Gaining a Competitive Advantage through Green Human Resource Management Practices: The Case of Egyptian Hotels

أكتساب ميزة تنافسية من خلال ممارسات إدارة الموارد البشرية الخضراء: حالة الفنادق المصرية

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Abstract

The topic of green human resources management is considered one of the modern topics. Applying green human resources management practices has become an important factor for hotels in order to achieve a culture of sustainability. Therefore, this study aimed to investigate the impact of green human resource management practices on achieving the competitive advantage in Egyptian hotels. The population of the study included all certified green star hotels in Egypt, which are 158 hotels distributed over 17 destinations country wide. The target population for this study included all human resource managers in these hotels. A questionnaire form was used as a data collection tool. The total number of valid answered questionnaires reached 146 forms representing 92.40% of the total distributed ones. SPSS-26 software was used to analyze the collected data. The correlation and regression results of this study results clarified that only two variables “green performance management and appraisal” and “green reward and compensation” have a positive and significant impact on the competitive advantage. Results also showed that green recruitment and selection, green training and development, and green employee empowerment and participation have no impact on the competitive advantage. This study recommended the necessity of establishing an environmental management information system and conducting audits to evaluate the environmental performance of employees and provide regular feedback on the implementation of their environmental responsibilities, which contributes to hotels obtaining a competitive advantage.

Keywords: Green human resource management practices; The Competitive Advantage; Egyptian Hotels.

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1. Introduction

The increasing interest in environmental issues and the implementation of environmental and cleaner production policies in recent years by organizations around the world, whether it is commercial or non-commercial, has prompted the phrase “Go Green” to become the buzzword of the 21st century (Koberg & Longoni, 2019). It is worth mentioning that the concept of green orientation has become the focus of attention, making organizations take many green initiatives such as green management, green marketing, green supply chain, green packaging and green human resource management (GHRM). Furthermore, firms operate in a highly competitive global economy where they must not only be efficient and deliver value, but they must also be responsible, and this includes responsibility towards the environment. Also, intensifying environmental concerns around the world have led firms to adopt green practices at an increasing rate; such adoption can benefit firms in becoming “green and competitive” (Yong, Yusliza & Fawehinmi, 2020a).

Specifically, the hotel industry is facing tremendous pressure to prioritize environmental preservation by providing environmentally benign and safer service and product to hotel guests. (Kostić, Ratković & Forlani, 2019). On the other hand, the conventional hotel practices are against the environmental preservation and harmful too (Sobaih, 2019). Consequently, due to the extreme harmful of environment issues there are increasing forces to give more attention to environmentally friendly hotels or what is called “green hotels” compared to traditional hotels (Kasliwal & Agarwal, 2019).

In this vein, some hotels have started to implement various innovative methods to increase the greenness of their operations. Green hotels are viewed as “environmentally friendly establishments that apply distinctive strategies to reduce negative impacts on the environment by implementing programs to save water and energy and reducing solid waste production and recycling (Lemy, Carissa, Ayumi, Tamara & Pramono, 2021). Furthermore, Green hotels aim to protect the environment and the surrounding natural ecosystem, reduce expenses, generate long term profitability, and create competitive advantage (Dani, Tiwari & Negi, 2021).

Apparently, human resources management (HRM) is the basis for achieving the best environmental management and enhancing sustainability in organizations. Therefore, it is necessary to synthesize green concepts in HRM in order to be green HRM (Bombiak, 2019). Given this, GHRM practices are the best strategy for environmental conservation programs and provide a basic framework that allows organizations to oversee environmental impacts (Yusof, Nejati, Kee & Amran, 2020).

According to the competitive advantage, hotels should have the ability to highlight a greater differential or relative value than its competitors and convey this relevant information to its target audience in the best possible way in order to gain and maintain the competitive advantage (Botes & Pretorius, 2020). In this way, a competitive advantage lies in the hotel’s ability to generate goods/services in a more effective way than its immediate competitors. Hotels have a competitive advantage when they employ a value-creating strategy that is not simultaneously implemented by any current or potential competitors (Gharbi, Sobaih, Aliane & Almubarak 2022). In addition, GHRM practices enhance differentiation and public image, providing the hotel with a competitive advantage (Pham, Vo-Thanh, & Tučková, 2022).

Due to the increasing interest in the human element and the emergence of many modern concepts in the field of human resources management leading to the concept of green human resource, it has contributed significantly to developing the skills of the human element, which has become one of the most important determinants of competitive advantage. In addition, there are many researches which contributed greatly to solving problems related to the human element, some of them focused on the effects of GHRM practices on growth of economies across the world in various industries in general, and the hotel industry in particular. On the other hand, there are a few researches that have focused.
on the impact of GHRM practices on the competitive advantage, despite its importance in developing GHRM practices. From an applied perspective in Egyptian hotels (Green Star Hotels), this study is one of the most important studies that studies the relationship between these variables. Hence, the importance of this study increases in its ability to fill the research gap by exploring and clarifying the impact of applying green human resource management practices on the competitive advantage in Egyptian hotels (Green Star Hotels).

2. Literature Review and Hypotheses Formulation

2.1 Green Human Resource Management

2.1.1 The Concept of Green Human Resource Management

The concept of GHRM is one of the modern management practices used by businesses to preserve the environment and guarantee environmental sustainability (Cheema & Javed, 2017). GHRM has also emerged as a result of global environmental concern and the need for businesses to adopt environmental preservation criteria (Zhu, Tang, Wang & Chen, 2021).

Consequently, the term "greening" refers to the use of sustainable practices and policies in all functional areas of human resource management over the course of an employee's career to make the best use of the limited resources at hand while promoting the source of employee morale and satisfaction, which is environmentalism (Moktadir, Dwivedi, Ali, Paul, Kabir & Madaan, 2020). Moreover, HRM practices and policies in the aspects of recruitment, selection, training, evaluation, pay, compensation, rewards, and employee relations have become an effective instrument for coordinating employees with organizational environmental strategies, ultimately resulting in sustained performance over time (Mughal & Malik, 2022). In that sense, Zhao, Liu & Sun (2020) added that GHRM is a set of practices to implement the organization's strategy towards environmental protection, which can be considered as a competitive ability to encourage employees to engage in pro-environmental activities within the company.

2.1.2 The Importance of Green Human Resource Management

GHRM can help green organizations maximize profitability by reducing waste, recycling, and reusing materials, improving the property's image, and drawing in and retaining customers who care about the environment (Fayyazi, Shahbazmoradi, Afshar & Shahbazmoradi, 2015). Green practices for human resources play an important role in the industry, the most important of which are according to (Mehta & Chugan, 2015; Mishra, 2017). (1) Attracting customers interested in the environment. (2) Sustaining business activities. (3) Promoting environment-related issues. (4) Helping the employers in building brand image. (5) Increasing the company’s reputation in the market.

According to Ashraf, Ashraf & Anam (2015), hotels that have adopted GHRM practices gain advantages more than those that haven't. However, the implementation of GHRM resulted in a number of advantages such as, enhancing guest confidence in hotel and strengthening the relationships between hotel and their employees, suppliers, customers, government agencies, and the media and can be used as a marketing strategy. Additionally, GHRM may also improve mental image and support hotel’s brand (Sheopuri & Sheopuri, 2015), increase productivity and sustainability (Saha, Sarker & Ahmed, 2020), achieve enormous operational savings by reducing their carbon footprint and achieve higher employee job satisfaction and commitment (Amjad, Abbas, Zia-Ur-Rehman, Baig, Hashim, Khan & Rehman, 2021).

2.1.3 Green Human Resource Management Practices

GHRM practices are the best strategy to help the organization by creating a "green employee" who appreciates and recognizes the environmental performance in an organization by focusing on green recruiting and hiring; green training and development; green compensation and improving the organization’s human capital (Dutta, 2012). Furthermore, Yusoff et al., (2020) defined GHRM
practices as the programs, techniques and processes that get completed in the organization to lessen negative environmental effects or increase positive environmental effects. In this vein, traditional HRM practices, including as recruiting and selection, training and development, performance appraisal, and compensation, are also included in green HRM practices. However, green HRM practices have to bring the capabilities required for the continuous improvement of the organization’s environmental performance. The primary strategy in green HRM practices is to invest in people who are concerned about environmental issues (Islam, Jantan, Yusoff, Chong & Hossain, 2020). GHRM includes human resource functions such as green Recruitment and Selection, green Training and development, green performance management and appraisal, green reward and compensation, and green empowerment and participation (Ahmad, 2015; Farid & El-Sawalhy, 2016; Ojo & Raman, 2019; Islam et al., 2020).

1. Green Recruitment and Selection
Organizations have difficulty attracting and retaining human capital due to a lack of qualified employees in the business world. Now more than ever, businesses need to attract, recruit, and retain talented employees, particularly those who are environmentally conscious and constantly think about how to keep a secure environment (AlAmeri, 2018). Furthermore, green recruitment and selection can be defined as "integrating corporate environmental policies with the organization's recruitment and selection policies" (Arulrajah, Opatha & Nawaratne, 2015). Generally, attracting green employees is a mutual need between the organization and job candidates, as there is a growing number of people interested in incorporating environmental responsibilities into their jobs (Karmoker, Zannat & Roy., 2020). In this vein, hotels rely on green recruitment through the hotel’s use of electronic means of communication, the hotel’s website and search engines, thus giving green recruitment and selection to the hotel a competitive advantage through commitment to the sustainability of resources and preserving the environment, through which it is possible to attract human resources that secure with environmental concepts (Muniandi & Nasr al-Din, 2015; Uddin, 2018; Haldorai, Kim & Garcia, 2022; Irani, Kiliç & Adeshola, 2022).

2. Green Training and Development
Green training and development refer to initiatives that enhance employees to educate environment protection skills and pay attention to environmental issues, which is a key in achieving environmental goals (Saeed, Afsar, Hafeez, Khan, Tahir & Afridi, 2019). Furthermore, the primary objectives of green human resource training and development to increase environmental awareness among all employees of firms and to provide environmental training courses. Hence, the first step of designing environmental training programs that will give employees the necessary environmental knowledge, abilities, and attitudes is defining employees’ environmental training requirements analysis criteria (Al-Romeedy, 2019). Also, the training program which is planned and implemented to make employees aware of their responsibilities towards protection and conservation of environment is known as “green HR training and development program” (Mukherjee, Bhattacharjee, Paul & Banerjee, 2020). In this vein, focusing on green training and development, expected to enhance the hotel’s capabilities in green innovation and sustainable competitive advantage. Hence, green training mainly focuses on training for eco-design, training in recycling or reusing, and training in waste elimination (Xie, Zhu & Qi, 2020). According to, Asikhia, Oduyoye, Nanle & Akinlabi (2022) found out that green training and development improve competitive advantage and overall performance by enhanced employee morale, retention of employees, better public image, and improved productivity and sustainability.

3. Green Performance Management and Appraisal
Employees' green performance appraisal is one of the quality indicators of GHRM in the organization (Chaudhary, 2019). However, ISO 14001 has set the standards for environmental issues and their
management, organizations which contribute to reduce environmental issues will receive a certificate from the ISO authorities upon the successful implementation of ISO policies and standards. Based on the above reason, firms have developed objectives and set targets. According to (Yong, Yusliza, Ramayah, Chiappetta Jabbour, Sehnem & Mani, 2020b), green performance management is evaluating and recording the environmental performance of employees throughout their careers in the organization and provides them with observations about their performance to prevent undesirable situations or reinforce ideal behavior. Therefore, the green appraisal is one of the quality indicators that measuring the actual green performance of employee against the previously established goals”. Apparently, Masri & Jaaron (2017) summarized that green performance assessment helps hotels determine the level of performance provided by employees to reduce environmental pollution and develop innovations in training programs, as hotels that pay attention to environmental issues can obtain international certificates such as ISO 14001 that contribute to improving the reputation of the organization and upgrading its advantage competitiveness.

4. Green Reward and Compensation
Compensation policies have become, at present, one of the most powerful strategies of the organization to attract and retain competent employees, especially in light of intense competition for talent. Thus, a good compensation system helps the organization achieve its strategic goal by positively affecting employee loyalty and their commitment and performance (Daniel, 2019). According to Jehan, Hussain, Batool, Imran, Rasaizadi, Askari & Jonga, (2020), green reward and compensation systems are strategies for attracting and motivating employees by giving them with monetary and nonmonetary rewards for meeting environmental goals. This is also shown in the study of Huo, Li, Zheng (2020) who found that managers should ensure the effective green reward to get a competitive advantage. Furthermore, green reward and compensation enhance differentiation and public image, providing the hotel with a competitive advantage (Pham, Vo-Thanh, & Tučková, 2022).

5. Green Employee Empowerment and Participation
Employee empowerment is very important activity in increasing the standard of business success. Thus, organizations can empower employees to be green through implementing the GHRM practices. Employee participation in environmental decision-making increases their willingness to participate in initiatives for environmental improvement (Ramasamy, 2017). Furthermore, Hameed, Khan, Islam, Sheikh, & Naeem, (2020) argued that employees feel green empowerment when they have green-friendly environment in the organization. As in that, employee empowerment enhances their motivation to work and job performance in terms of effectiveness and efficiency (Virgiawan, Riyanto & Endri, 2021). Thus, when employees use their empowerment to improve their green objectives, this is referred to as "green employee empowerment" (GEE) (Khan & Liu, 2023). According to Tuan (2021), management can motivate employees to use personal initiatives and engage in eco-friendly behaviors, which would help the hotel accomplish a competitive advantage.

2.2 The Competitive Advantage
2.2.1 The Concept of the Competitive Advantage
In recent years, organizations in the hotel industry have experienced a great deal of instability as the competitive forces within their industry have shifted under the weight of globalization. The combination of global trends and a highly competitive business environment has led to the increased importance of creating and maintaining a competitive advantage in the hotel industry (Liu & Gan, 2018). To survive, many hotels must now build competitive advantage by relying on their employees to implement improved service delivery processes (Nasifoglu Elibidemir, Ozturen & Bayighomog, 2020). According to Lazenby, (2018) defined competitive advantage as when a company possesses something that its rivals do not, including the edge a business has over others within the same sector.
or industry. Additionally, Muis & Isyanto (2021), defined competitive advantage as an organization's ability to acquire, integrate, and reconfigure its resources in response to evolving and changing customer demands.

2.2.2. The Importance of the Competitive Advantage

Competitive advantage is considered one of the main reasons for the company’s survival in the market, where the company exists in the market and its strength depends on its value, which is determined by the competitive advantage, hence making the customers is completely loyal to the company. Meanwhile, Obeidat (2021) showed that competitive advantage represents the critical strategic element that presents a substantial opportunity for the organization to realize constant profitability compared to its competitors. According to Mahmoud, (2019), the importance of competitive advantage in hotels is as follows: (1) Competitive advantage is considered a main goal for all hotels that seek for excellence and superiority, and it is an incentive for these hotels to exploit all their resources and possibilities to achieve a better competitive position and to meet the needs of customers in a way that is difficult for competitors to imitate. (2) Supporting creativity and innovation within the hotel and developing new products and services. (3) Create value for customers that meet their needs, guarantee their loyalty and support. (4) Improving the mental image of the hotel in the work environment.

2.2.3 The Competitive Advantage Dimensions

The dimensions of competitive advantage are defined as “being the culture and values of the organization, attention to human resources as intellectual capital, education, continuous training, the ability to bring about rapid change, the available technological capabilities, the efficiency and effectiveness of the organization's main operations, and the organization's market orientation”. The same author adds that competition is based on the following pillars: information technology - quality - rationalization of costs and competitive prices - timely product and service provision from the customer's point of view - innovation in providing new products to the market. This competition requires the existence of a management and work force capable of achieving excellence and competition through a global outlook, knowledge, advanced skills, mental abilities and effective authorities in performance and dealing (Mahdi & Nassar, 2021).

Furthermore, Ismail, Rose, Abdullah (2010) emphasized that every organization chooses its competitive dimensions when presenting its products and meeting demands in the market in order to work to achieve competitive advantage. According to the study of Kotler & Keller (2009) the dimensions of competitive advantage are the best product, the lowest price, the newest and the fastest delivery. In addition, Kahreh, Ahmadi, and Hashemi (2011) indicated that the dimensions of competitive advantage are cost, quality, time, flexibility, innovation. Furthermore, the study by Cahyono & Hakim, (2020) showed that competitive advantage has many dimensions, including low cost, quality of products and services, R&D capability, managerial capability, profit, revenue growth, first mover, Corporate Image, Competitor cannot copy. While Abuktaish & Alkshali, (2020) indicated in his study that the dimensions of competitive advantage are Cost, Quality, Flexibility, Delivery/Time. Based on this, there is a difference in the number of dimensions of competitive advantages as well as their name according to what the researchers mentioned. In the current study, the researcher depended on a certain set of dimensions because there is almost agreement on them. Thus, these dimensions are: low cost, quality, flexibility, creativity/innovation and time/ speed of delivery and the following is an explanation of each of them:

**Low Cost**

Low cost is considered the oldest dimension of competition between organizations. Low cost represents one of the competitive dimensions that organizations should rely on in competition within
the markets, as organizations have sought to design, manufacture, produce and distribute a product at a lower cost compared to its competitors (Al-Janabi & Mhaibes, 2019). Nevertheless, Islami, Mustafa & Topuzovska Latkovikj (2020) cleared that low cost gives organizations opportunities to sell at competitive prices, as it enables them to achieve higher profits. This dimension depends on the least amount of production input cost compared to competitors. This can be achieved by dealing with a cheap supplier of raw materials while maintaining the level of quality of those raw materials. Furthermore, low-cost advantage arises when the organization is able to reduce the cost while maintaining the quality of service provided to customers (Agarwal, Chakrabarti, Prabhu & Brem, 2020), if the cost management seeks to provide products or services similar to those offered by competitors, but at a lower price (Darmawan & Grenier, 2021).

1. Quality
   Quality is one of the most important competitive advantages that refer to doing things correctly to provide products and services that suit the needs and desires of customers, because customer satisfaction with the quality of the product is one of the factors to maintain it and then achieve competition with other competitors (Kahreh et al., 2011). According to Chen & Chang (2013), quality defined as a set of integrated activities and processes that the company follows as a strategy to improve its production, reduce costs, gain customer satisfaction, expand the scope of marketing and distribution, and achieve the company's goals competitiveness.

2. Flexibility
   Flexibility dimension came as a result of the state of technological development and innovation, and therefore it is a new state produced by environmental variables and reflected by the complexities of life, cost and quality have become traditional dimensions. Regarding to flexibility, flexibility is defined as the extent to which the organization adapts to changing circumstances successfully and efficiently and meets the changing needs and requirements of the market without increasing costs or time or the occurrence of lack of control within the organization (Chang, Chen, Lin, Tien & Sheu, 2006). With increased uncertainty and turbulence in business environments, strategic flexibility is an essential factor for organizations. It is used to change and reset organizational resources, processes and strategies to deal with changes in a business environment (Zhou & Wu, 2010).

3. Creativity
   Creativity is the primary source of competitive advantage in the twenty-first century, as it helps in successfully adapting to various variables in the work environment (Guo & Woulfin, 2016). Creativity refers to the generation of novel ideas or solutions to problems by employees. In line with the resource-based view (RBV), creativity is an intangible, rare, inimitable, non-substitutable resource that can be a valuable source of competitiveness and acquiring a sustainable competitive advantage for organizations (Thawabieh, Saleem & Hashim, 2016).

4. Time/ Speed of Delivery
   The delivery dimension is a critical competitive dimension in the contemporary market and has a significant impact on the purchasing decision, because express delivery is one of the priorities of this competitive dimension, which can help the enterprise increase its profits and achieve competitive priority (Xiang, Tong, H., Shi, Q., Fernandes, Jin, Dai & Zhang, 2012). In addition, Kahreh et al., (2011) showed that in view of the increasing importance of delivery time to the customer, this dimension has become competitive and a form of company differentiation.

2.3 Hypotheses of the study
   The study hypotheses can be formulated as follows: -
   **H1**: Green human resource management practices have an impact on the competitive advantage in Egyptian hotels.
This hypothesis branches out into the following sub-hypotheses:

**H1a:** Green recruitment and selection has an impact on the competitive advantage in Egyptian hotels.

**H1b:** Green training and development has an impact on the competitive advantage in Egyptian hotels.

**H1c:** Green performance management and appraisal has an impact on the competitive advantage in Egyptian hotels.

**H1d:** Green reward and compensation has an impact on the competitive advantage in Egyptian hotels.

**H1e:** Green employee empowerment and participation has an impact on the competitive advantage in Egyptian hotels.

Based on the reviewed literature, the conceptual Framework for this research is shown in the figure below.

![Figure 1. The Conceptual Framework](image)

### 3. Methodology

#### 3.1 Population and Data Collection

**Egyptian Hotels (Green Star Hotels)**

The Green Star Hotel (GSH) is a national green certification under the auspices of the Egyptian Tourism Ministry and administered by the Egyptian Hotel Association (EHA). The program of (GSH) submits the chance for hotels operating in Egypt to get an international recognition, on one hand, to promote their environmental functioning and social criterion, and on the other hand to decrease their operational costs (Khalil, 2020).

**3.1.1 The Population of the Study**

The comprehensive survey is used due to the limited scale and the population is homogeneous. The population of the study consisted of hotels that have obtained the green star certificate (three, four, and five green star category) in Egypt, amounting to 158 green star hotels (GSH) distributed over 17 destinations country wide (Alexandria - Borg-Alarab - Marsa Matrouh - Sharm El Sheikh - Dahab - Taba - Soma Bay - Hurghada - El Gouna - Sahl Hasheesh - Makadi - Safaga - Madinat Coraya - Marsa Alam - Luxor - Ain El Sokhna - Cairo). The target population for this study included human resources managers because they are assumed to have a good background about the GHRM practices, and their impact on competitive advantage of these hotels.

**3.1.2 Sample Selection and Size**

Sampling is a systematic process of selecting parts of a population to draw conclusions regarding the population of a study (Filimonau & Delysia, 2019). Moreover, the selection of a suitable sample size is an important feature of any empirical study, in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is determined based on the expense of data collection, availability of resources and time, the access to participants and the need
to have sufficient statistical power (Suresh & Chandrashekara, 2012). In this study, the questionnaire was distributed to the whole population.

3.2 Measures

3.2.1 The Pilot Study
To ensure the content validity of the instrument, an invitation to a pilot study of (30) human resources managers of green star certified hotels and (12) academic staff and hospitality industry practitioners as well as set of academic experts who visited the hospitality field; they were asked to give their notes and comments about the efficiency of the layout, the clarity of the words, the adequacy of the questions, and finally the probable duration for answering the questionnaire. The results of the pilot study showed that two subitems under the green human resource management practices (section one) must be rephrased. Those items were "The hotel evaluates the employee's environmental performance" and "The hotel offers incentives for environmentally friendly activities and behaviors", and rephrase these sentences to be "The hotel evaluates the employee's performance based on green standards in order to reach the goals related to environmental protection and the sustainability use of resources" and "The hotel offers financially and/or non-financially rewards based on environmental achievements", in addition to the rearrangement of items under the low cost and quality (section two). The pilot study revealed no difficulty in understanding the questionnaire items.

3.2.2 Self-administered Questionnaire Design and Development
The researcher designed a self-administered questionnaire as a data collection tool in order to obtain the required data. The questionnaire was divided into two sections for measuring the variables of the study (see Table 1). The first section was divided into five categories asked respondents about Green Human Resource Management Practices: green recruitment and selection, green training and development, green performance management and appraisal, green reward and compensation, and green employee empowerment and participation (Arulrajah et al., 2015; Berber & Aleksic, 2016; Masri & Jaaron, 2017; Mishra, 2017; Tang, Chen, Jiang, Paillé, & Jia, 2018; Sobaih, 2019; Farzana, 2020; Mukherjee et al., 2020; Singh & Pandey, 2020; Tulsi & Ji, 2020; Bazrkar & Moshiripour, 2021; Ma et al., 2021). Each category in turn included sub-items to measure human resources managers perception, all items were measured using a five-point Likert scale. The second section of survey was divided into five categories asked respondents about the competitive advantage: low cost (Kipturgo, 2019; Lachache & Abdelhalim, 2019), quality (Islami et al., 2020; Darmawan & Grenier, 2021), Flexibility (Kahreh, et al., 2011; khorsheed, Abdulla, Othman, Mohammed & Sadq, 2020), Creativity (Chia & Liang, 2016; Chen, 2022), and Time/Delivery Speed (Thabit & Jasim, 2017; Raewf & Mahmood, 2021). Each category in turn included sub items to measure human resources managers perception, all items were measured using a five-point Likert scale. Scale ranging from "strongly disagree" (1) to "strongly agree" (5). The questionnaires were distributed over six months started in December 2022. They were distributed among 158 human resources managers, one questionnaire was distributed in each hotel; only 146 questionnaires were obtained and valid, which represent a response rate of (92.40%). Hence, the number of valid and returned questionnaires gave a good response rate; according to (Sekaran & Bougie, 2016), a thirty percent response rate is acceptable for most studies.

4. Findings and Discussion

4.1 Reliability Analysis
A reliability analysis (Cronbach’s Alpha) was conducted to ensure the reliability of the questionnaire. All values of Cronbach’s alpha for constructs were more than 0.6 which are acceptable indicating that the reliability of all constructs used in this study had a positive consequence as shown in table 1.
Table 1. Reliability Analysis of the Study Variables

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>No. of statements</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Human Resource Management Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Recruitment and Selection</td>
<td>8</td>
<td>.668</td>
</tr>
<tr>
<td>Green Training and Development</td>
<td>5</td>
<td>.867</td>
</tr>
<tr>
<td>Green Performance Management and Appraisal</td>
<td>7</td>
<td>.861</td>
</tr>
<tr>
<td>Green Reward and Compensation</td>
<td>5</td>
<td>.936</td>
</tr>
<tr>
<td>Green Employee Empowerment and Participation</td>
<td>5</td>
<td>.698</td>
</tr>
<tr>
<td>The Overall</td>
<td>30</td>
<td>.911</td>
</tr>
<tr>
<td>The Competitive Advantage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Cost</td>
<td>9</td>
<td>.610</td>
</tr>
<tr>
<td>Quality</td>
<td>9</td>
<td>.890</td>
</tr>
<tr>
<td>Flexibility</td>
<td>6</td>
<td>.866</td>
</tr>
<tr>
<td>Creativity</td>
<td>6</td>
<td>.797</td>
</tr>
<tr>
<td>Time/Delivery Speed</td>
<td>7</td>
<td>.803</td>
</tr>
<tr>
<td>The Overall</td>
<td>37</td>
<td>.926</td>
</tr>
</tbody>
</table>

4.2 Hypotheses Testing

To test the study hypotheses, the researcher adopted the regression coefficients as follows:
- **Test of the first study hypothesis**

The researcher adopts linear regression coefficient to test H<sub>1a</sub> as follows:

H<sub>1a</sub>: Green recruitment and selection has an impact on the competitive advantage.

**Table 2. The impact of green recruitment and selection on the competitive advantage**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>R</th>
<th>R&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Sig.</th>
<th>Constant</th>
<th>Sig. = 0.000</th>
<th>B</th>
<th>Sig. = 0.196</th>
</tr>
</thead>
<tbody>
<tr>
<td>The competitive advantage</td>
<td>Green Recruitment and Selection</td>
<td>.108</td>
<td>.012</td>
<td>.196</td>
<td>3.98</td>
<td></td>
<td>.073</td>
<td></td>
</tr>
</tbody>
</table>

The previous Table (2) showed that sig. value was (0.196) more than (0.05) suggested that, the study accepted the null hypothesis and rejected the alternative hypothesis, on the other words, green recruitment and selection has no impact on the competitive advantage. This result suggests that the H<sub>1a</sub> of the study was rejected.

The researcher adopts linear regression coefficient to test H<sub>1b</sub> as follows:

H<sub>1b</sub>: Green training and development has an impact on the competitive advantage.

**Table 3. The impact of green training and development on the competitive advantage**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>R</th>
<th>R&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Sig.</th>
<th>Constant</th>
<th>Sig. = 0.000</th>
<th>B</th>
<th>Sig. = 0.539</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitive Advantage</td>
<td>Green Training and Development</td>
<td>.051</td>
<td>.003</td>
<td>.539</td>
<td>4.14</td>
<td></td>
<td>.020</td>
<td></td>
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</tbody>
</table>
The previous Table (3) showed that sig. value was (0.539) more than (0.05) suggested that, the study accepted the null hypothesis and rejected the alternative hypothesis, on the other words, green training and development has no impact on the competitive advantage. This result suggests that the $H_{1b}$ of the study was rejected.

The researcher adopts linear regression coefficient to test $H_{1c}$ as follows:

**$H_{1c}$: Green performance management and appraisal has an impact on the competitive advantage.**

Table 4. The impact of green performance management and appraisal on the competitive advantage

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Green Performance Management and Appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>.231</td>
</tr>
<tr>
<td></td>
<td>$R^2$</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>3.907</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B.</td>
<td>.107</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.005</td>
<td></td>
</tr>
</tbody>
</table>

The previous Table (4) showed that there was a weak significant correlation between green performance management and appraisal and competitive advantage ($R=0.231$), as well as $R$ Square ($R^2$) referred to the determination coefficient was (0.054). Moreover, the sig. (2-tailed) was (0.005) less than (0.05) suggested that, the study rejected the null hypothesis and accepted the alternative hypothesis, there was a significant impact of the independent variable (Green performance management and appraisal) on the dependent variable (the competitive advantage). Furthermore, the statistical constant ($\alpha$) equal 3.907 with significance level less than 1%, whereas (B) equal 0.107, with significance level less than 1%. This result suggests that the $H_{1c}$ of the study was accepted. From the previous result, the following equation was suggested:

**The Competitive advantage = 3.907 + (.107 * Green performance management and appraisal + e)**

The researcher adopts linear regression coefficient to test $H_{1d}$ as follows:

**$H_{1d}$: Green reward and compensation has an impact on the competitive advantage.**

Table 5. The impact of green reward and compensation on the competitive advantage

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Green Reward and Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>.388</td>
</tr>
<tr>
<td></td>
<td>$R^2$</td>
<td>.151</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>3.828</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B.</td>
<td>.135</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.000</td>
<td></td>
</tr>
</tbody>
</table>

The previous Table (5) showed that there was a weak significant correlation between green reward and compensation and competitive advantage ($R=0.388$), as well as $R$ Square ($R^2$) referred to the determination coefficient was (0.151). Moreover, the sig. (2-tailed) was (0.000) less than (0.05) suggested that, the study rejected the null hypothesis and accepted the alternative hypothesis, there was a significant impact of the independent variable (Green reward and compensation) on the competitive advantage.
dependent variable (the competitive advantage). Furthermore, the statistical constant ($\alpha$) equal 3.828 with significance level less than 1%, whereas (B) equal 0.135, with significance level less than 1%. This result suggests that the $H_{1d}$ of the study was accepted. From the previous result, the following equation was suggested:

$$\text{The Competitive advantage} = 3.828 + (.135 \times \text{Green reward and compensation} + e)$$

The researcher adopts linear regression coefficient to test $H_{1e}$ as follows:

**H1e: Green employee empowerment and participation has an impact on the competitive advantage.**

**Table 6.** The impact of green employee empowerment and participation on the competitive advantage

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Green Employee Empowerment and Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitive Advantage</td>
<td>R</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>$R^2$</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.492</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>4.096</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B.</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.492</td>
<td></td>
</tr>
</tbody>
</table>

The previous Table (6) showed that sig. value was (0.492) more than (0.05) suggested that, the study accepted the null hypothesis and rejected the alternative hypothesis, on the other words, green employee empowerment and participation has no impact on the competitive advantage. This result suggests that the $H_{1e}$ of the study is rejected.

The researcher adopts multiple regression coefficients to test $H_1$ as follows:

**H1: Green human resource management practices have an impact on the competitive advantage.**

**Table 7.** The impact of green human resource management practices on the competitive advantage

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Green Human Resource Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitive Advantage</td>
<td>R</td>
<td>.420</td>
</tr>
<tr>
<td></td>
<td>$R^2$</td>
<td>.176</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>3.999</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B.</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Green recruitment and selection</td>
<td>Sig. =0.707</td>
</tr>
<tr>
<td></td>
<td>Green training and development</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>Sig. =0.687</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green performance management and appraisal</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>Sig. =0.047</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green reward and compensation</td>
<td>.150</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green employee empowerment and participation</td>
<td>.093</td>
</tr>
<tr>
<td></td>
<td>Sig. = 0.069</td>
<td></td>
</tr>
</tbody>
</table>

The previous table (7) showed that the coefficient of determination ($R^2$) is (0.176), suggesting that 17.6% of the variation of competitive advantage was explained by independent variables. Just two variables have an impact on the competitive advantage " Green performance management and
appraisal (sig. = 0.047) and green reward and compensation (sig. = 0.000). Other variables have no significant impact on the competitive advantage where sig. values were more than (0.05). The following equation can be inferred to predict the competitive advantage from the study independent variables as follow:

\[
\text{Competitive advantage} = 3.999 + (0.033 \times \text{Green performance management and appraisal} + 0.150 \times \text{Green reward and compensation})
\]

**Figure 2.** Analysis Model of Green Human Resource Management Practices on The Competitive Advantage in Egyptian Hotels (Green Star Hotels)

### 4.3 Discussion of Results

This study aimed to investigate the relationship between five main variables of green human resource management practices (green recruitment and selection, green training and development, green performance management and appraisal, green reward and compensation, and green employee empowerment and participation) and the competitive advantage in Egyptian hotels (Green Star Hotels). Accordingly, the correlation and regression results of this study results agreed with only two variables that have a significant impact on the competitive advantage “green performance management and appraisal” and “green reward and compensation” (H1c, H1d), and did not agree with the other variables about the relationship between green recruitment and selection, green training and development, and green employee empowerment and participation and the competitive advantage (H1a, H1b and H1e).

The findings revealed the relationship between green recruitment and selection and the competitive advantage, these findings showed that green recruitment and selection has no impact on the competitive advantage. This result did not agree with study conducted by (Haldorai, Kim & Garcia, 2022) who indicated that the competition between hotels is to attract qualified human resources who possess the skills, ideas and talents that support the green standards when applying for a job, and then gives green recruitment and selection to the hotel a competitive advantage through commitment to the sustainability of resources and the preservation of the environment.

Moreover, the findings revealed the relationship between green training and development and the competitive advantage, these findings showed that green training and development has no impact on the competitive advantage. This result differed with study conducted by (Alreshidi, 2016) who indicated that green training mainly focuses on discuss of environmental issues, training for eco-design, training in recycling or reusing, and training in waste elimination, which enhances
Competitive advantage. Additionally, this result was incompatible with the result of Asikhia et al., (2022) who found out that green training and development improve competitive advantage.

Additionally, the findings showed that green performance management and appraisal has a significant impact on the competitive advantage. This finding was in line with the result of Masri & Jaaron (2017) who indicated that green performance management and appraisal helps hotels set green goals for each employee, determine the level of performance provided by employees to reduce environmental pollution and develop innovations in training programs, as hotels that pay attention to environmental issues can obtain international certificates that contribute to improving the reputation of the organization and upgrading its advantage competitiveness.

Apparently, this study confirmed that green reward and compensation has a significant impact on the competitive advantage. This result is consistent with the study of (Shafaei, Nejati & Yusoff, 2020) who mentioned that an application of incentives such as rewards, can make the employees get used to the habit of green practices which in the long run would influence their habit and thus, gain a competitive advantage.

Finally, the results indicated that green employee empowerment and participation has no impact on the competitive advantage. This result was incompatible with the result of (Karadas & Karatepe, 2019) who stated that green empowerment encourages employees to engage in pro-environmental. Such employees can provide novel ideas about how the hotel may enhance the green environment and share its strategies and practices about environmental sustainability. This result was incompatible with the result of Meng Murad, Bakhtawar & Ashraf (2022) who found that green empowerment motivates employees to engage in green practices, which would help the hotel accomplish a competitive advantage.

5. Conclusion
Green human resources management adopts environmental practices to promote employee loyalty and improve environmental performance. This study increases its importance in showing the extent to which the contribution of the human resource is linked to reducing negative environmental impacts, maintaining sustainable environmental performance, and thus achieving sustainable development goals. Furthermore, this study aimed to investigate the impact of green human resource management practices on achieving the competitive advantage in Egyptian hotels (Green Star Hotels). It was achieved through reviewing the literature and a structured survey, and then by conducting statistical tests.

The results of the study showed that green recruitment and selection has no impact on the competitive advantage. Also, the findings revealed the relationship between green training and development and the competitive advantage, these findings showed that green training and development has no impact on the competitive advantage. On the other hand, the results showed that green performance management and appraisal has a positive impact on the competitive advantage, which indicates that setting green goals, assigning responsibilities to each employee, and integrating environmental management standards into the performance appraisal process contribute to hotels obtaining a competitive advantage. Additionally, the results showed that green reward and compensation has a positive impact on the competitive advantage, as green reward and compensation is an important element in influencing competitive advantage, through commitment to granting employees monetary and non-monetary rewards for achieving environmental goals, which contributes to enhancing competitive advantage. Another result showed that green employee empowerment and participation has no impact on the competitive advantage. On the concluding note, we would like to add that HRM is the major role player in implementing GHRM practices and policies. Apart from this, they have a
vital role to play in recruitment of new employees who are more responsible towards green business practices and thus achieve competitive advantage.

6. Recommendations

Egyptian hotels can benefit from the results of this study to gain and achieve a competitive advantage by applying green human resources management practices and improving their capabilities and trends to implement these practices and apply the requirements necessary to achieve them. These requirements represent a roadmap that these hotels can begin to achieve a successful competitive advantage. Among these requirements, there are some that can be implemented immediately, do not require any additional costs, they only need the hotels' willingness to implement green human resource management practices. However, the main contribution of this study is to help HR managers in the hotel industry to use GHRM practices more effectively, which will increase their effectiveness towards environmental protection.

Recommendations for Human Resources Managers

- Integrating environmental dimension into green recruitment and selection process through expanding the use of the virtual recruitment method to post jobs and submit applications online via electronic means of communication, which reduces costs in using resources.
- Educating employees and developing their skills and attitudes regarding environmental management through paying attention to analyzing training needs in light of environmental knowledge and skills to make them more aware of the environment, which enhances competitive advantage
- Providing adequate and modern training programs and courses and hold them frequently to develop employees’ skills and pay attention to providing online training materials to reduce training costs, paper use and communication use.
- Establishing an Environmental Management Information System (EMIS) and conducting audits to evaluate the environmental performance of employees and provide regular feedback on the implementation of their environmental responsibilities, which contributes to hotels obtaining a competitive advantage.
- Linking employee participation in green initiatives to promotion/job gains would contribute to achieving a competitive advantage for green hotels.
- Supporting green employee empowerment and participation towards environmental protection by maintaining regular meetings and open communications with employees regarding discussing environmental issues.
- Forming green teams and working together to successfully manage the environmental issues of hotels and increase awareness about them.

7. Limitations and Direction for Future Research

7.1 Limitations

This study focused on green human resources practices because they are an important strategy for preserving the environment and sustaining activity in hotels and are attracting increasing attention, but this research area has a dearth and needs to be extended. Therefore, the study focused on examining the impact of green human resources practices on the competitive advantage in Egyptian hotels (green star hotels). There were many challenges and obstacles facing the process of distributing the questionnaire. First, the geographical area of the population was very wide, which cost the researcher a lot of effort, time and money to reach all Egyptian hotels with a green star over 17 destinations country wide to be able to generalize the results on all over Egypt. Accordingly, data was collected from included human resource managers from Egyptian hotels (Green Star Hotels), thus, the generalization of the results cannot be made. For instance, the findings should not be generalized to different categories of hotels. In addition, this study only focused on five practices of green human resource management practices. Unexpectedly, the primary limitation of this study was the scarcity
of literature on studying the impact of green human resource management practices on competitive advantage in Egyptian hotels (Green Star Hotels).

7.2 Directions for Future Research

The current study discussed a set of practices of green human resources management that affect the competitive advantage in hotels. Future research could be devoted to discussing other practices that were not investigated in this study. This study also attracted responses from human resources managers; additional researches should examine the same research hypotheses but from other perspectives such as the employees’ point of view and hotel management. This is very important to validate the results of this research, and to prove whether employees, supervisors and management have the same vision. Furthermore, the current study only used the survey as a tool to collect information from hotel HR managers; perhaps future studies could use in-depth interviews as an alternative approach to provide richer insights into the hotel services field.

The following are some suggestions for future studies related to green human resource management practices: (1) Making an expanded study about the green human resource management practices of these hotels. In addition to applying this study again on different hospitality sectors, and on other types of hotels with environmental (green) certificates in other hotel categories or other international hotels could be included in the comparison study in the future, but this time excluding green star hotels. (2) Evaluating the Ministry of Tourism’s role in supporting and facilitating adoption and implementing green practices. (3) Exploring the effects of GHRM practices on employee satisfaction.

References


