The Impact of Perceived Organizational Support on Green Hotel Performance: Green Environmental Practices as a Mediator

Ahmed Mahmoud Mohamed Ali[a]**,**   **Muhammad Abd ElMonem Ebraheem Abd Elsalam** [b]**,**

Hamad Ali Batikh Hamdoun [c]

[a] *Associate Professor, Hotel Management Department, Faculty of Tourism and Hotels, Minia University.*
[b] *Associate Professor, Hotel Management Department, Faculty of Tourism and Hotels, Minia University.*
[c] *Lecturer, Hotel Studies Department, Faculty of Tourism and Hotels, Luxor University.*

Keywords

Abstract

Perceived organizational support (POS) achieves several positive organizational consequences as well as positive employee behaviors that help hotels to succeed, so this study aims to explore the impact of perceived organizational support on green hotel performance (GHP): a mediating role of green environment practices (GEP) in Egyptian green hotels. A quantitative approach was applied. The targeted population was the employees and their supervisors in Egyptian Green Star hotels. A questionnaire was used to collect data, which was distributed in South Sinai and the Red Sea Governorate from September to November 2023. The research utilized four measurement instruments to measure perceived organizational support, sustainability performance and green environmental practices.382 forms of valid replies were collected and examined. This study uses smart PLS-SEM to test the model. The results showed that POS has a significant impact on GEP and GHP. Furthermore, green environmental practice improves green hotel performance, and GEP mediates the relationship between POS and GHP. In general, this study gives essential insight into the hospitality industry as it proposes important tactics for hotel managers to enhance their employees' green performance by supporting sustainable practices in hotels. Lastly, this study will help managers who are interested in gaining a competitive advantage, applying green practices, and increasing sustainability performance by enhancing perceived organizational support for their employees.

1. Introduction

The hospitality industry has converted to a rapidly increasing economic zone worldwide that has pushed countries in social and economic progress while contributing 10% more to sustainable development goals (Qasim et al., 2023). Sustainability techniques in the hotel industry have gained popularity in recent eras (Rehman et al., 2023). Hotel customers are becoming increasingly aware of the environment (Kularatne et al., 2019; Yusoff et al., 2020). Social connections at work are important for employees' well-being since every staff desire to be treated with esteem and decency, whether by supervisors (Rukh et al., 2018). As a result, POS may be defined as an organization's creativity to give various resources valued by employees in exchange for a positive return in the long term (Wang et al., 2020).

Employee commitment will increase if they feel stronger organizational support at work due to the good influence of POS on organizational sustainability performance (Wang et al., 2018; Rukh et al., 2018). Choi et al. (2016) argued that employees who believe that they are being treated justly will respond with great job performance and favorable attitudes toward the job and the business. According to this argument, it can be defined that employees' best efforts in executing their own obligations and hotel goals are reflected in POS as a positive reply that stems from their certainty of being respected, being interested in well-being, and having considerable organizational support.

Some progress has been made in studies of perceived organizational support relationship with emotional intelligence and labor (Wen et al., 2019), human resource development and organizational citizenship behavior (Suteera & Suthinee, 2019), servant leadership (Huning et al., 2020), psychological well- being (Wang et al., 2020), and job insecurity (Han and Khalid, 2021). In addition, there are many studies published on sustainability performance relation with green innovation (Asadi et al., 2020), lean green (Kovilage, 2021) leadership style (Kafetzopoulos & Gotzamani, 2022), talent management (Lyu et al., 2022), social media and value creation (Owusu et al., 2023), environment management (Rehman et al., 2023), green human resource management (Qasim et al., 2023), green intellectual capital (Bhatti, 2023), green orientation (Karikari et al., 2023), so there is a lack of literature to verify the relationship between perceived organizational support, green environment practices, and green hotel performance, especially in analyzing the mediation role of green environment practices in the hospitality industry in Egypt.

In addition, when the researchers performed a pilot study, they discovered that hotel management did not focus on green hotel performance via perceived organizational support and green environmental practices, meanwhile, the serial mediation effects of green environment practices between perceived organizational support and green hotel performance have not yet been clarified theoretically and practically. Therefore, this study explores the impact of perceived organizational support on sustainability performance: a mediatorial role of green environmental practices in the Egyptian hospitality domain.

1.1 Objectives of the study

The main objective of this study is to explore the impact of perceived organizational support on sustainability performance: a mediating role of green environment practices. The objectives of this study are as follows:

1. To find out the impact of (POS) on green environment practices (GEP)
2. To identify the impact of perceived organizational support (POS) on green hotel performance (GHP).
3. To explore the impact of GEP on GHP.
4. To explore the mediating role of green environment practices GEP in the relationship between perceived organizational support (POS) and green hotel performance (GHP).
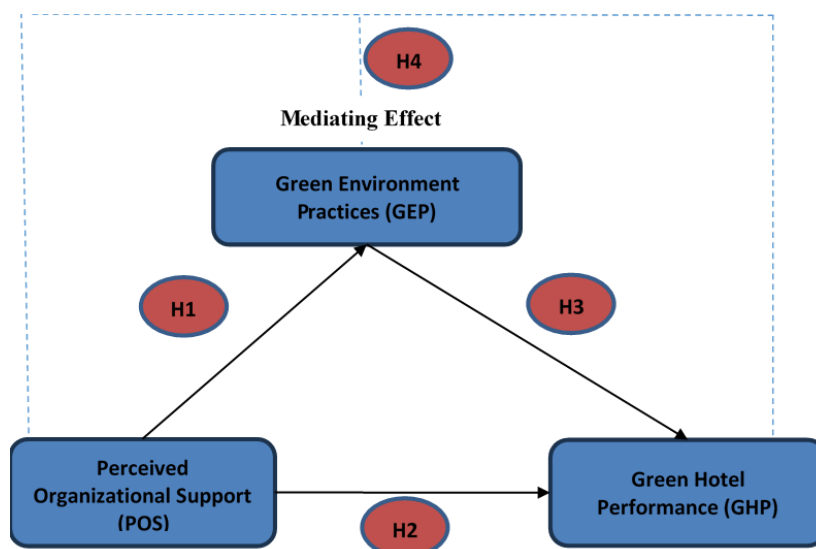
(Fig 1.) Conceptual proposed model

2. Theoretical background and hypotheses development

2.1. Perceived organizational support (POS).

POS is defined by Musenze and Mayende (2022) and Lumineau et al. (2023) as an employee's view of the level to which the hotel supports workers and willingness to give help when required. According to Patnaik et al. (2023) and Putri et al. (2023) POS can be defined as the amount to which workers think the hotel morals their helps and pay attention to their well-being at work. Organizational support is a job source that may assist employees in developing personal resources such as essential, incentives, and positive affecting (Hobfoll et al., 2018). Furthermore, POS can strengthen workers' sense of control and decrease their anxiety (Bohle et al., 2018). Additionally, POS can help hospitality staff gain different resources required in their sensitive labor-based service delivery (Wen et al., 2019).

A range of factors influence employees' perceptions of organizational support, shaping how employees view the underlying intentions of how they are treated in the firm (Xingyu & Priyanko, 2020). Employees with high POS tend to return their organization with good attitudes and actions (Alfes et al., 2013; Ng, 2016; Aktar & Pangil, 2017). Xingyu and Priyanko (2020) added that, when a mistake occurs, staff feel uncertain and feel fear of resource loss. Setyoko et al. (2022), Sabir et al. (2022) and Sheikh (2023) stated that the hotel is regarded a guarantee in terms of offering support in calming and caring for their employees by providing the appropriate answer

to these challenges. To shed light on perceived organizational support (POS), Riska et al. (2023) and Sheikh (2023) argue that, it is an employee's clarification of the hotel where he works; employees will see and have ideas about the range to which the hotel offers care and comment that is in accord with the performance and efforts that employees have made. According to Patnaik et al. (2023) and Putri et al. (2023), POS is a procedure used to demonstrate others' obligations in a social interface.

2.2. Green environmental practices (GEPs)

According to Teng et al. (2012) and Chan (2013), green practices inspire hoteliers to decrease their use of solid waste, conserve energy and water, minimize expenses associated with running their business, and preserve the environment. In the hotel business, "green practices" are environmentally friendly initiatives promoted to improve the hotel's standing (Dwivedi et al., 2022; Moise et al., 2021). According to Moise et al. (2021), green practices are environmentally sociable techniques that encourage managers to create environmental conservation and health programs. According to Fukey & Isaac (2014) and Nthiga (2018), hotels have a greater presence of green practices in three domain areas: water conservation, solid and liquid waste management, and energy efficiency methods. According to Han et al. (2020), the hotel sector is primarily responsible for the significant environmental damage that occurs on earth because of its constant use of energy, water, and garbage.

Barakagira and Paapa (2023) declared that crucial green practices encompass dedication to ecological principles, reusing and recycling materials, energy efficiency and conservation, lighting, water conservation and efficiency, landscaping, pest control, handling hazardous and toxic materials, transportation, and procurement. According to Gil-Soto et al., (2019), adopting a "green" stance has emerged as a potent strategic tool for differentiating and positioning businesses' goods and services. Barakagira and Paapa (2023) also mentioned that hoteliers experienced a great deal of benefits from the adoption of green techniques such as, increased profitability, lower material costs, a competitive edge, and better customer service are just a few advantages.

2.3. Green hotel performance (GHP)

Sustainability is a broad concept that includes aspects of economics, and other social sciences (Rosenberg et al., 2021). Many hotels prioritize skills and environmental awareness (Ögmundarson et al., 2020; Alzoubi et al., 2022; Ben-Abdallah et al., 2022). It is a proactive approach that necessitates the development of hotel objectives (Owusu et al., 2023). Moreover, it is a vital aspect for service organizations to remain good and fulfill the requirements (Moisescu, 2018; Ali et al., 2022; Lizarelli et al., 2022). The necessity of developing and managing a sustainability plan has grown as hotels are increasingly compelled to play a dynamic role in social obligation and environmental preservation (Stead & Stead, 2014; Suárez & Zaragoza, 2021).

Hotels must accurately assess and manage not only their financial performance but also other dimensions to carry out sustainability programs, which indicates their dedication to environmental and social standards (Jassem et al., 2020). Lumineau et al. (2023) define performance as a set of managing actions that offer an outline of the degree to which outcomes were accomplished in carrying out their tasks and obligations. Hotel success is often measured by the level of sales and corporate incomes over a given period. The term assessment is frequently used to refer to the evaluation of a hotel's performance (Haudi et al., 2020). Performance is an explanation of the level of accomplishment of activities in attaining the objectives and strategic planning of a hotel (Patnaik et al. 2023; Putri et al., 2023).

GHP is described as a hotel's competitiveness in ensuring long-term market presence and being able to meet partners' expectations, provide value for customers, and acknowledge the need for long-term development (Pislaru et al., 2019). Furthermore, sustainable performance is the position of financial, environmental, and social aims in the transfer of a hotel's main corporate operations to maximize value (Huo et al., 2019). Sustainable performance is defined as performance enhancement while minimizing environmental impact (Latan et al., 2018), making it a crucial element (Sharif et al., 2020; Yu et al., 2021).

GHP has been defined by several scholars as a green approach aimed at preserving the social, and economic elements of the environment that a hotel operates (Shahzad et al., 2019; Hen et al., 2021; Khan et al., 2021). Many scholars, however, have discovered and emphasized the elements influencing social performance, like innovation and green investment (Saunila et al., 2018; Ding et al., 2019; Razzaq et al., 2021; Xuefeng et al., 2022). As a result of human financial expansion destroying the world's natural resources and ecosystems, participation in social attempts to alleviate the situation is severely constrained (Sarwar et al., 2022). Prior research has stressed the importance of humans in source protection and sustainable growth (Di Fabio, 2017; Rehman et al., 2021). According to Zaid et al., (2018), the growing emphasis on sustainable performance and social obligation has established new goals that go beyond just economic considerations, such as a dedication to environmental and social consequences.

Nizam et al., (2019), Al-Hawary and Mohammed, (2017), AlTaweel and Al-Hawary, (2021), and Al-Hawary and Alhajri (2020) clarified sustainable performance as the practice and management of a hotel's properties in a technique that maximizes the three dimensions. These dimensions of sustainability performance are as follows: First, economic performance is a set of practical tools to develop strategies to respond to unpredicted economic events (Al-Jarrah et al., 2012; Poltronieri et al., 2019). Profitability (Afum et al., 2020), return on assets, organizational cost reduction, market share promotion (Kafetzopoulos & Gotzamani, 2022), total revenues, gross profit, and average daily rate (Ishaq et al., 2023). Second, organizational social performance is evaluated (Iqbal et al., 2020). It is the successful transformation of an organization's task into practical realism by establishing social standards connected to enhancing people's lives in society and providing growth opportunities (Huo et al., 2019; Alshura et al., 2023). Third, Ojo and Fauzi (2020) discover that a hotel's environmental performance supports staff in assessing improvement toward reaching their environmental objectives. For example, reduce harmful materials (Akanmu et al., 2020; Han & Huo 2020; Roh et al., 2022), decrease water consumption, decrease plastic consumption, and energy production (Ishaq et al., 2023). To address environmental concerns, it is critical to understand environmentally conscious and productive decision-makers in diverse companies (Abbas et al., 2022).

2.4. Perceived organizational support and green environmental practices

Management support and employee involvement are crucial for the implementation of energy conservation and carbon reduction (ECCR) programs (Teng et al., 2012). Organizations can increase the level of organizational support to further establish environmental behavior standards, strengthen employees' perceptions that their business supports corporate sustainability initiatives, and increase employees' motivation to follow those initiatives to increase their commitment to environmental behaviors (Kim et al., 2020). It is well known that employees' positive attitudes toward eco-friendly activities are influenced by top management's support for environmental

issues and that this, in turn, promotes sustainable environmental performance (Haldorai, et al., 2022).

According to Teixeira et al. (2016), environmentally aware management teams can effectively manage environmental initiatives across departmental and business borders. Teixeira et al. (2016) added that top management teams that are concerned about environmental issues are viewed as intangible assets in the context of continuous environmental advancement. The environmental commitment of top management is essential to develop an organizational culture that places a high priority on environmental performance (Latan et al., 2018). Hotel managers are more inclined to adopt green practices, promote creative thinking, and cultivate relationships with their staff if they view environmental practices as a means of gaining a competitive edge (Kim et al., 2020).

Concerns about the environment have compelled businesses to adopt ecologically sustainable practices and focus on their total environmental performance, which has increased attention to the tendency of organizations to eliminate industrial waste and risks (Ahmed et al., 2021). According to Haldorai et al. (2022), the green commitment of top management has a direct impact on hotel environmental performance. Employee POS plays a role in establishing organizational norms, and supporting environmental behaviors can boost affective commitment to sustainability projects (Kim et al., 2020). Task-related pro-environmental behavior and work engagement are raised when employees feel that their organizations support the environment (Karatepe et al., 2022). These evidences point to the following hypothesis: Hypothesis1 (H1): POS has a positive impact on GEP.

2.5. Perceived organizational support and green hotel performance

According to Rockow et al., (2016) and Islam & Ahmed (2019) empirical research has shown that POS is related to work performance. Employees attempt to recoup real source loss by obtaining resources from a variety of sources (Woo et al. 2021). Le and Lei (2019) argue that POS signifies the best efforts of the employee to behave following the hotel's goal and achieve personal obligations as a positive response. According to Duan et al. (2020), when employees think they are respected and reinforced by their hotel, they will be certain of the hotel's ideals and strive for the hotel's success. Choi et al. (2016), argued that if employees believe that they are being treated equally, they will respond with good job performance. Based on the preceding logic, we define POS as an employee's extreme efforts in carrying out personal commitments and hotel objectives as a positive reply stemming from their belief of being respected and having strong organizational care (Duan et al., 2020).

. POS is seen as an important aspect of creating a favorable ecosystem for green innovation (Choi et al., 2016; Suifan, 2016; Suifan et al., 2018). As a result, this favorable perception of organizational support is connected to employees' preparedness for change (Chenevert et al., 2019). According to Duan et al. (2020), perceived organizational support gives meaning and determination to the lives of staff. As a result, people who feel strong organizational support are more likely to find purpose and meaning in their work. Duan et al. (2020) gathered data from 377 employees from numerous businesses. According to their relationships, perceived organizational support and the meaning of work are positively associated.

The results of the analysis of the structural equation model on data from 274 hotel workers revealed the importance of POS in explaining the importance and performance of the job (Akgunduz et al., 2018). In addition, POS and sustainability performance has been proven to have a significant positive association in previous

studies (Karatepe & Aga, 2016; Imran & Aldaas, 2020). These evidences point to the following hypothesis: Hypothesis 2 (H2): POS has a positive impact on GHP.

2.6. Green environmental practices and green hotel performance

According to Asadi (2020) green practices had a favorable impact on financial performance, market performance, and social welfare. Green methods have a favorable impact on financial and operational performance by lowering manufacturing costs, minimizing environmental damage, consuming less energy, producing less waste, and adopting recycling (Centobelli et al., 2019; Asadi et al., 2020). Furthermore, boosting the company's image and green technology, strengthening the firm's competitiveness strategy, and expanding social and health benefits all have a good impact on the firm's economic performance (Mehta & Chugan, 2015; Raharjo, 2019).

Green hotel practices techniques can assist a hotel in improving its environmental performance (Jabbour & Santos, 2008). By reducing solid and water waste, carbon emissions, the use of polluted and hazardous inputs, the rate of environmental mishaps, that impact a hotel's operation (Centobelli et al., 2019).

In terms of social performance, green practices improve employee and community circumstances, helping people live healthier lives (Zaid et al., 2018). Also, it is acknowledged that the most significant organizational advantages of addressing green practices include enhanced employee social responsibility awareness, as well as talent recruitment and retention (Mehta, K. & Chugan, 2015). There is also evidence that hotels that participated in social obligations experienced important profits in terms of guest and employee happiness, excellent staff recruiting, and innovation, all of which are likely to improve a hotel's social performance (Wagner, 2013; Zaid et al., 2018). These evidences point to the following hypothesis. Hypothesis 3 (H3): GEPs has a positive impact on GHP.

2.7. GEPs mediate the relationship between POS and GHP

Organizations can increase the level of organizational support to further establish environmental behavior standards, strengthen employees' perceptions that their business supports corporate sustainability initiatives, and increase employees' motivation to follow those initiatives to increase their commitment to environmental behaviors (Kim et al., 2020). Employees' positive opinions of green activities are known to be influenced by top management's support for environmental issues, and this, in turn, promotes sustainable environmental performance (Haldorai, et al., 2022). Moreover, employee POS plays a role in establishing organizational norms, and supporting environmental behaviors can boost affective commitment to sustainability projects (Kim et al., 2020). Furthermore, the development of green commitment and the intellectual capital of top management have a direct impact on the management of hotel environmental performance (Haldorai et al., 2022). Karatepe et al., (2022) added that duty-related pro-environmental behavior and work engagement are raised when employees feel that their organizations support the environment.

Green methods, in particular, have a favorable impact on financial and operational performance by lowering manufacturing costs, minimizing environmental damage, consuming less energy, producing less waste, and adopting recycling (Asadi et al., 2020). Furthermore, boosting the company's image and green technology, strengthening the firm's competitiveness strategy, and expanding social and health benefits all have a good impact on the firm's economic performance (Mehta & Chugan, 2015; Raharjo, 2019). According to these findings, there is a clear correlation exists between GEP and POS, and there is a similar correlation exists between POS and GHP. The study suggested an indirect link between POS, GEP, and GHP. As a result, research formulates the following hypothesis: Hypothesis 4 (H4): Green environmental practices

mediate the relation between Perceived organizational support and green hotel performance.

3. Methodology

The research adopts a deductive approach and focuses on establishing causal relationships between variables, specifically examining the impact of POS on GEP and GHP. Moreover, the mediating role of GEP between POS on GEP in green-star hotels in Egypt. Furthermore, the survey strategy is consistent with the deductive research approach and is associated with the positivist research paradigm (Saunders et al., 2016). Given that the research involves developing a causal model to explore and test the relationships between POS and other constructs, specifically GEP and GHP. Hence, the researchers adopted a questionnaire as it is associated with the philosophy of positivism, the design of quantitative research, the explanatory nature, and the considerations of time and cost.

3.1. Measurement

The survey consisted of two parts: first, the questionnaires included questions on demographic data of the sample from hotel employees and their supervisors. Second, the questionnaires consist of variables of the model (POS-GEP-GHP). The first variable was perceived organizational support (POS), this section was measured using seven items that were adapted by Eisenberger et al. (1986), and this scale displays a reliability coefficient of 0.891. The second variable was sustainability performance which contains three performance dimensions adopted by Zhu et al. (2007) and Paulraj (2011) as follows: The environmental performance dimension consists of six items. The economic performance dimension consists of seven items. The social performance dimension consists of five items; this scale displays a reliability coefficient of 0.895.

The third variable was the green environmental practices scale was adapted from the study of Barakagira, A., and Paapa, C. (2023), this scale contains three dimensions as follows: the energy conservation dimension, which consists of nine items. The water conservation dimension contains six items. The waste management dimension contains nine items. Finally, the Commitment to Environmental Practices dimension which was adapted from the study of Wang (2012), contains four items, this scale displays a reliability coefficient of 0.875. A five-point Likert scale of 1= (strongly disagree) to 5= strongly agree.

Researchers slightly modified some items in the original description of items to suit the research field. Content validity was established, as all measurement items included in the questionnaire survey were adapted from previous studies that had confirmed the validity of the content of their items. Furthermore, researchers employed face validity to assess the validity of data collection techniques based on feedback and suggestions from five professional hotel managers and experts. The researchers conducted a pilot study of sixty questionnaires and distributed them to a sample of employees in the Red Sea and South Sinai governorates to validate the data collection instrument (see Table 1).

Table1: Measurement of Research Variables

Perceived organization support (POS)		
	POS1	My hotel appreciates my contributions to green management challenges.
	POS2	My hotel seriously considers my environmental beliefs and ambitions.
	POS3	My hotel values my feedback on green management challenges.

	POS4	My hotel is proud of my successes on green management concerns.
	POS5	My hotel would disregard any complaint from me on green management matters
	POS6	My hotel recognizes the extra effort I make on green management concerns.
	POS7	My hotel values my pleasure with green management.

Green Environmental Practices (GEP)		
Energy conservation (EC)	EC1	Staff is aware of the environmental effect of hotels.
	EC2	Energy policy informed to guests, which includes best practices for space heating, opening windows, turning off lights, and so forth.
	EC3	Room thermostats are adjusted to the appropriate temperature for guest comfort, reducing open doors and windows when air conditioning is working.
	EC4	When guests check out, all electricity and lighting in the vacant room are instantly shut off.
	EC5	Each guest room has a thermostatic control with a suitable higher and lower temperature setting.
	EC6	There are automated systems that cut off air conditioning and/or heating when windows or exterior doors are opened.
	EC7	The electricity automatically shuts off when guests departure.
	EC8	Occupancy sensors detect movement and turn on and off the lights
	EC9	Make sure that hot water tanks, water systems, boilers, and water pipes are all thermally insulated.
Water conservation (WC)	WC1	Hotel guests participate in numerous ways to preserve water.
	WC2	low-flow plumbing fixtures, such as tap and showerhead water restrictors
	WC3	Water restrictors in taps and showerheads are examples of limited water flow fixtures.
	WC4	In kitchens, efficient equipment such as reduced water flow taps with pedal, efficient dishwater, and efficient premise spray valves are installed.
	WC5	Water pressure is reduced by installing pressure reducers or pressure groups with frequency inverters. Identification of leaks and control of water losses through routine water network inspections using tools and technologies.
	WC6	Rainwater harvesting may be used for laundry, irrigation, and other non-potable purposes.
Waste management (WM)	WM1	Hotels employ a centrally located or electronic bulletin board for communications rather of creating several copies of notes.
	WM2	Hotel rips workplace paper and uses it to box goods.
	WM3	The hotel uses email for communication.
	WM4	The sellers return reusable containers, pallets, and other trash packing.
	WM5	We utilize produced items that are packed in returnable or reusable boxes and crates.

	WM6	Hotel often buys recycled materials.
	WM7	The hotel is prepared to swap out the little, disposable amenity bottles in the suites with refillable soap and shampoo dispensers.
	WM8	Any extra food is distributed as assistance to those who need it the most.
	WM9	Portion management has significantly helped the hotel decrease food waste.
Commitment to Environmental Practices (CE)	CE1	Hotel formed an Environmental Committee, whose job it is to create an Environmental Green Plan for the use of water, electricity, and solid waste.
	CE2	Hotel develops a Green Team that is responsible for ensuring that all environmental initiatives in which the hotel participates are done on time and appropriately.
	CE3	The hotel monitors its environmental efficiency by analyzing electricity, gas, water, and garbage use data on a monthly and annual basis.
	CE4	Hotel's environmental initiatives are obviously carried to its guests, staff, and to the public.
Green Hotel Performance (GHP)		
Economic performance (CP)	CP1	Implementing green practices helps hotel decrease in cost of materials purchased
	CP2	Implementing green practices helps hotel decrease in cost of energy consumption
	CP3	Implementing green practices helps hotel decrease the fees of waste discharge
	CP4	Implementing green practices helps hotel improve earnings per share
	CP5	Implementing green practices helps hotel improve return on investment
	CP6	Implementing green practices helps hotel increase sales
	CP7	Implementing green practices helps hotel increase profits
Social performance (SP)	SP1	Using green practices enhances guest satisfaction in hotels
	SP2	By implementing green practices, hotels may enhance their reputation among guests.
	SP3	Implementing green practices helps hotel improve investments on social projects (education, culture, sports)
	SP4	By implementing green practices, hotels may strengthen their ties with community activists and nongovernmental organizations (NGOs).
	SP5	Using green techniques enhances hotel knowledge and safeguards community members' rights and claims.
	SP6	Implementing green practices assistances hotel development in employee training and education
	SP7	Implementing green practices helps hotel improve occupational health and safety of employees
	SP8	Implementing green practices helps hotel improve overall stakeholder welfare.
Environmental performance (EP)	EP1	Implementing green practices helps hotel improve the environmental situation
	EP2	Implementing green practices helps hotel reduce waste (water and/or solid)

	EP3	Implementing green practices helps hotel reduce air emission
	EP4	Implementing green practices helps hotel decrease the consumption of hazardous/harmful/toxic materials
	EP5	Implementing green practices helps hotel decrease the frequency of environmental accidents

Source: prepared by the researchers

3.2. Population and Sample

This study investigates the impact of perceived organizational support on green hotel performance: a mediating role of green environment practices in green star hotels in South Sinai and Red Sea governorate in Egypt. Participants are hotel employees and their supervisors in the investigated hotels. The survey questionnaire was distributed to green hotels in Red Sea and south Sinai government in Egypt, the reason chosen these cities is that, firstly, there are considered one of the most awarded cities green star hotels (GSH) certification. The certified green star in South Sinai 83 hotels and in Red Sea 58 hotels (Egyptian Ministry of Tourism, 2022).

A pilot study was done and distributed 60 forms to employees to test wording of the scale, clarity, and applicability of the tool. The main goals of a pilot study are to verify the reliability and validity of the survey items (Doody & Doody, 2015; Fraser et al., 2018). A total of 382 valid forms were gained during October and November 2023, the researcher uses convenience sampling technique to include employees from different hotels, these sample is appropriate for analysis using PLS-SEM. The data gathering process was conducted via online survey that using google forms. All forms were checked for accuracy and established for analysis. The questionnaire was originally in English and was translated into Arabic.

3.3. Data Analysis Techniques

Two software programs were used in the current study's data analysis phase. Initially, the demographic and trip graphic characteristics of the respondents were calculated using frequencies, percentages, means, and standard deviations using the Statistical Package for the Social Sciences (SPSS) version 22. Second, the gathered data was examined using the Partial Least Squares Structural Equation Modeling (PLS-SEM) Smart-PLS 4 approach.

4. Data Analysis and Findings
4.1. The Descriptive Statistics of the Sample Demographic Data

In table 1, the descriptive analysis of the demographic characteristics of the research sample namely: gender, age, educational qualification, experience, hotel department, hotel location, and hotel grade (in stars).

Table 2: Descriptive Analysis of the Sample Profile

Variable	Frequency	Percentage (%)	Rank
Gender			
Male	229	59.9	**1**
Female	153	40.1	**2**
Total	382	100.0	
Age			
From 21: 30 years	136	35.6	**2**
From 31: 40 years	204	53.4	**1**
From 41: 50 years	35	9.2	**3**

More than 50 years	7	1.8	**4**
Total	**382**	**100.0**	
Education			
Pre-university education	24	6.3	**3**
Technical education	125	32.7	**2**
Bachelor's degree	216	56.5	**1**
Postgraduate studies (Masters - Ph.D.)	17	4.5	**4**
Total	**382**	**100.0**	
Experience			
Less than 5 years	122	31.9	2
From 5 : 15 years	230	60.2	1
More than 15	30	7.9	3
Total	**382**	**100.0**	
Department			
Front office	142	37.1	**1**
Housekeeping	111	29.1	**3**
Food and beverage	129	33.8	**2**
Total	**382**	**100.0**	
Hotel location			
South Sinai Government	194	50.8	1
Red Sea Government	188	49.2	2
Total	**382**	**100.0**	
Hotel grades (in star)			
Five star	224	58.6	**1**
Four star	146	38.2	**2**
Three star	12	3.1	**3**
Total	**382**	**100.0**	

As declared in the previous table, 59.9% of the sample were males, and 40.1% of the sample were females. The predominant age group within the range of 31 to 40 years (53.4%) suggests that our research captures a significant portion of participants in a stage of life associated with specific behavioral and attitudinal patterns, as well as that the distribution between other age groups is relatively balanced. In terms of education qualification, it highlights the academic diversity within the sample; most participants who hold bachelor's degrees (56.5%) reflect global higher education trends, while 32.7% have technical education, suggesting that they are potentially informed and knowledgeable. Furthermore, most participants (60.2%) have experience ranging from 5 to 15 years, while 31.9% have less than 5 years of experience. As a result, most employees have a lot of experience. 37.1% percent of the employees are from the front office department, followed by the food & beverage department (33.8), and housekeeping department (29.1%). Furthermore, according to the location of the hotel, 50.8% of the employees are from the South Sinai government and 49.2% from the Red Sea governorate. Moreover, most employees are from five-star hotels (58.6%), followed by four-star hotels (38.2%).

4.2. Common Method Bias

Collinearity (or multicollinearity) is an undesirable situation where the correlations among the independent variables are strong (Micheal & Abiodun, 2014). Most commonly, a value of less than 5 has been recommended as the maximum level of VIF (García et al., 2015). According to the results, all indicators ranged between 1.708 and 3.261 and had a VIF value of less than 5, thus each of these variables does not represent multicollinearity (see Table 3).

Table 3: Variance Inflation Factor (VIF)

Variables	VIF
CE	1.978
CP	2.788
EC	2.435
EP	2.401
POS1	3.038
POS2	3.261
POS3	2.026
POS4	1.977
POS5	1.708
POS6	2.441
SP	3.136
WC	2.184
WM	2.392
EC1	1.948

4.3. Measurement Model Assessment

The reliability test of the research model was strengthened with the alpha Cronbach score. The limit of the Cronbach alpha *(α)* reliability test is greater than 0.7 (Hair et al., 2019). The results of the reliability test of Cronbach's alpha *(α)* values ranged from 0.807 to 0.948, indicating that the scale has an acceptable internal reliability. Moreover, CR should be higher than 0.70, and the CR values in the research results ranged from 0.833 to 0.910 for all items, indicating that all the employed scales have acceptable internal reliability (see Table 4). Researchers evaluated whether the AVE values were greater than 0.5, which is the minimal level of acceptability deemed sufficient for convergent validity, while examining the average variance extracted (AVE) for convergent validity (Hair et al., 2011). Additionally, a latent variable that explains more than half of the variance in its indicators is said to have significant convergent validity if its AVE value is 0.50 or greater (Cheung et al., 2023). Moreover, the results show that all factors had factor loading values greater than 0.70. In summary, the statistical analysis supports the conclusion that the research's outer model exhibits strong reliability and validity, with consistent values across various measures, ensuring the robustness of the research findings (see Table 4).

Table 4: The Evaluation of Reliability and Validity of the Measurement Model

Indicators	α	C R	AVE	Factor loading
POS	0.891	0.897	0.648	.713
GEP	0.875	0.876	0.728	.885
EC	0.900	0.903	0.557	.778
WC	0.897	0.898	0.662	.749
WM	0.852	0.857	0.561	.769
CE	0.843	0.854	0.681	.718
GHP	0.895	0.895	0.826	.885
CP	0.830	0.833	0.544	.796
EP	0.909	0.910	0.734	.702
SP	0.807	0.826	0.570	.713

(α = Cronbach's alpha, CR = Composite reliability, AVE = Average variance extracted)

The HTMT value should be less than 0.85 (Hair et al., 2017). The HTMT levels were significantly lower than the reference value and did not exceed 0.85 (see Table 5). In summary, the research successfully demonstrated adequate discriminant validity through the application of multiple criteria, ensuring that each construct is distinct from others in the research.

Table 5: Heterotrait–monotrait Ratio of Correlations

	CE	CP	EC	EP	GEP	GHP	POS	SP	WC	WM
CE										
CP	0.654									
EC	0.673	0.721								
EP	0.673	0.806	0.692							
GEP	0.761	0.802	0.677	0.605						
GHP	0.710	0.755	0.650	0.791	0.768					
POS	0.788	0.793	0.707	0.734	0.856	0.714				
SP	0.658	0.755	0.685	0.861	0.823	0.787	0.752			
WC	0.646	0.653	0.674	0.708	0.855	0.751	0.667	0.742		
WM	0.782	0.719	0.679	0.671	0.708	0.752	0.766	0.720	0.714	

4.4. Assessment of the Structural Model (Test of Hypotheses)

The path coefficients of the Partial Least Squares (PLS) structural model were interpreted as standardized Beta coefficients, quantitatively ranging from 0.000 to 1.000 (Lowry & Gaskin, 2014). Hair et al. (2017) emphasized that values below 0.10 are generally considered not significant. Significant paths in the hypothesized direction provide empirical evidence for the suggested causal relationship, while non-significant or opposite paths do not support the previous hypotheses (Hair et al., 2011). Smart PLS4 was used to use a consistent PLS-SEM bootstrapping procedure to ascertain the significance of the route coefficients and related t-values for both direct and mediated associations. A path coefficient is deemed significant using a two-tailed t-test at a significance level of 5% if the T-statistic is greater than 1.96 (Wong, 2013). Furthermore, Table 6 and Figure 2 demonstrate that all three of the presented hypotheses (H1, H2, and H3) were significant as predicted. Therefore, the hypotheses are accepted. The research found that the inner model's path coefficients were statistically significant; suggesting that the proposed relationships between variables in the model are empirically supported and contribute to explaining the variation in the endogenous variables.

Table 6: Research Tested Hypotheses

Research Tested Hypotheses		Beta	T value	P value	Results
H$_1$	POS -> GEP	0.758	21.915	0.000	Accepted
H$_2$	POS -> GHP	0.356	4.249	0.000	Accepted
H$_3$	GEP -> GHP	0.498	5.724	0.000	Accepted
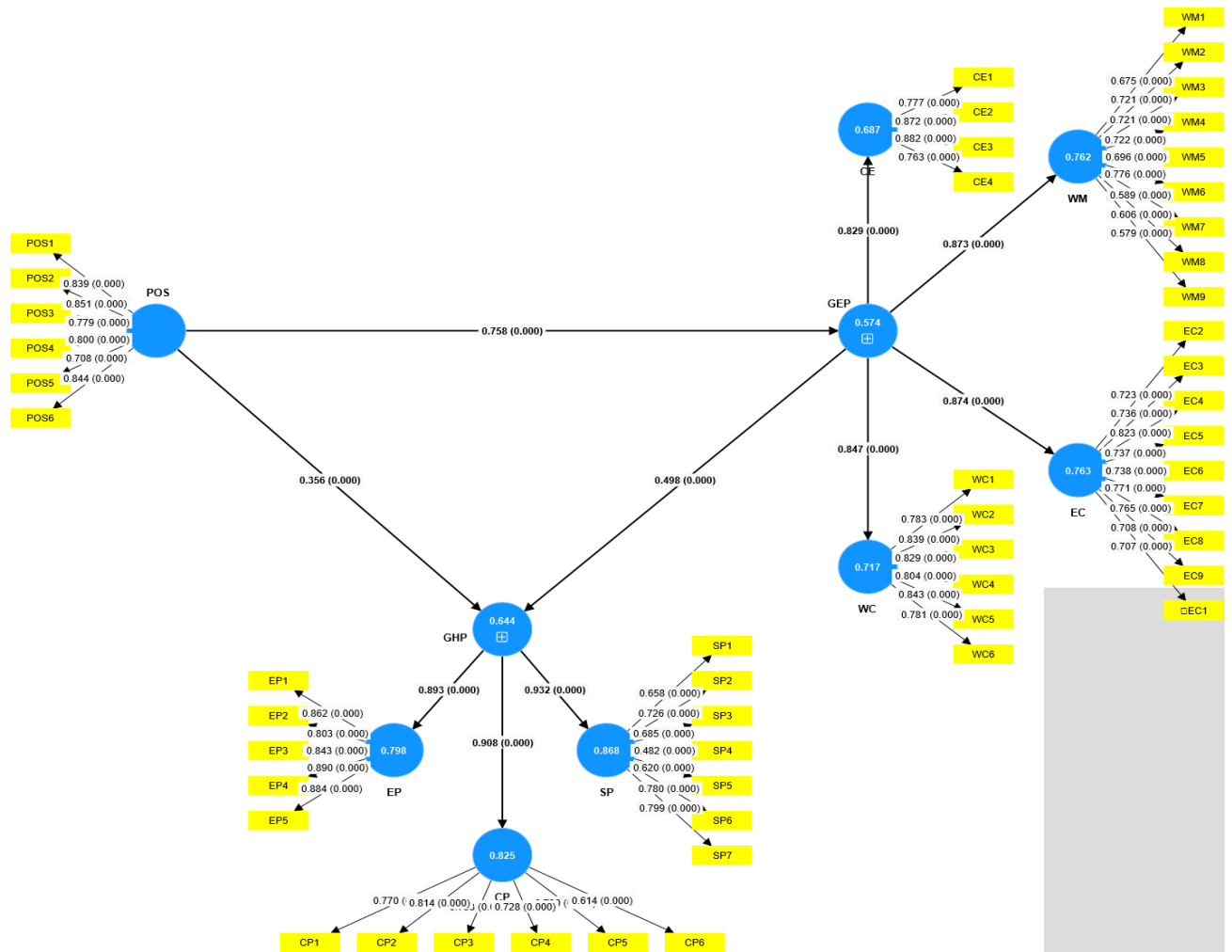
(Fig 2): The Structural Inner Model

In certain situations, researchers report F2 effect size to explain partial or full mediation (Purwanto, 2021). Values larger than zero are meaningful (Hair et al., 2019). Moreover, as a rule of thumb, values higher than 0.02, 0.15, and 0.35 represent small, medium, and large f-effect sizes (Purwanto, 2021). Based on Table 13, the size of the effects is between medium and large (see Table 7).

Table 7: The Effect size (F^2)

	f-square
POS -> GHP	0.151
POS -> GEP	1.347
GEP -> GHP	0.297

In addition, the indirect effect to assess the mediating role of the GEP between POS and GHP (see Table 8) was found to be positive and significant, supporting the mediation effects of GEP between POS and GHP (β = 0.352, t-value = 5.132, p < 0.000), hence supporting hypotheses H4 were supported.

Table 8: Mediation Analysis

Research Tested Hypotheses		Beta	T value	P value	Result
H4	POS -> GEP -> GHP	0.352	5.132	0.000	**Accepted**

4.5. Assessment of Overall Model Fit

When the measurement model assessment is satisfactory, the next step in evaluating PLS-SEM results is assessing the structural model (Hair et al., 2019). The goodness of the model is determined by the strength of each structural path determined by R2 value for the dependent variable (Henseler & Fassott, 2010). R2 is a measure of explanatory power in endogenous constructs that ranges from 0 to 1, with higher values indicating greater power (Purwanto, 2021). Furthermore, Hair et al. (2019) suggested an R2 value of at least 0.10 to ensure a satisfactory model fit. The results in Table 9 show that the R2 values are 0. 574 for WC and 0. 868, therefore the predictive capacity is substantially established.

Moreover, Q^2 provides a comprehensive understanding of the model's performance in predicting and explaining the observed data. Hair et al. (2011) recommended that the predictive capability of the model is assessed through predictive relevance (Q^2). A Q^2 greater than 0 indicates that the specific path for that independent variable has predictive relevance on the dependent variable (Hair et al., 2019). In this investigation, Q^2 values of 0.353 for WC and 0.566 for GEP were obtained, suggesting good predictive relevance. In summary, from these results, this research model can be stated to have a good goodness of fit.

Table 9: Coefficient of determination R-square and Q-square

Endogenous latent factors	R^2	Q^2
CE	0.687	0.460
CP	0.825	0.461
EC	0.763	0.405
EP	0.798	0.437
GEP	0.574	0.566
GHP	0.644	0.530
SP	0.868	0.423
WC	0.717	0.353
WM	0.762	0.446

5. Discussion and conclusion

First, to test hypothesis1 (H1) the researchers proposed that the perceived organizational support has a positive impact on green environmental practices. The results showed that perceived organizational support has a positive impact on green environmental practices. Green practices are critical in the hotel business because they encourage people to perform well at work. Furthermore, when employees perceive organizational support (POS) plays a role in building organizational norms, and supporting environmental behaviors, emotional commitment to sustainability can be increased. Furthermore, while employees have good views on their bosses, the researchers noticed that they are concerned about implementing green measures in hotels, such as energy efficiency processes, solid and liquid waste management methods, and water conservation practices. When staff have appositive support from their manager, they decrease water used in hotels, especially in bathrooms, kitchen, housekeeping, and laundry, and in water facility operations such as heating, ventilation, and air conditioning –HVAC, irrigation, cleaning, and maintenance. This is due to the ability of energy-efficient technology and the utilization of renewable energy resources to reduce greenhouse gas emissions. Therefore, it is consistent with the findings reported by (Teng et al., 2012; Latan et al., 2018; Kim et al., 2020; Karatepe et al., 2022; Haldorai et al., 2022).

Second, to test hypothesis 2 (H2), the researchers proposed that perceived organizational support has a positive impact on green hotel performance. The results presented by the researchers noted that to make employees feel cared for, hotels should proactively offer employee benefits, protect their rights, listen to their voices, and provide training. Furthermore, employees who are attached to their hotel perform better and make more meaningful contributions; therefore, managers should spend appropriate and intense time with their staff through supportive activities such as socializing and training, so there is a positive and significant relationship between perceived support and hotel performance. This result is in line with Wijaya et al., 2022; Xu et al., 2022; Afsar et al., 2017; Koroglu et al., 2022; and Srirahayu et al., 2023.

Additionally, to test hypothesis 3 (H3) the researchers proposed that green hotel practices are positively associated with green hotel performance. The findings showed that green hotel practices are positively associated with green hotel performance, as evidenced by the fact that hotels that participated in social responsibilities experienced significant profits in terms of customer and employee happiness, excellent staff recruiting, and innovation, all of which are likely to improve a hotel's social performance. Moreover, Green hotel practices techniques can assist a hotel in improving its environmental performance). By reducing solid and water waste, carbon emissions, the use of polluted and hazardous inputs, the frequency of environmental mishaps, and the overall environmental impact of a hotel's operation this result agrees with (Jabbour & Santos, 2008; Wagner, 2013; Zaid et al., 2018; Centobelli et al., 2019; Ali, 2022).

Finally, to test hypothesis 4 (H4) the researchers proposed that GEP mediates the relationship between POS and GHP. The results indicated that green environmental practices mediate the relation between perceived organizational support and green hotel performance. POS has a positive impact on GEP, indicating that employees' perception of their managers positively influences their commitment to implementing green practices in hotels. This includes energy efficiency, waste management, and water conservation practices. When employees have good views, they are more likely to reduce water usage in hotels, thereby improving their overall environmental impact and reducing the frequency of environmental mishaps. The results demonstrated a positive correlation between green hotel practices and green hotel performance. This was demonstrated by the fact that hotels that engaged in social responsibilities saw significant financial gains in terms of enhanced customer and employee satisfaction, superior hiring practices, and innovative ideas, all of which have the potential to improve a hotel's social performance. This result is in line with (Kim et al., 2020; Karatepe et al., 2022; Haldorai et al., 2022; Koroglu et al., 2022; Srirahayu et al., 2023; Zaid et al., 2018; Centobelli et al., 2019).

An attribution strategy used to indicate others' commitment to a social connection is perceived organizational support. Organizational support is influenced by a person's interface with the hotel where the hotel gives praise, support, and agreement. When employees perceive that they are valued and supported by their hotels, they will believe in hotel morals and try their best for hotel accomplishment. The objectives of this study are as follows. Firstly, to shed light on the relation between perceived organizational support (POS) and Green Environment practices (GEP) Secondly, to identify the impact of POS on green hotel performance (GHP) in Egyptian hospitality. Thirdly, identifying the impact of GEP on GHP in Egyptian hospitality, and finally, exploring the mediating role of GEP in the link between (POS) and (GHP). The findings confirmed that the POS had a good impact on GEP and GHP. GEP has a beneficial

influence on GHP. As a result, GEP mediates the relationship between POS and GHP. This research recommended that:

• Hotels should prioritize staff retention, growth, and improvement by offering green training programs.
• Hotels should establish goals and link them to a green reward and assessment system.
• Hotels should employ green environmental practices as one of their dynamic capabilities to capitalize on market possibilities.
• Hotels should educate their employees about environmentally friendly practices and provide examples of high-performing teams that are devoted to long-term skill development through training and cross-organizational learning.
• Managers should be willing to receive employees' ideas about work to keep the environment more efficiently
• Managers and practitioners have the responsibility of providing their staff with environmental instruction and awareness via appropriate planning of training programs, and seminars for the effective operation of green practices.
• Hotels should focus on providing chances for workers to participate in their hotel's green initiatives (for example, suggestion boxes, green groups, and encouragement to give thoughts for energy and water management.

6- Theoretical and Practical implications

The present study contributes theoretically as follows: First, it provides to the green literature by combining the concept of POS, GEP, and GHP in the Egyptian hotel industry, which is an understudied area. Also, according to the authors' best knowledge, no one studied the impact of POS on GHP by the mediating role of GEP in the context of the hospitality industry. Based on our findings, the practical implications of this study recommend enhancing hotel sustainability performance. To begin, this study argues that if managers wish to achieve high social, economic, and environmental performance, they can do so by offering greater perceived organizational support, which is considered a key predictor of sustainable performance. Managers must recognize that each employee has unique needs and expectations that must be met. As a result, when employees feel more organizational support, they tend to be more efficient at work and more loyal to their firm, which leads to a favorable attitude towards green practices.

As a result, hotels and managers must ensure that their staff receive enough assistance. The more support employees receive from their hotels, the more likely they are to establish emotional ties to their hotels and to demonstrate more excitement for their profession, resulting in improved sustainability performance. Second, the research's assumptions have significant implications for hotel managers and policymakers. Regarding the impact of perceived organizational support on green environmental practices and green hotel performance, the research methodology aims to provide direct guidance to hotels. A study framework of sustainable performance can be used in developing nations to minimize waste and emissions, non-renewable material, chemicals, components, and pollutants, and to conserve water and energy.

Today, owners/managers and policy-makers focus on green hotel performance, which includes economic performance, social performance, and environmental performance. By offering green training programs, companies should also concentrate on enhancing, maintaining, and growing the skills and knowledge of their workforce. Green goals and objectives need to be specified and connected to a green system of rewards and appraisals, which includes green indicators that give workers non-financial and financial information.

Thirdly, in addition to teaching employees about green practices, hotels should provide case studies of high-achieving teams that are dedicated to long-term skill development cross-organizational learning, and training. Workers are more willing to embrace challenges when it comes to suggesting innovations and are more likely to manage constraints if they are informed about green practices and receive assistance from their management in this regard. Meanwhile, sharing information within a company may guide in improving consumer satisfaction.

Green practices in hotels can significantly reduce waste, energy, and water usage. Employees should receive training on waste identification, emissions reduction, and resource conservation. Managers should monitor staff's environmental performance and encourage participation in environmentally friendly initiatives. This includes setting up an impartial board to monitor staff activities and offering opportunities for staff to contribute to sustainable initiatives.

Lastly, this study will help managers who are interested in gaining a competitive advantage, applying green practices, and increasing sustainability performance by enhancing perceived organizational support for their employees.

8. Limitations and Future Research:

The data originated from 5-star hotels in only two cities, which may have a distinct work culture. As a result, the generalizability of the findings may be examined in various categories in other cities using cross-cultural research methodologies. Also, as the current study used survey research, future studies may rely on different research methodologies, such as interviews with hotel managers in Egypt.

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تأثير الدعم التنظيمي المدرك على أداء الفنادق الخضراء: الممارسات البيئية الخضراء كوسيط

أحمد محمود محمد علي[a]   محمد عبد المنعم إبراهيم عبد السلام[b]

حماد علي بطيخ حمدون[c]

[a] استاذ مساعد بقسم إدارة الفنادق ؛ كلية السياحة والفنادق ؛ جامعة المنيا.

[b] استاذ مساعد بقسم إدارة الفنادق ؛ كلية السياحة والفنادق ؛ جامعة المنيا.

[c] مدرس بقسم الدراسات الفندقية ؛ كلية السياحة والفنادق ؛ جامعة الأقصر

يحقق الدعم التنظيمي المدرك العديد من النتائج التنظيمية الإيجابية بالإضافة إلى سلوكيات الموظفين الإيجابية التي تساعد الفنادق على النجاح، لذا تهدف هذه الدراسة إلى استكشاف تأثير الدعم التنظيمي المدرك على أداء الفنادق الخضراء: دور وسيط للممارسات البيئية الخضراء في الفنادق المصرية الخضراء. تم تطبيق النهج الكمي. وكان المستهدفون هم الموظفون والمشرفون عليهم بالفنادق المصرية الخضراء. تم استخدام استبيان لجمع البيانات، وتم توزيعه في محافظتي جنوب سيناء والبحر الأحمر في الفترة من سبتمبر إلى نوفمبر 2023. واستخدم البحث أربع أدوات قياس لقياس الدعم التنظيمي المتصور وأداء الاستدامة والممارسات البيئية الخضراء وقد تم جمع 382 استمارة صالحة. تستخدم هذه الدراسة برنامج PLS-SEM لاختبار النموذج. أظهرت النتائج أن الدعم التنظيمي المدرك له تأثير كبير على الممارسات البيئية الخضراء وأداء الفنادق الخضراء. علاوة على ذلك، تعمل الممارسات البيئية الخضراء على تحسين أداء الفنادق الخضراء، ويتوسط الممارسات البيئية الخضراء العلاقة بين الدعم التنظيمي المدرك وأداء الفنادق الخضراء. بشكل عام، تعطي هذه الدراسة نظرة ثاقبة أساسية حول صناعة الضيافة حيث تقترح أساليب مهمة لمديري الفنادق لتعزيز الأداء الأخضر لموظفيهم من خلال دعم الممارسات المستدامة في الفنادق. وأخيرًا، ستساعد هذه الدراسة المديرين في الحصول على ميزة تنافسية، وتطبيق الممارسات الخضراء، وزيادة أداء الاستدامة من خلال تعزيز الدعم التنظيمي المدرك لموظفيهم.