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The impact of green HRM on green creativity and green empowerment: Evidence from the UAE

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Abstract

This study examines the impact of Green Human Resource Management (GHRM) on Green Creativity (GC) and Green Empowerment (GE) within the hospitality sector in the United Arab Emirates (UAE). The study further explores the moderating role of intrinsic rewards on these relationships to enhance understanding of employee-driven sustainability initiatives. A quantitative research design was employed using purposive sampling to collect data from frontline employees at 4- and 5-star hotels in Dubai. A structured questionnaire was used to measure GHRM, GC, GE, and intrinsic rewards. Statistical analyses, correlation, regression, and moderated mediation tests were conducted to test hypotheses. The results reveal that GHRM positively influences both GC and GE. Furthermore, GE mediates the relationship between GHRM and GC. Intrinsic rewards were found to moderate the relationship between GHRM and GC but not between GHRM and GE. These results highlight the psychological mechanisms through which HR practices can stimulate green innovation and employee engagement in sustainable practices. The research contributes to the growing literature on sustainable HR practices by establishing GHRM as a critical enabler of green creativity and empowerment in the hospitality industry. It emphasizes the role of intrinsic motivation in enhancing the effectiveness of GHRM interventions. The findings offer actionable insights for HR practitioners and organizational leaders. By embedding sustainability into HR functions and leveraging intrinsic rewards, organizations can cultivate a workforce that is both innovative and environmentally conscious. This approach is particularly relevant for hotels aiming to align with global sustainability goals and enhance their competitive positioning.

Keywords: GHRM, Green creativity, Green empowerment, Hotel industry, Intrinsic rewards, UAE.

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1. Introduction

Green Human Resource Management (GHRM) is the strategic management activities in people that optimize organizational performance while simultaneously reducing the adverse effects on the environment [1]. This includes implementing practices that support an environmentally friendly organizational culture, increase employees' concern about environmental problems, and integrate the goals of HRM with environmental management principles. Some of the areas that can come under GHRM include environmentally friendly employment policies, hiring and training procedures, incentives given in the organization regarding environmental concerns, and even appraisals carried out on the basis of environmental standards [2]. Organizations have embraced sustainable features in their HRM practices to help in the conservation of the environment, promote involvement of employees in activities that support sustainability, and to help in supporting the CSR of the company. In the era of globalization, there is an increasing global competition, and growing pressure on organizations to become sustainable and not just for moral reasons but for reasons of competition as well. However, the key element in experiencing such change revolves around HRM, which is seen as having a decisive role in the processes of influencing organizational culture, practices, and policies toward sustainability [3]. GHRM emerged as a crucial configuration that links organizational HRM practices with environmental conservation ambitions, hence, incorporating ecological perspectives into core business strategies [4].

GHRM can be viewed as a range of activities that are geared towards the minimization of organizational impact on the environment while at the same time promoting superior organizational performance as well as employees' health [3]. These practices cover such aspects as environmentally friendly recruitment and training, as well as incentives for green behaviors and considering sustainability performance indicators in appraisals. When sustainability is integrated into the policies of the HRM, organizations reach out to employees and engage in sustainable practices [1].

GHRM is not limited to the country's environmental laws, it is a facilitator of change. Through creating awareness on sustainability issues and arming the staff with the means and desire to support organizational sustainability aspirations, the creative and innovative muscles are engaged. Organizational sustainability brings about the involvement of the employee in finding creative ways of implementing sustainable solutions in the product, process, or community that the organization interacts with Jiang et al. [5].

Also, GHRM increases the organizational capacity when operating in a context of environmental turbulence. In this way, developing an environmentally sustainable responsibility-capable workforce helps the organization address the volatility involving scarce resources and ever-evolving regulations while also responding to the changing market trends where consumers are now more concerned with products' sustainability [5]. The incorporation of GHRM is not an option but a necessity for organizational health in a sustainable environment. Thus, this study tries to explore the topic of GHRM and analyze its contribution to the development of sustainable and innovative organizations with an ethically motivated workforce.

GC involves generating new ideas focused on creating environmentally friendly products, services, processes, or practices that are both innovative and valuable [6]. When a firm with a well-established green perspective encounters external pressures to tackle environmental challenges, it may respond by developing creative solutions. These responses can lead to the generation of valuable ideas, enhancing the organization's ability to foster green creativity [6, 7]. This shows us how GHRM can positively impact GC and create a green innovation culture inside the organization.

GE is one of the GHRM practices, allows workers to propose and implement eco-friendly policies in the workplace, enhances their confidence in supporting the firm's green initiatives [8]. Hence, organizations can more effectively meet their environmental goals. GE refers to a psychological state where organizational members feel empowered by their institution to engage in ecological initiatives and other related activities. This positive mindset creates a sense of obligation in employees to give back in return [9].

Intrinsic rewards come from the inherent aspects of the job itself, providing satisfaction as a result of successfully completing tasks or achieving personal goals [10]. Unlike extrinsic rewards, which are external to the job, including things like salary, benefits, job security, promotions, work conditions, and contracts. Intrinsic rewards, often referred to as "psychological rewards," include elements such as empowerment, appreciation, positive recognition, and being treated with care. An individual motivated intrinsically will be committed to their work, and thus the current research expects intrinsic rewards to strengthen the effect of GHRM on both GC and GE.

1.1. Problem Statement

Although there is a trend in the implementation of GHRM, there is still a significant knowledge gap in the identification of its actual effects on GC and GE in organizations. Although the current literature reveals an understanding of GHRM as a tool to incorporate sustainability into HR practices, research in this area remains limited in terms of its overall coverage of effects on GC and staff's capability to enable sustainable performance.

Firstly, prior work mainly considers GHRM as a perfunctory function comprising compliance with obligatory legislations and bills that are environmentally sensitive and cost-cutting functions rather than probing the organization to think creatively and innovatively in managing organizational sustainability, as suggested by Al-Ghazali and Afsar [11]. This gap prevents the appreciation of how strategic HRM practices could use these environmental goals to facilitate the generation of new ideas and to build up organizational strength in handling ecological difficulties.

Secondly, even though research points to the correlation between empowerment and engagement or performance of organizations, the role that GHRM plays in empowering employees towards sustainable behavior is still ambiguous in HRM literature [12]. GE is one of the most vital theoretical frameworks where employees can engage proactively in environmental decision-making.

Furthermore, the literature gap suggests that there is limited understanding of how intrinsic rewards enhance the effect of GHRM on both GC and GE. For this reason, extrinsic incentives like tangible recognition for long-term accomplishments, as well as the chances of developing skills in green technologies, have been acknowledged as significant for encouraging the PEB [13]. However, their own utilization in increasing the effectiveness of GHRM initiatives is not well examined. Thus, this research aims to bridge these gaps by responding to research questions.

1.2. Significance of the Study

This study represents the first attempts to explore the nexus between GHRM, GE, and GC in Dubai's hospitality industry. Moreover, the study is among the first studies in the world to utilize intrinsic rewards as a moderator between GHRM and GC and GE.

This study helps us to deeply understand GHRM and offers important theoretical and applied implications. Moreover, the study explores the antecedents of GHRM and investigates the associations between GHRM, GC, GE, and intrinsic rewards will help fill the gap and advance theoretical models that incorporate environmentalism into the field of HRM [14]. It will help promote theoretical development to understand how HR practices can build organizational sustainability and encourage suitable adjustments and advancements for upcoming functionalities.

The results of the study should be useful to the HR managers and other organizational leaders who are in the process of managing sustainability as a business issue. Thus, the aim of the study is to recommend to policymakers and organizational leaders on how to benefit from the variables used in this study. The recommendations would advance GHRM practices and propose efficient methodologies to be implemented in various contexts and industries [15]. Altogether, these insights will assist HR practitioners to develop and integrate preventive sustainable strategies and HRM policies that align with environmental standards and promote positive employees' attitudes, motivation, and commitment towards sustainable development strategic directions.

Besides, by utilizing intrinsic rewards as a moderating variable to test if the impact of GHRM on GC and GE becomes stronger or not, the study furthers our knowledge on the psychological factors that influence sustainable behavior among employees [16]. Alongside, it can create an understanding of employees' motivation and enhance incentives and performance management systems to achieve organizational sustainability goals and encourage innovation for the creation of an environmental culture. The idea of utilizing intrinsic rewards as a moderator was developed based on a recommendation by Darvishmotevali and Altinay [12].

2. Literature Review

2.1. The Impact of GHRM on GC

GHRM is considered as a new area of concern within the sphere of HRM [17, 18] that primarily involves the combination of environmental considerations into conventional HRM techniques. This entails developing and effectively implementing policies and practices in the HR function that support sustainability by, for instance, educating employees to embrace environmentally conscious behaviors [11].

GHRM refers to the HRM practices and policies designed to support business sustainability while primarily focusing on preventing harm caused by environmentally harmful activities within organizations [19]. The theoretical framework for GHRM is based on the achieved organizational goals and objectives in relation to environmental management. This synchronization is done by making sustainability to be an integral part of the HRM practices like recruitment and selection of organizational members who have embraced environmental conservation, development of policies, reward system [20] and communication that aims at supporting employees in meeting the outlined sustainable development goals plus evaluation and appraisal of the workers on how they can assist the organization in the achievement of its SDGs [14]. With the integration of assumptions relating to concerns for the environment into the practices of HRM, organizations will have the ability to minimize their impacts to the environment, improving their public image, hiring the best talent in the market, and even realizing sustainable and impressive returns on their investment.

Chen and Chang [7] defined GC as the development of original, practical, and distinctive ideas aimed at eco-friendly commodities, services, procedures, or approaches that are recognized for their innovation. Encouraging GC among organizational members to achieve innovative outcomes is a key focus for leaders or superiors [7, 21]. According to Shalley et al. [22], the organizational member's creativity is viewed as a vital aspect, as it not only reflects an individual's personal traits but also demonstrates their capacity to effectively perform tasks in any situation.

GHRM practice can lead to GC in organizations, which can be vital, because the organization can set new methods to create new products and services. Innovativeness is of paramount importance as organizations look for ways of coming up with an optimal solve to environmental challenges [16]. Thus, the adoption of GHRM methods fosters a supportive organizational culture that encourages employees to involve their imagination in sustainability issues.

Ahmad et al. [23] believe that the practices of GHRM (e.g., training and development) focus on environmental issues, reward pro-environmental behaviors (PEBs) at work, and incorporate environmental criteria during the process of recruitment and selection, can assist in shaping organizational members' behaviors and attitudes toward more green practices and approaches. Guerri and Carollo [24] opined that green recruitment, training, and compensation are key elements of GHRM. This sense of ownership could lead them to develop innovative, eco-friendly solutions to problems, enhancing GC. Additionally, employees may view these firms as more ethical and responsible, which could encourage them to propose unconventional solutions without fear of harming their careers [25]. Similarly, Huo et al. [26] emphasized that GHRM plays a crucial role in shaping employees' attitudes, behaviors, and fostering GC. Therefore, it is suggested that GHRM practices positively impact GC, leading to the following hypothesis:

H₁. GHRM positively relates to GC.

2.2. The Impact of GHRM and GE

GHRM is central to promoting environmental consciousness in organizations because GHRM allows organizations to address the physical environment as a strategic asset. An important component of GHRM is indeed the thrust of HRM towards involving the employees in the whole process of sustainability [27]. GE is regarded as a key GHRM practice for achieving organizational environmental goals [28]. Another study stated that when employees are empowered, they tend to feel intrinsically motivated [29], which positively affects employment-related outcomes like job satisfaction. According to the AMO theory, which was developed by Appelbaum [30], GHRM influences organizational members' abilities and motivation to meet green objectives while also creating opportunities to achieve environmental goals. Another study by Norton et al. [31] further clarified that organizational member engagement encourages individuals to perform beyond organizational expectations. GHRM practices foster employee empowerment by enhancing their skills, knowledge, and motivation, eventually enhancing the organization's eco-friendly performance. Renwick et al. [32] opined that companies should utilize HRM processes to efficiently support environmental protection. For example, providing green training and promoting workforce engagement programs can boost organizational members' motivation for the environmental, economic, and social benefits of environmental management, offering them the freedom to pursue green tasks. GHRM practices can lead to GE because green initiatives directly involve employees, giving them the authority to help achieve environmental goals. Research has consistently shown that empowerment enhances organizational member fulfillment and engagement within organizations [33]. Another study by Laschinger et al. [34] suggested that having a work climate that encourages empowerment positively impacts employee engagement and subsequently increases organizational productivity. Employee involvement in environmental initiatives, such as at the NUMMI automotive plant in the U.S., demonstrates how employee participation enhances eco-friendly performance, as organizational members often have better expertise and skills than their superiors [35]. A study by Henriques and Sadorsky [36] on Canadian organizations found that firms with strong environmental engagement profiles had a positive relationship with employees as a driving force for green practices. Similarly, research from Belgium [37] revealed significant connections between companies identifying as eco-leaders and prioritizing their employee stakeholders, particularly in high-polluting industries.

2.3. GHRM affects GE in different aspects

Green Recruitment and Selection: Sustainable staffing policies are a way of making certain that those individuals selected to join an organization are not only fit for the positions they apply for and interested in environmental conservation. When organizations target individuals with principles and values supporting environmentalism, then an organization will be able to employ people who will see it necessary to take a role in eco-friendly activities willingly [38]. Thus, the initial correspondence of the individual's values by the HRM opens up the prospect for further empowerment by using the other practices of the profession.

Green Training and Development: On training for empowerment for sustainability, it means that the employees are trained on how to practice sustainability as well as encourage others to do the same. A study by Daily et al. [39] reported a positive nexus between environmental training and environmental empowerment. Interventions such as training programs to management of environmental issues, sustainability, or green technologies can be a way of developing the requisite competence and confidence of employees in supporting the organizational sustainability initiatives. Promotional training in sustainability provides information to the employees on new changes or advancements in the implementation of sustainability and empowers them to champion the change.

Participative Decision-Making: Participative decision-making can be defined as providing employees with chances to be engaged in the process of formulating and executing the policies for sustainability. Employees who have a say in strategies and decisions being made concerning the environment are more likely to own the outcomes of those strategies than their counterparts who are often simply informed of such decisions instead of being involved in decision-making processes [40]. These participative processes can be done through green teams or committees, suggestion schemes and conducting of environmental staff meetings.

Green Performance Management: The reviewed literature shows that including sustainability performance metrics into performance management systems enables employees by setting specific standards and rewarding the staff's contribution to the organization's environmental objectives. Therefore, green performance should be integrated into the performance management system because it can help to enshrine the culture of sustainability and foster employees' active participation in green activities [41]. This may mean recognizing people through their formal performance reviews, promotions, and bonuses tied to environmental performance.

Supportive Leadership and Culture: Employer engagement for sustainability is vital in any organization, and this is where the leadership comes in. When a company or the leader of a company adopts environmentally friendly actions and practices, the he or she fosters a culture that embraces the protection of the environment [27]. The components of empowering leadership are being capable of giving the resources that the employees require in order to perform green practices, being able to create a culture that supports change through being open to suggestions regarding sustainability.

Hypothesis 2: GHRM positively relates to GE

2.4. The Impact of GE on GC

It is proved that when managers empower their organizational members, they become more creative [42]. So, in order to have more GC, organizations must adopt GE. This is significant because when an organization fosters creativity and independence, particularly with a focus on green initiatives, it can achieve sustainable performance and maintain a

competitive advantage over the long term [43, 44]. GE seems to be the mechanism of encouraging independent decision-making recourse to the sustainability goals of an organization by the HR in charge [44]. When employees feel empowered, they are more likely to engage in innovative thinking and contribute to sustainable practices in various ways:

Initiative and Proactivity: Another behavior that is encouraged by empowered employees include taking the initiative to locate potential for enhanced environmental performance and/or offer creative ideas to this finish. For example, empowered teams may implement programs that will solve problems such as wasted resources, energy wastage and environmental degradative products or services [38]. A sense of ownership leads them to do more than formal expectations and look for innovative ways to support sustainability goals.

Problem-Solving and Decision-Making: Management support allows employees to be involved in decision-making processes regarding the implementation of sustainability policies. They are involved in measuring the effects of decisions on the environment, defining objectives and selecting proper courses of action. Such involvement does not only lead to better decisions being made, but also contributes to bringing creativity and innovation to problem solving [45]. Innovative employees are typical of engaging all their creativity into sustaining challenges and looking for creative ways of solving them.

Innovation and Continuous Improvement: Employees carry out innovation by bringing into the organization new technology, procedure or practice that would enhance sustainability. ICLEs may engage other departments to co-ordinate a company's environmental aspects into its products, purchasing or activities [46]. Further, their emancipation fosters an environment of developmental distinctiveness that sees employees improve and look for ways of bettering the environmental standard and creating sustainability.

Knowledge Sharing and Collaboration: Knowledge management is a result of the empowerment process since empowerment enables the sharing of ideas, experience and practices evolved in the organization's sustainability field. Autonomous groups or individuals may convene a workshop or a training session or hold an information sharing session and educate other members of the organization on matters of sustainability [28]. It not only fosters the fast acquisition of knowledge but also fosters collective intelligence, a feature that is very helpful for any organization to tap into the various perspectives and experiences towards creating sustainable solutions.

Adaptability and Resilience: Self-managing teams are responsive to environmental conditions or alterations of Blue's policies and procedures. On dynamic factors, they are interactive in responding to the emerging issues, making necessary changes and adopting new measures of managing the environment in an efficient manner as it was done initially [44]. Empowerment of women enables them to enhance their ability on how they can cope with these uncertainties and also to actively participate in the sustainability of organizations.

Hameed et al. [47] have established the moderation of GE on GHRM practices and innovation consequences. Through the engagement of the employees in decision-making and delegating the responsibility of sustainability changes, GHRM boosts the imagination and the creation capacity in the organization for sustainability. This mediation effect further emphasizes the significance of empowerment as a key cog between the mechanisms of HRM practices and creativity in environmental settings. GE and since it is one of the GHRM practices, it is expected to mediate the relationship between GHRM and GC. Based on the abovementioned discussions, the following two hypotheses are suggested:

Hypothesis 3(a): GE positively relates to GC

Hypothesis 3(b): GE mediates the relationship between GHRM and GC

2.5. The Moderating Role of Intrinsic Rewards

Intrinsic rewards are linked to a positive psychological state within individuals, often characterized by feelings of passion, energy, and enthusiasm [48-50]. This connection aligns with the notion of engagement, sometimes described as "positive affectivity." [49] point out that the concept of engagement is often ambiguously defined by both academic researchers and practitioners when working with clients. To clarify, they define engagement as a positive psychological state experienced during the performance of one's work [49]. In this context, we consider engagement to be reflected in an employee's experience of intrinsic rewards.

This shows us that intrinsic reward refers to the psychological gains that employees get from doing work that is aligned with their self-identity, vocational interest, or simply personal satisfaction that comes with accomplishing certain tasks. Intrinsic rewards are different from kinds of tangible self-interest promotion incentives like increased pay or bonuses as they are personal and related to feelings of fulfillment or accomplishment [51]. Especially within the field of sustainability and GHRM, self-generated stimuli depict the key means for encouraging employees to contribute to sustainability in their organizations.

In the immediacy of sustainability, the organizational intrinsic rewards will include self-satisfaction for being involved in the green programs, satisfaction that accosts from the conservation of the environment and a feeling of being closely associated with a sustainable culture at the workplace [12]. These rewards appeal to the employee's self-interest by ensuring the organization takes measures to conserve the environment and to ensure that the employee's work assumes a role of contributing to the enhancement of the environment.

Intrinsic incentives are linked to psychological benefits, which include higher job satisfaction, heightened level of worker motivation as well as better well-being of the workers. This implies that when employees assign meaning and enhance the fit between them and their role, they engage in a range of sustainable employee behaviors [13]. This internal motivation creates a sustainable culture within the organization by encouraging innovation and the positive implementation of environmentally friendly concepts.

Companies that use intrinsic motivation for sustainable behaviors make their employees understand that the environment is a core business value. By integrating sustainability initiatives into the work being done throughout the organization, it increases employee engagement towards attaining the overall sustainability objectives while at the same time creating awareness of the company's environmental duties [13].

GHRM also has a direct relationship in influencing GC and GE, and the intrinsic rewards affect the strength of the relationships between the variables. In moderation, intrinsic rewards have an even stronger influence of GHRM on the positive changes in attitudes and behaviors of the employees regarding sustainability.

It is claimed that intrinsic incentives impact on the relationship between GHRM and GC, in that they advance the motivation of workers to apply their critical thinking on creativeness concerning sustainability initiatives by the company. Organizations which offer intrinsic rewards to their employees to support their green work projects will most likely receive higher ideas and solutions for eco problems from such employees [52]. For instance, Procter & Gamble and ISO9000, rewarding individuals for developing more sustainable commodities or procedures, strengthens the culture of innovation based. As the examples given illustrate, intrinsically motivated innovation is sustained by organizations that acknowledge and encourage employees' creativity.

Intrinsic rewards enable the nurturing of innovation for sustainability due to the improvement of the employees' motivation to protect the environment [13]. This pathway emphasizes the need to apply intrinsic rewards in GHRM to obtain innovative results for the employees as well as to promote the culture of innovative sustainability practices among them.

Based on the abovementioned discussion, the following hypotheses are suggested:

Hypothesis 4(a): Intrinsic rewards moderate the relationship between GHRM and GC.

Hypothesis 4(b): Intrinsic rewards moderate the relationship between GHRM and GE.

2.6. Underpinning theories to support hypotheses

Emerson [53] introduced Social Exchange Theory (SET), which provides a useful framework for examining the relationship between Green Human Resource Management (GHRM) and Green Creativity (GC). Researchers utilize SET to explore how HRM policies and practices affect employee behaviors and interactions. According to SET, when employees recognize the benefits and positive outcomes of adopting environmentally friendly practices, they are more likely to willingly engage in the organization's green initiatives [54-56]. Scholars suggest that implementing GHRM through fostering green practices positively influences employees' GC behavior, ultimately helping organizations achieve their environmental objectives [57-59].

The theory of AMO (The Ability-Motivation-Opportunity), as discussed by Appelbaum [30] and Boxall [60] is frequently applied in HRM performance research as suggested by Paauwe [61]. This theory helps in determining which HRM practices to implement. According to Gerhart [62] HRM practices (like empowerment) can affect employees' abilities (such as through effective selection, hiring, and training processes), motivation (for instance, via performance-based pay), and opportunities (like using teamwork or suggestion systems) to enhance organizational performance by making new ideas (creativity). This shows us the importance of this theory in the current research and how GHRM can affect GC and GE.

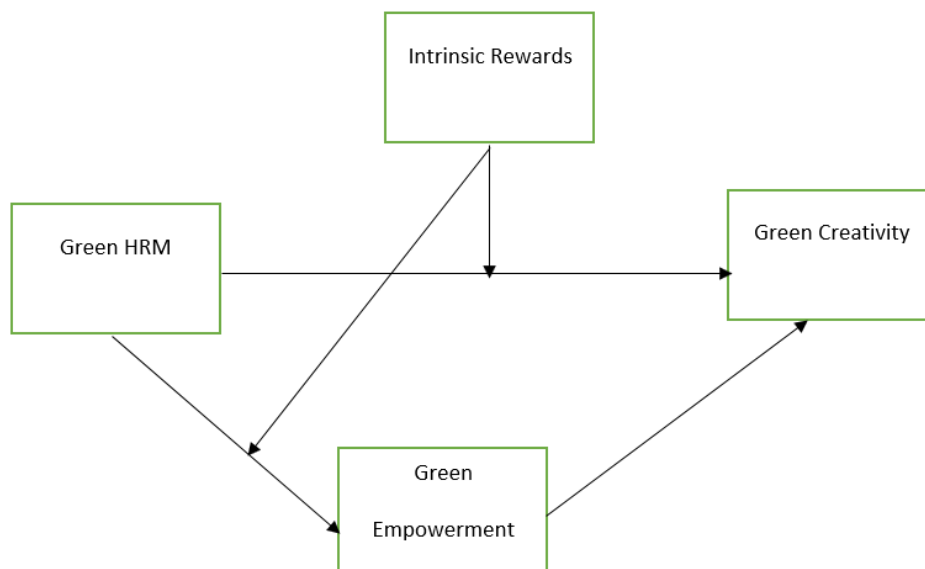


Figure 1.
Research Model.

3. Research Methodology

The hospitality industry of the United Arab Emirates flourishes on the back of tourism, business travel, and expatriate influence. The presence of iconic structures such as the Burj Khalifa and the Palm Jumeirah, along with luxurious hotels and beaches, attests to the UAE remaining at the pinnacle of the tourist's imagination. Luxury hotels such as the Burj Al Arab in Dubai cater to discerning luxury travelers. Similarly, the country's dining scene ranges from Michelin-starred fine dining

restaurants by celebrity chefs to Emirati food. The country is host to a dynamic business environment that operates on business and MICE tourism, with Dubai being the favorite stopover for international conventions and exhibitions. The country motivates visionary investors by focusing attention on attractions such as Dubai Parks and Resorts, Yas Island, and others.

Moreover, hotels and resorts across the country are embracing sustainable tourism practices. First and foremost, the country has a historical and cultural background maintained in rusty sites, souk markets, and museums. Spa and wellness tourism is a large segment catering to relaxation and rejuvenation. The manpower in the hospitality sector comprises Emiratis and expatriates, with diverse skills and expertise driving industry innovations. However, the future of the UAE hospitality sector shows additional growth inspired by infrastructure advancements ahead of the Expo 2020 Dubai.

3.1. The Research Design

This research follows a quantitative approach and employs purposive sampling. This method allows researchers to choose the most appropriate sample, focusing on high-star hotels, as these establishments are more likely to implement advanced GHRM practices due to their organizational framework and culture, which promote the acceptance and implementation of green management programs [12, 63]. Similar studies like [55, 64] collected data from 5- and 4-star hotels.

In order to collect relevant data for this research, the researchers adopted the quantitative research approach. Campbell and Stanley [65] stated that qualitative research can be considered as a part of empirical research or study. The qualitative approach includes traditional ways in which psychology and behavioral sciences depended on for a long time. Indeed, it has been the key trend in social sciences research. Instead of using qualitative research in this study, which is always classified under ethnographic studies and depends usually on grounded theory and interviews. The current study utilized a quantitative approach because variables used in the current study have been studied previously and have high validity. It is true that a qualitative approach provides us better and deeper understanding of the phenomenon being researched, but no need to use it in the current study since all variables have been tested in different settings.

The top management of eleven hotels in Dubai was contacted; five of them are 5-star hotels and six are 4-star hotels. However, only four 5-star hotels and four 4-star hotels responded positively and allowed the author to collect data. After obtaining approval from talent management at those hotels, three hundred and thirty-one questionnaires were distributed to employees in person. Three hundred and eighteen were found to be eligible for statistical analysis. Eleven questionnaires were excluded due to missing information. The questionnaire has 28 questions, excluding the demographics. All scale items were measured using a five-point Likert scale, which ranges from 1 (strongly disagree) to 5 (strongly agree).

3.2. Measures

GHRM was measured by using 6 items adapted from Hsiao et al. [66] and Shen and Benson [67]. These items were used later by Darvishmotevali and Altinay [12] and Kim et al. [57]. The items included “My hotel provides adequate training to promote environmental management as a core organizational value”; “My hotel considers how well employee is doing at being ecofriendly as part of their performance appraisals”. GE was measured by 9 items adapted from Hameed et al. [47]. Items included “I am self-assured about my capacities to perform my green work activities”; “I have significant autonomy in determining how I do my green job”. GC was measured by 6 items adapted from Mittal and Dhar [68]. Items included “The members of the organization suggest new ways to achieve environmental goals”, “The members of the organization propose new green ideas to improve environmental performance”. In order to measure intrinsic rewards, seven items were adapted from [69]. These items were initially developed by Allen and Kilmann [70]. Items included “Celebrations to acknowledge achievement of quality improvement goals such as lunches, dinners, and special events”, “360 degrees performance appraisals wherein feedback from co-workers and/or customers is incorporated into performance appraisals”.

The questionnaire was prepared and distributed in English because having a high level of proficiency in the English language is a must in the hospitality industry in Dubai. Therefore, there was no need for back translation. Confidentiality and anonymity were assured to all respondents. The researchers ensured that the collected data would not be shared with their management. The cover page of each questionnaire clearly stated this.

4. Data Analysis and Interpretation

SPSS version 22 was used to analyze data. The analysis started with a demographic breakdown, which is shown in Table 1. In terms of gender, males formed 56.4% while females formed 43.6%. Table 1 shows that more than 60% of respondents are between 18 and 27 years old, while more than one-third of respondents are between 28 and 37 years old. Fifty-six percent of respondents are single while 42.3% of them are married. Almost 84% of respondents have either a vocational school or college degree (Bachelor's degree), and this is expected since most hotels ask for an academic degree when they hire. Fifteen percent of respondents have primary or high school certificates, and the rest have graduate degrees. In terms of organizational tenure, more than 81% have experience between one to ten years, while more than 13.7% have less than one year of experience.

Table 1.
Respondents' Summary (n = 344).

	Frequency	Percentage
Age		
18-27	194	63.2
28-37	108	35.2
38-47	5	1.6
48-57	0	0
Over 58	0	0
Total	307	100.0
Gender		
Male	173	56.4
Female	134	43.6
Total	307	100.0
Education		
Primary & High School	46	15
Vocational School	65	21.2
College Degree	189	61.6
Graduate Degree	7	2.3
Total	307	100
Marital Status		
Single	172	56
Married	130	42.3
Divorced	5	1.6
Widowed	0	0
Total	307	100.0
Job Experience		
Less than 1 year	42	13.7
1-5	117	38.1
6-10	133	43.3
11-15	9	2.9
16-20	6	2
Total	307	100

Table 2.
Scale of entries, Reliability, and Exploratory Factor Analysis Outcomes.

Scale of entries	Factors Loadings	Eigenvalue	Percentage of Variance	α
<i>GHRM</i>		6.70	19.44	.88
My hotel provides ...	0.88			
My hotel considers...	0.67			
My hotel relates ...	0.90			
My hotel considers ...	0.84			
Employees fully understand ...	0.76			
My hotel encourages ...	0.57			
<i>Green Empowerment</i>		4.52	14.85	.91
The green work that ...	0.61			
My activities are ...	0.69			
The green work I ...	0.78			
I'm confident about ...	0.83			
I'm self-assured about...	0.80			
I have mastered ...	0.83			
I have significant ...	0.78			

I can decide on ...	0.83			
I have considerable ...	0.74			
<i>Green Creativity</i>		3.71	14.25	.91
The members of ...	0.82			
The members of ...	0.82			
The members of ...	0.84			
The members of	0.77			
The members of ...	0.75			
The members of ...	0.80			
<i>Intrinsic Rewards</i>		2.64	14.24	.86
Non-monetary form ...	0.79			
Celebrations to ...	0.88			
Regular expressions ...	0.79			
360 degrees perf ...	0.62			
Formal suggestion ...	0.60			
Use of development ...	0.83			
Quality-based...	0.69			
NOTE: Every entry is computed by a five-point scale.	KMO weight of sampling Adequacy= .839	Bartlett's Test of Sphericity = 5960.46	DF= 378, p<.001.	
The explained Total Variance of all factors is 62.77%				

Note: Every entry is computed by a five-point scale. KMO weight of sampling Adequacy= .839 Bartlett's Test of Sphericity = 5960.46
The explained Total Variance of all factors is 62.77%

Exploratory Factor Analysis (EFA) was applied on the data. It utilized the Varimax rotation, KMO, and Principal Components Analysis (PCA). Table 2 shows factor loadings which ranged from .57 to .90. The table also shows that all the items were vital since there was no item that failed to load or cross-loaded with other items at .50. Moreover, the analysis was made for four factors and the eigenvalues are more than 1.00. The four analyzed variables explained 62.77% of the total variance. All Cronbach's alphas exceeded the cut-off .70, which was suggested by Nunnally [71]. Based on that, the data is reliable and valid and can be used to test the hypotheses.

In order to check if common method variance (CMV) threatens the data, the author conducted Harman's Single Factor test as suggested by Podsakoff et al. [72]. In this test, all measurements are tested as one single factor. The outcome of the test shows 21.31%, and this is less than the cut of 50%. This result indicates that CMV is not a threat to the study.

Table 3.
Correlations of the variables.

Factors	Mean	Std. D	GHRM	GE	GC	IR
GHRM	4.20	1.13	-			
GE	3.87	1.04	.138*	-		
GC	3.76	1.02	.362**	.178**	-	
IR	3.90	1.05	.091	.137*	0.105	-

Note: Std. D = Standard Deviation

** Correlation is substantial at the 0.01 level (2-tailed).

* Correlation is substantial at the 0.05 level (2-tailed).

Table 3 shows the correlations of variables, means, and Std.D. Table 3 proves some significant correlations between independent, mediator, and dependent variables. Baron and Kenny [73] suggested four conditions to conduct mediation analysis. The first condition is related to the correlation between the independent and the mediator variable. The third table shows a significant correlation between the independent variable (HRM) and the mediator, which is GE (relation = .138*). Thus, the first condition is achieved. GHRM is significantly correlated with GC (relation = .362**). Therefore, the second condition which states that the predictor variable should be significantly related to the criterion, is met. The third condition which stipulates a significant correlation between the mediator (GE) and the criterion variables (GC), is achieved (relations = .178**). We conclude from those findings that we have a direct effect between the independent variable (IV) and the dependent variable (DV).

The 4th condition examines the whole mediating impact. The author added the IV and the mediator (GE) together and examined their impact on the DV. Table 4 shows that GE mediates the relationship between GHRM and GC because the relationship became weaker when we added the mediator (It went down from 6.44 to 2.45 after adding the mediator). Thus, the fourth condition in Barron and Kenny, which states that the relationship between the predictor variable and the criterion should be non-significant or weaker when we add the mediator, is achieved. The same method was used in previous studies (e.g., Lee and Ok [74]).

Based on Table 3 and Table 4, the first hypothesis is supported ($r = .362^{**}$). H2, which states that GHRM positively relates to GE, is supported ($r = .138^*$). H3(a), which highlights the relationship between GE and GC, was supported ($r = .178^{**}$). Hypothesis 3(b), which discusses the mediating role of GE, is accepted ($\beta = .105$, $t = 2.45$).

In regard to H4 (a) and H4 (b), the author examined the moderated mediation via four conditions as suggested by [75]. The first condition, which predicts GHRM to have a significant effect on GC, is supported as reported in H1. In regard to the second condition, the author examined if the interaction of GE and intrinsic rewards can predict GC. This condition is achieved ($\beta = .004$, $P = .019$). In regard to the third condition regarding the significant impact of GE on GC, it was supported as reported in H3(a). In regard to the fourth condition regarding the indirect effect of IV on DV via mediator is met as reported previously. GHRM was found to be significantly related to GC and GE. Since all conditions are met, intrinsic rewards moderate the relationship between GHRM and GC. Hypothesis 4 (a) is accepted. By applying the same method on H4(b), the author found that the second condition is not accepted ($\beta = .000$, $P = .964$). Thus, hypothesis 4 (b) is rejected.

Table 4.
Regression Outcomes: Direct and Mediating Effects.

		GE					
		Step I		Step I		Step II	
		β	t			β	t
Factors				Factors			
GHRM		0.193	2.43**	GHRM		0.405	6.79*
				GE		-	-
						0.105	2.45**
F	5.90						
R ² at each step	0.019						
ΔR^2	0.016						
Sobel test for							
GHRM → GE → GC = 1.72***							

Note: The results do not show any problems of multicollinearity. *** $P < .01$, ** $P < .05$, * $P < .10$.

Table 5.
Regression for the moderation test.

Mediator variable model (dependent variable GE)				
Predictor	β	SE	t	P
Constant	10.191	5.385	1.89	0.059
GHRM	0.410	0.271	1.51	0.131
IR	0.086	0.216	0.396	0.693
GHRM x IR	0.000	0.011	-0.045	0.964
Dependent variable model (Dependent variable- GC)				
Constant	11.03	1.759	6.27	0.000
GHRM	0.381	0.060	6.38	0.000
IR	-0.071	0.083	-0.847	0.398
GE	0.014	0.165	0.087	0.930
GE x IR	0.004	0.002	2.358	0.019

5. Discussion and Implications

The main focus in this study is to clarify the role of GHRM in enhancing GC and GE among employees within the Dubai hospitality industry that specializes in 4 & 5-star hotels [76]. This paper rigorously explores this in the research and postulates a number of hypotheses, which we then found to be true, except for the moderating role of intrinsic rewards between GHRM and GE. This result highlights the importance of HRM green practices in creating a green organizational culture, as well as behaviors conducive to more innovative and empowered performance by employees. It is essential to discuss these implications, as they shed light on how sustainable practices can best fit within HR strategies in the hotel industry [77]. Through this discussion, we strive to assist in achieving a fuller appreciation of the exciting potential dialogical dynamics that may be at play between environmental management and employee engagement, promoting convergence and congruence between theoretical frameworks on paper with real-world implementation. This study, therefore, provides insight into these linkages, which would help researchers better understand how GHRM practices can be used as leverage points to achieve a sustainable and innovative workplace environment.

The impact of GHRM on GC, which is found in the current study, supports what was reported in earlier studies, Malik et al. [16], Ahmad et al. [23], and Ali et al. [78]. The positive relationship between sustainable HR practices and innovative employee behavior signifies the substantial improvement of GC in the workplace by practicing GHRM [16]. Organizations that successfully blend GHRM instigate their workforce to think outside the box and develop innovative ways to address environmental issues. For instance, it sparks green imaginations through HR activities such as full-scale workshops that inform employees on green regulations and new reward systems to encourage eco-friendly solutions.

This synthesis highlights the importance of linking GHRM with GC by demonstrating that a well-established environmental focus embedded in HR practices can transform standard operating procedures into potential sources of creative solutions that benefit the environment [11]. Various studies in the literature deeply verify how GHRM catalyzes an innovation culture. These studies show that creating such a context by incorporating environmental goals into day-to-day HR activities encourages creative solutions. Additionally, this research aligns with broader studies suggesting that GHRM practices are associated with more innovative workplaces, where the environment actively supports environmental innovation [11]. Employees also become more invested, taking greater responsibility for their creative endeavors, benefiting both individually and as catalysts for promoting sustainability within the organization. This dynamic highlights how GHRM can become the foundation for cultivating a proactive, eco-friendly organizational culture that integrates innovation into its daily operations and strategic efforts.

The current study found that GHRM is positively related to GE. This result confirms what was reported in the past studies [28, 79]. While GHRM practices are being implemented, an organization is not just limiting the approach to environmental-based policies but is intrinsically working at enhancing the employees' empowerment [27]. Empowerment is required in order to build a sense of ownership and responsibility of employees for the organization's environmental objectives. GHRM will equip employees with tools and power that can facilitate them to contribute aggressively towards sustainability goals, leading to an increase in their involvement and commitment towards the same.

Empowerment through GHRM comes through in the way employees are involved in more decision-making aspects, coupled with active environmental practices. Allowing employees to participate in decision-making transforms personal accountability for ensuring actions will be executed successfully [16]. It helps employees learn more about their critical role within the organizational sustainability processes, thus inspiring creative thinking and action toward innovation in existing practices.

Also, the empowerment enabled by GHRM extends beyond procedural involvement to include psychological empowerment. The employees feel a sense of autonomy and meaningfulness in their role and contribute towards a greater alignment with the sustainability objectives of the organization. Such psychological empowerment is quite required because it turns the employees from passive participants in environmental stewardship to active proponents [40].

Empowerment is one of those key ingredients that have been advocated for when it comes to achieving effective environmental management, and indeed has been proven in research. For instance, studies have shown that empowered employees are more proactive, creative, and persistent with their initiatives for the solution of environmental problems [40]. This necessarily goes to mean an approach that leads to a stronger and more innovative measure of environmental practice—once employees are personally involved in implementing and promoting changes that have greater environmental payoffs.

Previous studies rarely used GE as a mediating variable between GHRM and GC [47]. The pivotal role of GHRM explains the interrelationship between GE and GC in organizations. It really explains how empowering practices bring about a metamorphosis in employee innovation [28]. This research identified the fact that once employees are empowered through sustainable HR practices, their capacity for creative problem-solving in environmental management increases significantly. The mediation effect of GE is significant on GC; therefore, it can be asserted that the role of empowerment is quite important in developing an innovative approach to the challenges at hand.

Herein, empowerment will refer to a strategic dispensation where employees' roles would be enhanced by proper entrustment of authority and by giving personnel the autonomy to make decisions that would advance not just personal goals but also closely congruent with the firm's objectives on ecological issues [80]. The empowerment may come in handy in GHRM practices such as engaging employees in planning and decision-making processes, offering them the necessary resources and training, and recognizing of their valuable contribution towards sustainability [9]. Thus, when employees are empowered, they become more responsible for their work and own it enough to innovate and apply their skills in novel ways beyond the capacity or traditional solutions of environmental problems [81]. These findings support the hypothesis that a high propensity for empowerment is positively related to enhanced ideal creativity. The empowered employee feels more open to trying new ideas and ways of addressing environmental problems [28]. This will be because empowerment supports a psychological boost by bolstering an individual's belief in their capability to effect change. A positive mental state can thus enhance creativity and enable employees to suggest and implement more innovative ideas without excessive criticism or feelings of failure.

Furthermore, GE may play the role of an effective mediator in enhancing GC. Indeed, in this respect, organizations have to implement an HRM practice that goes beyond involving employees in routine tasks [59]. What follows from the 'mediator' role of empowerment in GC is that, for any effective mediation to be achieved, empowerment needs to be comprehensive in forms, providing chances for involvement and ensuring meaningful saying in matters pertaining to their work and the environmental footprint of the organization. This would also embody a culture of giving effective feedback and valuing it, with risk-taking and innovation on the part of employees being encouraged. The interrelationship between GE and GC also brings into view the recursive nature of these constructs. As employees are empowered, their creative outputs could lead to further empowerment at the organizational level, creating a virtuous cycle in which every increment raises a notch in organizational capability to meet its sustainability goals [27]. This spiral of empowerment and creativity drives environmental innovation, while it concurrently creates a responsive work climate in tune with the principles of eco-friendly development.

The current study is considered as the first study to use intrinsic rewards as a mediator between GHRM and GC & GE. As shown in the results, intrinsic rewards moderate the nexus between GHRM and GC, but it failed to do the same between the predictor variable and the mediator. This may be attributed to the fact that is GE is one of the GHRM practices.

The depth and breadth of the role intrinsic rewards play in moderating the relationship between GHRM and the beneficial outcomes, including GC and GE, is a key issue. Intrinsic rewards-seeking behaviors deal with gratification of inner

psychological needs-including personal satisfaction, self-actualization, and recognition that can further boost the power of GHRM practices [51]. These pay-for-performance incentives tap into the core motivations of employees as they are motivated not just to meet their standard job responsibilities but to exceed such responsibilities in innovative and environmentally proactive ways.

The study shows that intrinsically rewarded employees are more engaged and motivated to contribute to sustainability initiatives in the organization [13]. Such a level of engagement is important in building an environment within which creative and empowered behaviors can flourish. For instance, when their creative ideas are acknowledged by others or when they feel personally fulfilled by their contributions toward sustainability, they are more likely to continue experimenting at the fringes of innovation and trying new ways to make an impact on the environment. The relationship here is such that intrinsic rewards not only support but also amplify the impact of GHRM by aligning the personal goals of the employee with the organizational environmental goals.

Moreover, intrinsic rewards are a critical link between GHRM practices and their effectiveness in encouraging the workplace to be innovative as well as empowered. Satisfying the deeper psychological needs of workers, intrinsic rewards increase emotional and cognitive investment in work and create a sense of ownership and responsibility towards environmental initiatives that provoke creativity and empowerment [16]. Since intrinsic rewards exist, GHRM practices become more than mere procedures, but personally pertinent to employees.

Empirical studies show intrinsic rewards as a moderator in enriching the effects of HRM practices [59]. Studies indicated that when employees perceived work as intrinsically rewarding, they would demonstrate higher-order creativity, commitment, and overall job satisfaction [82]. These are components that are very significant in the effectiveness of sustainable practice within organizations. This approach has underlying self-determination theory that points toward the intrinsic needs having to be fulfilled in a manner that promotes pro-environmental behaviors beyond minimal compliance and into innovative contributions.

Intrinsic rewards are instrumental in ensuring long-term employee engagement for any such GHRM initiative. In the absence of intrinsic rewards, the employees may begin by complying with environmental practices but only for extrinsic reasons, such as monetary gains [27]. Without addressing the deeper psychological needs, such involvement normally runs off. Instead, intrinsic rewards maintain employee commitment and enthusiasm to add value towards the sustainability of an organization, ensuring continuous improvement and innovation.

5.1. Implications

Practically, the inclusion of GHRM in the hospitality industry is very vital for the promotion of eco-friendly programs that have been gaining increasing influence over competitive strategies. In fact, hotels can immensely improve their sustainability efforts if they work their GHRM in fusion with the primary strategies of the organization [27]. This process, in itself, relates to the integration of environmental values into the fabric of an organization's culture and activities. For instance, the hotel management can begin with a holistic education program on sustainability that educates the staff regarding the environment and provides them with firsthand practices to implement green solutions. Specific and measurable objectives toward environmental issues will enable and motivate the actions of employees toward certain sustainability goals.

Another factor besides training and goal setting is the recognition and rewarding of employees for their contributions toward sustainable ways, which further promotes deeper engagement and innovative practices in furtherance thereof. Whether it is through a public acknowledgement in company meetings, performance reviews that include the use of sustainability criteria, or even tangible rewards for green improvements, these recognitions work as great motivators. Moreover, the creation of cross-functional teams can further facilitate cooperative approaches between departments and towards a culture in which sustainability is everyone's responsibility [40]. Such teams might lead a hotel into projects ranging from upgrading its energy efficiency to waste reduction, ensuring every aspect of the operations is put in place follow sustainable patterns. Such a pervasive approach will not only make it more inclusive in its workplace but also help position the hotel as an industry leader regarding environmental stewardship.

5.2. Conclusion

The study has developed a rather extensive analysis of intricate relationships that exist within the realm of GHRM and its impact on fostering a sustainable organizational culture. Through such rigid examination regarding how GHRM influences GC and GE, but also through the impacts of intrinsic rewards inherent within these processes, this research study has shed pivotal mechanisms important to environmental initiatives in the hospitality industry. It is indicated that intrinsically rewarded and empowered employees increase the 'smartness' of the relationship they establish with sustainability activities, which ultimately manifests into innovative solutions and proactive stewardship in a healthy environment. This requires, therefore, organizations to transcend the typical compliance-based approaches and adopt a holistic integration of sustainability into mainstream HR practices.

This research will therefore shift conventional views on how GHRM may be used to achieve and surpass environmental goals through the involvement and creativity of employees. It has been argued that strategies for organizations need to shift from being more employee-centered to taking into account more psychological and motivational perspectives in driving environmental action.

An implementation of the types of GHRM practices that focus on intrinsic rewards and empowerment can go a long way in furthering the sustainability agenda of an organization. This study therefore, contributes not only to theoretical advancements in GHRM but also offers practical recommendations for application and continues to encourage the need for

further research into the dynamics of various sectors and cultural contexts to enrich understanding and applicability for sustainability goals globally.

5.3. Limitations and Future Research

The limitation is mainly because it focuses on the hotel industry in Dubai. In all probability, these results may not apply to the findings of other sectors or geographies. In other words, generalizability is questionable. Future studies may collect data from other emirates and other countries in the MENA Region to validate the current results. The current study focused on GHRM as one issue to check its impact on GC. However, future studies may focus on each GHRM practice, such as green leadership, green hiring, and green training. Since various forms of environmental performance have been recognized in the literature, future research could explore additional potential outcomes of GHRM, such as environmental awareness and green consumer behavior. Longitudinal studies can also help better understand the long-term outcomes of GHRM practices from a sustainability perspective. Types of intrinsic rewards that most help enhance green behaviors can also be explored to provide useful insights for tailoring GHRM practices more effectively.

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