

**Journal of Association of Arab Universities  
for Tourism and Hospitality (JAAUTH)**journal homepage: <http://jaauth.journals.ekb.eg/>**Antecedents of Green Innovation in Saudi Travel Agencies  
A dual Mediation Examination**

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[hhmadkhali@jazanu.edu.sa](mailto:hhmadkhali@jazanu.edu.sa)**ARTICLE INFO****Abstract****Keywords:**

Green Organizational  
Identity;  
Green innovation;  
Saudi Arabia;  
Travel agencies;  
Employees.

**(JAAUTH)**  
**Vol.24 , No.1 ,**  
**(2023),**  
**pp.353 - 366**

This research investigates the factors influencing green innovation (GIN) within Saudi Arabian travel agencies, with a particular emphasis on the roles of green human resource management (GHRM), green organizational culture (GOC), and green organizational identity (GOI). Using a random sampling method, 296 employees from Saudi travel agencies participated in the study. The findings highlight that GHRM has a significantly positive impact on GIN, GOC, and GOI. Additionally, GOC and GOI were found to significantly and positively influence GIN. Notably, the study reveals that GOC and GOI act as partial mediators in the relationship between GHRM and GIN. These findings hold significant implications for the travel sector, providing valuable insights for policymakers and industry stakeholders. The research underscores the importance of adopting GHRM practices within travel agencies to foster green behaviors, cultivate environmentally conscious workplaces, and align organizational culture and identity with sustainability goals. By doing so, travel agencies can enhance their capacity for GIN, contributing to a more sustainable future. In summary, this study illuminates the interconnectedness of GHRM, GOC, GOI, and GIN within the unique context of Saudi travel agencies. It offers practical recommendations for enhancing eco-innovation capabilities and promoting sustainability in the travel industry.

**1. Introduction**

In order to reduce the adverse environmental effects caused by organizations, they consistently strive to enhance and transform their operations and procedures (Iqbal, 2020). The need to incorporate environmentally friendly concepts into the strategies of these companies has surged due to the environmentally harmful practices observed in many organizations (Aggarwal & Agarwala, 2022). The capacity of any company to enhance its environmental performance is elevated through green innovation (GIN) (Bahmani et al., 2023). Promoting GIN is also associated with organizations' inclination to embrace environmentally conscious practices such as green human resource management (GHRM), fortifying their green organizational identity (GOI), and fostering an organizational culture that supports environmental preservation (Al Doghan et al., 2022).

Furthermore, organizations have tended to apply GHRM and develop their policies, strategies, and operations in line with their green orientations (Shah & Soomro, 2023). Sheikh et al. (2019) indicated that GHRM seeks to employ environmentally friendly employees with a distinct green culture to preserve the environment. GHRM focuses on achieving positive

outcomes (e.g., innovation, performance, and job satisfaction) by supporting green values and identity (Bahmani et al., 2023). GHRM is a vital and effective tool for creating and developing outstanding GIN that supports the organization's green outcomes, the support for green behaviors among employees, and adherence to pro-environmental behaviors (Shah & Soomro, 2023).

GHRM contributes to maximizing the green capabilities of organizations (Awan et al., 2022). Besides, GHRM increases the green behaviors and participation of employees, improving organizations' green reputation and sustainability. Furthermore, GHRM supports GOC through a green work environment, green practices associated with employees, and task performance (Ahakwa et al., 2021). GOC also plays an influential role in promoting GIN for employees (Khammadee & Ninaroon, 2022).

By changing the organization's and its employees' beliefs, practices, and attitudes toward environmental preservation, GHRM adoption aids organizations in fostering a culture of becoming green (Aggarwal & Agarwala, 2022). GHRM supports the organization's capabilities to develop the expertise and awareness of employees who appreciate and understand how to achieve organizational sustainability (Muisyo & Qin, 2021). Sobaih et al. (2020) argue that there needs to be more evidence of the GHRM-GIN linkage in the tourism context. However, organizations are increasingly interested in GIN to preserve the environment. This innovation creates environmental support for organizations.

Recently, the various impacts of GHRM on GOC (Aggarwal & Agarwala, 2022), GOI (Liu et al., 2021), and GIN (Muisyo & Qin, 2021) have been discussed. Their results proved the focal effect of GHRM on GOC, GOI, and GIN. Despite the interest in green employee innovation, the determinants of this innovation and how it is affected by GHRM, GOC, and GOI still need to be discussed in the tourism setting. As such, no previous studies have discussed the potential effect of GHRM on GIN in the tourism setting through dual mediation effects (i.e., GOC and GOI).

## **2. Literature review**

### *2.1. Green innovation (GIN)*

According to Xie et al. (2019), GIN refers to an organization's and its staff adopting innovation in green processes. As highlighted by Sobaih et al. (2020), organizations that adopt GIN can utilize their resources efficiently and respond quickly to the needs of their customers, which is reflected in their success. GIN includes some practices aimed at designing environmentally friendly processes, products, and services by using fewer materials in product design, reducing harmful emissions, reducing water and energy consumption, and using green raw materials (Zhang et al., 2020). GIN also contributes to achieving several benefits for organizations, such as reducing costs, improving green organizational reputation, and increasing productivity (Yahya et al., 2021).

### *2.2. Antecedents of GIN in the tourism context*

#### *2.2.1. Green human resource management (GHRM)*

The majority of workforce indicators that seek to enhance a firm's environmental performance are referred to as GHRM. It includes three main aspects. The first aspect is based on motivating employees to participate in preserving the environment through green compensation and green performance evaluation. The second aspect concerned providing the organization with opportunities to improve performance. The last aspect relates to the organization's tendency to increase employees' capabilities and skills through green selection, recruitment, and training (Paillé et al., 2020).

GHRM incorporates a number of environmentally friendly activities, including job analysis, hiring, training, vetting, and performance evaluation (Niazi et al., 2023). GHRM relates to organizations' endeavors to preserve the environment by implementing environmental practices and green behaviors for employees. Additionally, GHRM reflects the organization's strategic direction toward environmental protection, motivating employees toward green ideas development in the workplace.

### 2.2.2. *Green organizational identity (GOI)*

Employees' psychological ties to the company's environmental principles are also expressed through GOI, which gives them a sense of pride (Ribeiro et al., 2022). With the increasing trend towards organizational sustainability, preserving the environment and adopting green practices have become part of organizational identities. GOI aids in enhancing employee comprehension of the company's green organizational goals, beliefs, and practices in protecting the environment (Zhu et al., 2021).

### 2.2.3. *Green organizational culture (GOC)*

GOC refers to organizational practices, attitudes, assumptions, and goals (Tahir et al., 2019). GOC manifests when all employees think in a way that lessens the negative environmental consequences of the organization's practices and supports green initiatives and commitment. GOC improves an organization's capacity for green innovation, allowing it to establish a competitive edge that cannot be replicated or mimicked (Muisyo et al., 2022).

## 2.3. *Hypothesis development*

The shift from traditional HRM to GHRM motivates and encourages employees to share innovative ideas for preserving the environment (Awan et al., 2022). By minimizing the negative consequences of organizational processes, GHRM helps to increase the creation of environmentally friendly services (Sobaih et al., 2020). As shown by Aftab et al. (2022), GHRM can maximize the organization's GIN through its positive role in adopting green operations and providing green products and services. Muisyo and Qin (2021) stressed how to attract people with experience and an awareness of the environment, giving them the skills they need through green training, and inspiring them to carry out green initiatives through green compensation and performance management.

Bahmani et al. (2023) confirmed that GHRM positively affects GIN. Al Doghan et al. (2022) confirmed the correlation of GHRM with GIN. Munawar et al. (2022) explained how GIN is affected by GHRM through three axes. The first axis is the need to attract and appoint employees who can implement environmental activities and have innovative green capabilities. The second axis is the willingness of employees to develop their innovative capabilities, skills, and knowledge through organizational participation and training. Finally, the third axis is the compatibility between employee behaviors and organizational green goals. Thus, this paper proposes that:

### *H1. GHRM positively affects GIN.*

An ecologically friendly company culture is adopted and developed with the help of HR managers. GHRM facilitates the organization's adoption of GOC (Tahir et al., 2019). Khammadee and Ninaroon (2022) argued that GHRM should create GOC to support green employee values, behaviors, and practices by recruiting and selecting environmentally conscious employees and having green reward policies for green training. Aggarwal and Agarwala (2022) showed that GHRM positively affects GOC. Hadjri et al. (2019) also confirmed that GHRM promotes GOC. According to Al-Swidi et al. (2021), GHRM is positively associated with GOC. These studies showed that adopting GHRM supports

environmentally friendly behaviors within organizations, simulating GOC integration. Therefore, this paper proposes that:

### *H2. GHRM positively affects GOC.*

Organizations must improve their organizational cultures to respond to environmental issues more effectively and to facilitate the adoption of creative green initiatives. GOC improves employees' awareness how to implement green practices (Gürlek & Tuna, 2018). Besides, GOC stimulates innovation in green processes and products (Khammadee & Ninaroon, 2022). Furthermore, Al Doghan et al. (2022) highlighted the positive relationship between GOC and GIN in an organization. As Yeşiltaş et al. (2022) highlighted, GOC supports GIN behaviors among employees as it motivates them to create new ideas for developing processes and products and achieve green organizational goals.

Nassani et al. (2022) supported the positive relationship between GOC and GIN. GOC creates opportunities to increase GIN by increasing employees' awareness of how to adopt green attitudes towards environmental sustainability and enhancing their environmental awareness. Organizations' adoption of GOC supports their ability to develop green policies that support GIN (Nassani et al., 2022). Green Organizational Culture (GOC) exerts a significant impact on an organization's green innovation (GIN) strategies, as demonstrated by Song et al.(2019). Moreover, GOC not only influences but also amplifies and reinforces the creative green skills of employees, as emphasized by Abbas & Khan (2022). Additionally, GOC plays a pivotal role in bolstering the organization's capacity to develop environmentally-friendly products that align with business requirements and preferences, ultimately leading to the attainment of a sustainable competitive edge. Hence, this paper proposes that:

### *H3. GOC positively affects GIN.*

GHRM practices enhance the organization's green organizational reputation, increasing employees' self-esteem and improving their organizational identity (Liu et al., 2021). Employee engagement in green behaviors and practices and their adherence to environmental regulations and activities create a distinct GOI (Zafar et al., 2022). Zhu et al. (2021) claimed the focal role of GHRM in supporting GOI in three aspects. The first aspect is based on GHRM attracting employees with environmental awareness, capabilities, and values. The second is the GHRM's adoption of green training to disseminate green regulations and increase employees' awareness of GOI.

The third aspect is allocating GHRM for green rewards for employees implementing green goals and initiatives. Thus, GHRM enhances employee recognition of green culture and environmental policies and regulations. Therefore, GHRM positively affects GOI (Ribeiro et al., 2022). Furthermore, when organizations adopt GHRM practices, employees are motivated to act positively to appreciate the organization's efforts to preserve the environment. Therefore, this paper proposes that:

### *H4. GHRM positively affects GOI.*

GOI contributes to increasing GIN, especially regarding environmental problems, as identity improves innovation in designing green products, reducing pollution, recycling waste, and saving energy sources (Alnaim et al., 2022). GOI also increases organizations' green performance by improving employees' GIN capabilities (Onputtha & Siriwichai, 2021). GOI also contributes to engaging in green behaviors that innovatively develop processes and products (Parida et al., 2021). When some environmental goals and the greening of the organization were included in the organizational goals, GOI increased, which

increased green activities and practices as well as GIN capabilities of the organization (Chang & Hung, 2021).

Song et al. (2019) revealed that GOI changes the behaviors and attitudes of employees and increases their willingness to create ideas and innovative ways of working that increase the organization's ability to solve environmental problems and adapt to the environment. GOI is also positively linked to GI, as it stimulates proactive behaviors and pushes employees to think innovatively about how green organization policies are implemented. Also, when employees are more aware of GOI, they are more willing to innovate and implement innovative green practices (Zhu et al., 2022). Therefore, this paper proposes that:

*H5. GOI positively affects GIN.*

Organizations that seek to develop their GIN and green performance should expand GHRM practices, adopt a supportive and encouraging organizational culture to preserve the environment, and implement green initiatives inside and outside the workplace. Organizations should also pay attention to providing a green workforce with experience and skills to support green values and practices and develop green processes and products (Muisyo & Qin, 2021). As shown by Bahmani et al. (2023), the association of GHRM with GOC adopted by the organization can lead to increased GIN. Furthermore, Al-Ghazali and Afsar (2021) demonstrated that GHRM and GOC are predictors of GIN. In other words, GHRM adopted by the organization within the framework of its GOC enhances the green innovation capabilities of organizations.

According to Muisyo et al. (2022), organizations have environmental innovation capabilities that make them different from competitors by adopting environmental policies and values, encouraging employees to perform green initiatives, and providing a green workforce. Organizational cultures based on preserving the environment lead organizations to attract employees with green experience, skills, and knowledge. Those employees are more sensitive to environmental problems and have innovative solutions and ideas to improve the green performance of their organizations (Song et al., 2021). Moreover, Khammadee and Ninaroon (2022) highlighted that GHRM influences GOC, which influences and supports GIN. Consequently, this paper proposes that:

*H6. GOC mediates the GHRM-GIN relationship.*

GHRM contributes to shaping GOI and increasing emotional attachment to the organization through a sense of pride and belonging to it. Human resources management also encourages employees to adopt green attitudes and practices to support their organizational identity, which reflects positively on their involvement in providing GIN. According to Shen et al. (2018), GHRM practices foster green values in firms, making staff members aware of the company's environmental preservation efforts, which is reflected in their sense of pride. As such, employees are more willing to achieve competitive advantages for their organizations. Thus, this paper proposes that:

*H7. GOI mediates the GHRM-GIN relationship.*

### **3. Methods**

#### *3.1. Data gathering process*

Employees from Saudi travel agencies took part. Initially, approval was obtained from these agencies' human resources departments. Paper-based questionnaires were then distributed to employees who volunteered to take part. Those employees perceived a consent page at the beginning of the questionnaire, which indicated their anonymity and the study's

aims as research only. Lastly, employees were instructed to complete the questionnaire during off-hours and submit it in a sealed envelope. All completed questionnaires were gathered on-site. Data were obtained between February 2023 and March 2023. Throughout the period, 382 travel agencies were contacted.

Three hundred thirty-four agencies agreed to participate by 87.4%, while forty-eight agencies rejected it by 12.6%. As such, 334 questionnaires were delivered, and 296 questionnaires were returned. Just 38 surveys were rejected owing to insufficient information and Z-shaped replies (Al-Romeedy & Ozbek, 2022; Gaafar et al., 2021). The sample acquired ( $n = 296$ , with an 88.6% response rate) was sufficient using a response-to-item ratio of 1:10 as instructed by Hair et al. (2010).

### 3.2. Measures

This paper employed a quantitative approach to obtain the necessary data from personnel working in Saudi travel agencies. This questionnaire focused on five parts: GHRM, GOC, GOI, GIN, and respondents' demographic profiles. Sobaih et al. (2020) proposed four items to assess GIN. Six items to gauge GOI were adapted from Zafar et al. (2022). Five items were derived from Zhao and Huang (2022) to assess GHRM. Besides, GOC was evaluated using five items cited from Pham et al. (2018).

## 4. Results

### 4.1. Participants' profile

Table 1 shows that male respondents account for 71.3% of the total sample, while 28.7% were female. Age-wise, 41.2% were 30 to less than 40 years old, followed by 33.1% of those who were 40 to less than 50 years old. Furthermore, 55.6% of respondents hold a bachelor's degree.

Table 1. Participant profile.

| Category          |                         | Frequencies | %    |
|-------------------|-------------------------|-------------|------|
| Age-wise          | Less than 30            | 35          | 11.8 |
|                   | From 30 to less than 40 | 122         | 41.2 |
|                   | From 40 to less than 50 | 98          | 33.1 |
|                   | 50 and above            | 41          | 13.9 |
| Gender            | Male                    | 211         | 71.3 |
|                   | Female                  | 85          | 28.7 |
| Educational level | Below university level  | 69          | 23.3 |
|                   | Bachelor's degree       | 165         | 55.6 |
|                   | Postgraduate's degree   | 21          | 7.1  |

### 4.2. Measurement model

According to Table 2, item loadings reached the minimum cut-off value of 0.50, implying that internal consistency was achieved (Hair et al., 2021). Regarding convergent validity, all CR scores are above the 0.70 cut-off point. Similarly, all AVE scores exceed 0.50. The whole measurement model was verified after checking validity of each measurement model. Data provided a good fit as follows: (CMIN = 2.016, CFI = 0.953, GFI = 0.941, NFI = .948, CFI = .956, TLI = .942, RMSEA = 0.009). All factor loadings (see Table 2) were statistically significant and varied from 0.536 to 0.950. ( $> 0.50$ ). The AVE values exceeded 50% of the overall variance. Consequently, the model had robust convergent validity.

Table 2. Validity and reliability.

| Constructs  | FL   | CR   | AVE  |
|-------------|------|------|------|
| <b>GHRM</b> |      | .883 | .604 |
| GHRM1       | .852 |      |      |
| GHRM2       | .732 |      |      |
| GHRM3       | .811 |      |      |
| GHRM4       | .619 |      |      |
| GHRM5       | .847 |      |      |
| <b>GOC</b>  |      | .970 | .866 |
| GOC1        | .950 |      |      |
| GOC2        | .930 |      |      |
| GOC3        | .916 |      |      |
| GOC4        | .946 |      |      |
| GOC5        | .910 |      |      |
| <b>GOI</b>  |      | .869 | .530 |
| GOI1        | .798 |      |      |
| GOI2        | .814 |      |      |
| GOI3        | .725 |      |      |
| GOI4        | .784 |      |      |
| GOI5        | .669 |      |      |
| GOI6        | .538 |      |      |
| <b>GIN</b>  |      | .891 | .680 |
| GIN1        | .884 |      |      |
| GIN2        | .922 |      |      |
| GIN3        | .896 |      |      |
| GIN4        | .536 |      |      |

To further investigate the discriminant validity, the HTMT criteria scores are checked to ensure that the questions across the variables are assessing distinct variables (Henseler et al., 2015). It is discovered by observing that the score of 1 for a completely formed combination is not included in the positive interval score of HTMT measurements and by examining HTMT values lower than 0.90 (Hair et al., 2021). As a consequence, Table 3's HTMT score for the whole model was less than 0.90, indicating that discriminant validity is supported.

Table 3. Discriminant validity.

| Constructs | GHRM | GOC  | GOI  | GIN |
|------------|------|------|------|-----|
| GHRM       |      |      |      |     |
| GOC        | .607 |      |      |     |
| GOI        | .499 | .576 |      |     |
| GIN        | .649 | .590 | .531 |     |

#### 4.3. Structural model

Table 4 highlights that the structural model path coefficient analysis reveals that GHRM significantly and positively affected GIN ( $\beta = .416$ ,  $p < .001$ ). Besides, GHRM affects GOC significantly and positively ( $\beta = .619$ ,  $p < .001$ ). Therefore, H1 and H2 were supported. Furthermore, findings depicted that GOC positively affected GIN ( $\beta = .307$ ,  $p < .001$ ), supporting H3. GHRM significantly and positively affected GOI ( $\beta = .510$ ,  $p < .001$ ), supporting H4. Additionally, the results proved that GOI positively affected GIN ( $\beta = .349$ ,  $p < .001$ ). Hence, H5 was supported.

Table 4. Direct effects.

| Paths                      | $\beta$ | S.D   | t      | p-value | Decision  |
|----------------------------|---------|-------|--------|---------|-----------|
| H1: GHRM $\rightarrow$ GIN | 0.416   | 0.054 | 7.704  | ***     | Supported |
| H2: GHRM $\rightarrow$ GOC | 0.619   | 0.053 | 11.679 | ***     | Supported |
| H3: GOC $\rightarrow$ GIN  | 0.307   | 0.046 | 6.674  | ***     | Supported |
| H4L GHRM $\rightarrow$ GOI | 0.510   | 0.054 | 9.444  | ***     | Supported |
| H5: GOI $\rightarrow$ GI   | 0.349   | 0.055 | 6.345  | ***     | Supported |

The bootstrapping approach was adopted to examine the mediation effects on the GHRM-GIN linkage. A 5000-resample bootstrapping approach was used to analyze these indirect effects. The results clarified the partial mediation effect of GOC in the GHRM-GIN association ( $\beta = .190$ ,  $p < .001$ ). Moreover, GOI partially mediated the GHRM-GIN linkage ( $\beta = .178$ ,  $p < .001$ ), supporting H6 and H7.

Table 5. Indirect effects.

| Path   | $\beta$ | S.D   | t     | p-value | Decision  |
|--|---------|-------|-------|---------|-----------|
| H6: GHRM $\rightarrow$ GOC $\rightarrow$ GIN | 0.190   | 0.040 | 4.750 | ***     | Supported |
| H7: GHRM $\rightarrow$ GOI $\rightarrow$ GIN | 0.178   | 0.040 | 4.450 | ***     | Supported |

## 5. Discussion

The objective of the study is to explore the effect of GHRM on GIN in Saudi travel agencies through the mediating role of GOC and GOI. To achieve this objective, a model clarifying the effect of GHRM on GIN was adopted and tested through the Saudi travel agencies' employees. As well, to fulfill the research objectives, a quantitative approach was used in this study, with a questionnaire used to collect data from travel agencies in Saudi. The study's findings back up the proposed research model and all its hypotheses.

Findings proved that GHRM positively affected GIN, implying that GHRM leads to an increase in the GIN level. This paper agrees with several previous studies. For example, Zhao and Huang (2022) showed that GHRM positively affects GIN. As Aftab et al. (2023) highlight, organizations' ability to adopt green processes and provide green products can be enhanced by adopting GHRM practices.

Besides, findings proved that GHRM positively affected GOC, implying that GOC can be strengthened by adopting GHRM. This result is consistent with Aggarwal and Agarwala (2022), who demonstrated the positive association between GHRM and GOC. Further, Khammadee and Ninaroon (2022) added that adopting some GHRM practices, such as attracting environmentally aware employees and providing green training programs, positively affected GOC. Likewise, our findings indicated that GOC positively affected GI, implying that adopting GOC leads to an increase in the GIN degree. This result agrees with Nassani et al. (2022), who demonstrated a positive association between GOC and GIN. Yahya et al. (2021) concluded that GIN is positively affected by GOC.

Additionally, the findings confirmed that GHRM positively affected GOI, implying that adopting GHRM supports GOI. This result aligns with Zhu et al. (2022), who confirmed the linking GHRM with GOI. Besides, Muisyo et al. (2021) proved that GOI was positively associated with GHRM. Furthermore, Zafar et al. (2022) confirmed that adopting GHRM encourages employees to adopt green behaviors and trends, which supports GOI. Furthermore, findings confirmed that GOI positively affected GIN, implying that when the organizational identity is green, this raises the GIN degree. This finding is consistent with



Nassani et al. (2022), who highlighted that GOI positively influenced GIN. GIN increases whenever the organization tends to green its identity, as Chang and Hung (2021) clarified.

Regarding the mediation effects of GOC and GOI in the GHRM-GIN linkage, our findings proved that GOC and GOI partially mediated this association. This role is important because adopting GHRM practices supports organizations' green values and behaviors (Al Doghan et al., 2022), which is reflected in improving innovation in green processes and products.

## 6. Theoretical and practical contributions

Our conceptual framework contributes to HRM knowledge related to tourism and hospitality sectors. Furthermore, this paper may assist in adequately appreciating the implications of GHRM in tourism and hospitality settings. It is also recognized as the first attempt to construct and assess a comprehensive structural model including GHRM, GOC, GOI, and GIN in tourism and hospitality organizations in Saudi Arabia, one of the Middle Eastern countries. Lastly, this research established a conceptual framework based on Saudi Arabia's specific culture as a Middle Eastern country, which may help to develop HRM and sustainability in the Middle East.

Practically, findings provide many suggestions for travel agency managers that, if applied, may increase the amount of GIN, GOC, and GOI. In this vein, travel agency managers should adopt GHRM practices more broadly. For example, for green job descriptions, travel agencies should include some green tasks and responsibilities in the job descriptions of the various jobs to ensure that employees adhere to them, in addition to putting some environmental behaviors and skills within this description and creating green jobs within organizational structures. As for green recruitment and selection, the recruitment policy of travel agencies should focus on attracting employees interested in preserving the environment and implementing green initiatives.

Among the items for selecting new employees should be some items on preserving the environment and environmental awareness. Regarding green orientation, travel agencies should hold periodic meetings and programs to guide employees towards preserving the environment, implementing environmental initiatives, increasing their environmental awareness, and encouraging them to implement green practices in their jobs. Concerning green training and development, these agencies should organize green training programs to apply environmental practices successfully and provide a green work environment that encourages them to adhere to environmental standards for work performance.

As for green performance appraisal, there is a need to set some green goals within the performance appraisal criteria, define the focal role of each employee in implementing these goals, and grant some green rewards to the best environmental performers. Additionally, these agencies should adopt GOC that supports green values, behaviors, and attitudes among employees, use environmentally friendly tools, recycle waste, and reduce consumption of water and energy resources. Lastly, there is a need to adopt green goals, vision, and mission that motivate employees to implement green practices and initiatives inside and outside the workplace. These agencies also need to commit to protecting the environment and adopting environmental management to support GIN.

## 7. Limitations and future needs

The study's limitations are related to its context, which focuses on travel agencies. Future research may assess the effect of GHRM on GI, GOC, and GOI in hospitality institutions, which generally have larger and more complex HR bases. Furthermore, the influence of GHRM on GIN in travel agencies was explored in this paper. Future scholars may examine

the focal effects of GOC and GOI on other organizational outcomes (e.g., green voice, organizational sustainability, and green motivation). GOC and GOI were introduced as mediators between GHRM and GIN. Further scholars need to investigate other variables (e.g., sustainable leadership and entrepreneurial orientation) in mediating the link between GHRM and GIN.

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#### Supplement A. Measurement items and scales.

| Items  | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| <b>GHRM</b>  |   |   |   |   |   |
| Great effort goes into the select right person   |   |   |   |   |   |
| Every employee undergoes mandatory sustainable business development training                             |   |   |   |   |   |
| Performance appraisal records sustainable business performance   |   |   |   |   |   |
| Employee gets reward for sustainable business management   |   |   |   |   |   |
| Hiring only those who possess sustainable business values  |   |   |   |   |   |
| <b>GOC</b>   |   |   |   |   |   |
| Environmental dimension is considered as one of organizational priorities                                |   |   |   |   |   |
| Agency vision/mission statements include environmental improvement                                       |   |   |   |   |   |
| Top management clarify information and values of environmental management throughout the agency          |   |   |   |   |   |
| Top management develop punishment system and penalties for noncompliance in the environmental management |   |   |   |   |   |
| Top management actively support environmental practices  |   |   |   |   |   |
| <b>GOI</b>   |   |   |   |   |   |
| When someone criticizes my agency, it feels like a personal insult                                       |   |   |   |   |   |
| I am very interested in what others think about my agency  |   |   |   |   |   |
| When I talk about my agency, I usually say we rather than they   |   |   |   |   |   |
| My agency's successes are my successes   |   |   |   |   |   |
| When someone praises my agency, it feels like a personal compliment                                      |   |   |   |   |   |
| If a story in the media criticized my agency, I would feel embarrassed                                   |   |   |   |   |   |

|   |  |  |  |  |  |
|---|--|--|--|--|--|
| GIN   |  |  |  |  |  |
| My agency uses materials that produce the least pollution               |  |  |  |  |  |
| My agency uses materials that consume less energy and resources         |  |  |  |  |  |
| My agency uses materials that design environment-friendly product       |  |  |  |  |  |
| My agency uses materials that are easy to recycle, reuse, and decompose |  |  |  |  |  |



## شواهد الابتكار الأخضر في وكالات السفر السعودية

### استكشاف الوساطة المزدوجة

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#### المخلص

#### معلومات المقالة

يبحث هذا البحث في العوامل المؤثرة على الابتكار الأخضر (GIN) داخل وكالات السفر في المملكة العربية السعودية، مع التركيز بشكل خاص على أدوار إدارة الموارد البشرية الخضراء (GHRM)، والثقافة التنظيمية الخضراء (GOC)، والهوية التنظيمية الخضراء (GOI). وباستخدام طريقة أخذ العينات العشوائية، شارك في الدراسة ٢٩٦ موظفًا من وكالات السفر السعودية. تسلط النتائج الضوء على أن إدارة الموارد البشرية العالمية لها تأثير إيجابي كبير على GIN و GOC و GOI. بالإضافة إلى ذلك، وجد أن GOC و GOI لهما تأثير كبير وإيجابي على GIN. والجدير بالذكر أن الدراسة تكشف أن GOC و GOI يعملان كوسيط جزئي في العلاقة بين GHRM و GIN. تحمل هذه النتائج آثارًا كبيرة على قطاع السفر، حيث توفر رؤى قيمة لواضعي السياسات وأصحاب المصلحة في الصناعة. يؤكد البحث على أهمية اعتماد ممارسات GHRM داخل وكالات السفر لتعزيز السلوكيات الخضراء، وتنمية أماكن العمل الواعية بيئيًا، ومواءمة الثقافة والهوية التنظيمية مع أهداف الاستدامة. ومن خلال القيام بذلك، يمكن لوكالات السفر تعزيز قدرتها على تسجيل العلامات التجارية العالمية، والمساهمة في مستقبل أكثر استدامة. باختصار، تسلط هذه الدراسة الضوء على الترابط بين GHRM و GOC و GOI و GIN ضمن السياق الفريد لوكالات السفر السعودية. ويقدم توصيات عملية لتعزيز قدرات الابتكار البيئي وتعزيز الاستدامة في صناعة السفر.

#### الكلمات المفتاحية

الهوية التنظيمية الخضراء؛  
الابتكار الأخضر؛  
المملكة العربية السعودية؛  
وكالات السفر؛  
العاملين.

#### (JAAUTH)

المجلد ٢٤، العدد ١،  
(٢٠٢٣)،  
ص ٣٥٣-٣٦٦.