy and competitive advantage in the service sector. Human Resource Management Journal, 13(3), 5-20.

Boxall, P., & Purcell, J. (2022). Strategy and human resource management. Bloomsbury Publishing.

Chen, C.-H. (2016). Building green hotel by employees' green awareness, knowledge, and skill. Preprints, 2016080167. https://doi.org/10.20944/preprints201608.0167.

Cooper, J. & Schindler, S. (2011). Business Research Methods. (11th Ed.)., New Delhi, India: McGraw-Hill International Edition

Delmas, M. A., & Toffel, M. W. (2008). Organizational responses to environmental demands: Opening the black box. Strategic Management Journal, 29(10), 1027–1055. https://doi.org/10.1002/smj.701

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

Gilal, F. G., Ashraf, Z., Gilal, N. G., Gilal, R. G., & Channa, N. A. (2019). Promoting environmental performance through green human resource management practices in

higher education institutions: A moderated mediation model. Corporate Social Responsibility and Environmental Management, 26(6), 1579-1590.

Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance? International Journal of Manpower, 41(7), 1061–1079. https://doi.org/10.1108/IJM-08-2019-0388

Hameed, Zahid, Ikram Ullah Khan, Tahir Islam, Zaryab Sheikh, and Rana Muhammad Naeem. "Do green HRM practices influence employees' environmental performance?" International Journal of   Manpower (2020).

Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of Management Review, 20(4), 986–1014. https://doi.org/10.5465/amr.1995.9512280033

Hart, S. L., & Dowell, G. (2011). A natural-resource-based view of the firm: Fifteen years after. Journal of Management, 37(5), 1464–1479. https://doi.org/10.1177/0149206310390219

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Jabbour, C. J. C., Jugend, D., de Sousa Jabbour, A. B. L., Gunasekaran, A., & Latan, H. (2015). Green product development and performance of Brazilian firms: measuring the role of human and technical aspects. Journal of Cleaner Production, 87, 442-451

Karmoker, K., Zannat, T., & Roy, B. (2020). Can green HRM practices influence hotel employees' green behavior? Evidence from Khulna city hospitality industry, Bangladesh. International Journal of Human Resource Studies, 10(4), 149-167.

Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2017). Greening the marketing mix: Do greeners lead to greener? International Journal of Business and Social Science, 8(1), 45–63.

Next Tourism Generation (NTG) Alliance. (2019). Next Tourism Generation (NTG) Alliance: 2019

Ngigi, K. S., Wakahiu, J., & Karanja, M. (2016). Fundamentals of Research Methods in Education: A Students Handbook.

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, 127504. https://doi.org/10.1016/j.jclepro.2021.127504

Nisar, Q. A., Haider, S., Ali, F., Naz, S., & Rana, S. (2021). Green human resource management practices and environmental performance: The role of green psychological climate and green organizational culture in the hospitality industry. Journal of Cleaner Production, 311, 127504. https://doi.org/10.1016/j.jclepro.2021.127504

Ogunyomi, P., & Bruning, N. S. (2023). When and how green human resource management practices turn to employees' pro-environmental behavior of hotel employees in Nigeria: The role of employee green commitment and green self-efficacy. Journal of Quality Assurance in Hospitality & Tourism, 1–25. https://doi.org/10.1080/1528008X.2023.2249233

Omune, B., Kambona, O., Wadongo, B., & Wekesa, A. (2021). Environmental management practices implemented by the hotel sector in Kenya. Maseno University Repository. Maseno University Repository+1ResearchGate+1

Osiako, P. O., & Kummitha, H. R. (2020). Environmental management practices among coastal beach hotels in Kenya.

Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: the role of 'Green' HRM. Journal of Cleaner Production, 122, 201-211.

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.

Rudyanto, A., & Pirzada, K. (2020). Conservation of resources and work engagement: A study on the influence of work stress on innovative behavior. International Journal of Psychosocial Rehabilitation, 24(5), 3892–3905. https://doi.org/10.37200/IJPR/V24I5/PR2020483

Safari, A., Salehzadeh, R., Panahi, R., & Abolghasemian, S. (2020). Multiple pathways linking environmental knowledge and awareness to employees' green behavior. Corporate Governance, 18(1), 81–103. https://doi.org/10.1108/CG-08-2016-0168

Shafi, A. A. (2013). War Economics as positive science: from traditional to modern political economy. IMPACT: International Journal of Research in Applied, Natural and Social Sciences.

St. John, F. A. V., Brockington, D., Bunnefeld, N., Duffy, R., Homewood, K., Jones, J. P. G., Keane, A., Milner-Gulland, E. J., Nuno, A., & Razafimanahaka, H. J. (2016). Research ethics: Assuring anonymity at the individual level may not be sufficient to protect research participants from harm. Biological Conservation, 196, 208–209. https://doi.org/10.1016/j.biocon.2016.01.025

Tian, Q., & Robertson, J. L. (2019). How and when does perceived CSR affect employees' engagement in voluntary pro-environmental behavior? Journal of Business Ethics, 155, 399-412.

Uslu, F., Keleş, A., Aytekin, A., Yayla, Ö., Keleş, H., Ergun, G. S., & Tarınç, A. (2023). Effect of green human resource management on green psychological climate and environmental green behavior of hotel employees: The moderator roles of environmental sensitivity and altruism. Sustainability, 15(7), 6017. https://doi.org/10.3390/su15076017

Wang, Y., & Shen, N. (2016). Environmental regulation and environmental productivity: The case of China. Renewable and Sustainable Energy Reviews, 62, 758-766.

Waweru, M. (2019). Factors influencing Environmental concern and Pro-environmental Behavior among University of Nairobi Students (Doctoral dissertation, University of Nairobi).

Wolf, M. J., Emerson, J. W., Esty, D. C., Sherbinin, A. D., & Wendling, Z. A. (2022). 2022 Environmental Performance Index: ranking country performance on sustainability issues [full report].

Wright, T. (2014). A simple method of exact optimal sample allocation under stratification with any mixed constraint patterns. Statistics, 07.

Yusoff, Y. M., Nejati, M., Kee, D. M. H., & Amran, A. (2020). Linking green human resource management practices to environmental performance in hotel industry. Global Business Review, 21(3), 663–680. https://doi.org/10.1177/0972150918779294

Zhao, L., Tian, L., Cai, T., Claggett, B., & Wei, L. J. (2013). Effectively selecting a target population for a future comparative study. Journal of the American Statistical Association, 108(502), 527-539.