The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

Mohammed N. Elziny
Faculty of Tourism and Hotel Management, Helwan University, Cairo

Abstract
Human Resources Management (HRM) embraces considering environmental practices to increase their employees’ commitment and to improve better performance on the issues of environmental management. The research aim is to determine the impact of Green Human Resources Management (GHRM) on employees’ eco-friendly behavior. This research reports the findings of a survey from hotel employees who had at least one-year work experience in Cairo. A survey of 220 employees was conducted from January 2019 till June 2019. The survey included six statements related to the GHRM and one statement related to the employees' eco-behavior. Five hypotheses were verified and all of them were supported. Structural equation modeling (SEM) was used to test the measurements model using AMOS 4. The results demonstrate that green human resource management promotes employees’ eco-friendly behavior. Finally, this study presents a useful model of green human resources management policies that hotel HR managers should establish to support their environmental practices.

Keywords: Green Human Resources Management (GHRM), Employees' Eco-friendly Behavior, Cairo Hotels.

1. Introduction
The word "green" can be characterized into four major aspects regarding green human resources management GHRM (Opatha, 2013). Theses aspects are (a) caring of the environment, (b) protecting the nature, (c) minimizing pollution, and (d) exploiting eco fields and natural human scenery. Green efforts in service industries such as hotels include waste reduction, energy and water conservation in their operations and educating both of customers and staff the concept of environmental implications (Bohdanowicz et al., 2011 and Rahman et al., 2012). For example, Hilton has set operational objectives and environmentally friendly programs for environmental protection and has developed reporting tools to assess its progress. As a result, Hilton Worldwide in 2009 reduced its total water consumption by 14.1% and energy consumption by 14.5% (Kim et al., 2019).
Nowadays, Green Human Resources Management GHRM may play an essential role in environmental management (Paillé et al., 2014). The term of "GHRM" is referred to the management of green human resources which include ecological objectives in all HRM sub-areas (Harris & Tregidga, 2012). These sub-areas involve all the activities of hiring and maintaining of eco-friendly staff, environmental training, and eco-friendly contributions of employees that aims at making them of an organization green (Opatha, 2013). Consequently, the employees environmentally friendly behavior lead to a success of GHRM, as their behavior improves the overall environmental performance of the hotel as a whole (Faleye & Trahan, 2011).

Most of previous studies have examined environmental management practices in hospitality sectors mainly on the consumer views (Kim & Choi, 2013; Hsiao et al., 2014; and Molina-Azorín et al., 2015). Meanwhile, hotel employees have an important role in improving environmental outcomes (Harris & Crane, 2002, and Bohdanowicz, 2005). Few researches have examined the relationship between GHRM practices and eco-friendly behavior of hotel employees. In summary, there was a significant lack of research investigating how GHRM stimulates employees' eco-friendly behavior to improve their environmental performance.

Based on these arguments, this research aims to investigate the relation between GHRM and employees’ eco-friendly behavior. This study will first discuss a review of relevant literature on the importance of GHRM elements, employees' green behavior, and eco-friendly organizational culture. Then, the survey methodology followed by results and findings summary. Finally, these findings were used to develop specific advices on how to improve the concept of green human resources management in hotel, in order to get better performance on environmental management.

2. Literature review
2.1. Green HRM and its elements in hotel industry
Most researches nowadays demonstrate that hotel performance is improved by environmental issues (Opatha, 2013). Thus, many hotels become interested in ecological practices, noting that environmental protection is in their best interest (Beard & Rees, 2000 and Jabbour et al., 2010). In this context, a new approach has emerged that is related to human resources management, which is concerned with including a set of environmental objectives in all areas of human resources management (Bangwal & Tiwari, 2015). This approach starts from employee job analysis and ending with
The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

employee motivation and development, to their evaluation and influence on working conditions (Molina-Azorín et al., 2015).

Opatha (2013) as well as Opatha and Arulrajah (2014) defined GHRM as "all the activities involved in development, implementation and on-going maintenance of a system that aims at making employees of an organization green". Human resource management practices are also defined as a set of processes and techniques that relate to how employees are managed within organizations (Gerhart et al, 2000; Huselid & Becker, 2000). Similarly, GHRM practices are the implementation and application of a range of green human resources management programs aimed to reduce the negative impacts of organizations and to improve the environmental behavior amongst their employees (Sudin, 2011 and Rani & Mishra, 2014).

In 2017, Wehrmeyer was the first researcher who pays attention to the concept of green human resources management. This was reflected in one of his works when he merged the human resource management with the environmental management (Stojanoska, 2016). Hence, GHRM has an increased attention and many researches have emerged that seeking to push the institutions management i.e. hotels to reduce waste, and to bring about green behavior (Renwick et al., 2013). Hence, these actions will establish activities like e-filing, ride participation, job sharing, teleconferencing and virtual interviews, recycling, telemarketing, online training, and development of energy-efficient office spaces (Sharma & Gupta, 2015).

Many organizations are working to increase the environmental behavior of employees (Masri & Jaaron, 2017). However, many studies have found that there is no relationship between the company's environmental policy and the actual behavior of employees (Haddock-Millar et al., 2016). It should be noted that recent studies have highlighted the relationship between GHRM elements and the successful implementation of environmental management system (EMS) (Jabbour & Jabbour, 2016). HR factors can be listed as green job analysis and planning, green job advertising and selection process, green training and development, green compensation systems, green performance appraisal, and green empowerment and employee relations (Arulrajah et al., 2015; Masri & Jaaron, 2017; Bombiak & Marciniuk-Kluska, 2018; and Kim et al., 2019).

- **Green Employee Job Analysis and Planning**

Job analysis is the first step in the concept of GHRM, using the principles of environment-friendly jobs and each job role defines the environmental
protection tasks (Opatha, 2013). Human resources managers take into consideration a number of tasks, duties and responsibilities related to environmental protection during job analysis phase (Renwick et al., 2008).

Nowadays a lot of human resources managers in hotels place a number of environmental responsibilities in the job description of each job. Moreover, employees should have environmental requirements in their specifications as possible. For example, HR managers should include safety duties, as well as the allocation of environmental reporting roles (Jabbour et al., 2010).

- **Green Job Advertising and Selection Process**
After the completion of job analysis and the inclusion of the environmental requirements in the organizations' job description, these organizations seek to focus on attracting and selecting employees who are interested in supporting and preserving the environment (Renwick et al., 2013). Hence, hotels should create an environmental reputation influenced by the belief that these hotels are sensitive to the environment (Guerci et al., 2016).

Green job advertising refers to the importance of organization's green culture that new recruits should understand and committed (Jackson & Seo, 2010).

Research indicates that most new graduates tend to choose organizations renowned for their corporate environmental responsibility (Mandip, 2012). In addition, applicants should be notified in the selection context that one of the selection criteria is the environmental issue. Therefore, when interviewing applicants or assessing them, environmental issues should be a significant component of the assessment process (Revill, 2000).

- **Green Training and development.**
A considerable role of green HRM is to provide the employee with environmental training to develop the necessary abilities and expertise. This will be useful in implementing the environmental management programs (Jackson et al., 2011). The researchers also recommend certain green training and development practices such as training staff to produce green analysis of workspace, waste reduction, development of green personal skills, recycling and energy saving training.

Nowadays, some hotels are seriously analyzing and identifying employees' environmental training requirements to make them more workforces involved with the environment. Based on environmental training needs of employees, these hotels carry out serious and systematic education, training and development programs which are given to the employees to provide them
The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

with the necessary knowledge, skills and attitudes for good environmental management (Jabbour, 2011).

- **Green Compensation and Rewards.**
Motivating employees to undertake environmentally-friendly activities is an important role in the effectiveness of implementing of Green HRM elements (Urbaniak, 2017). There are many types of effective tools consist of awards and compensation practices to green skills acquisition for promoting environmental actions across organizations (Ramus & Steger, 2000).

Rewards can be on the form of financial incentives e.g. bonuses, premiums, other non-financial incentives include e.g. sabbaticals, leave, and gifts; and positive rewards e.g. praise, grants for environmental projects, (Phillips, 2007; Renwick et al., 2013 and Opatha, 2013).

- **Green Performance Appraisal.**
Assessment of employee ecological performance of job is one of the key functions in green HRM through measuring employees' contribution to the advancement of environmental practices (Ahmad, 2015). Without this practice, organization will not be able to guarantee real, environmental effectiveness (Renwick et al., 2013 and Opatha, 2013). Environmental Management Information Systems (EMIS) must be established by organizations to maintain good environmental efficiency (Jackson & Seo, 2010).

The main purpose of applying EMIS is to monitor resource flows and environmental audits and to monitor efficiently the big amount of pollution, resource usage, power and regulatory requirements an organization encounters (Jackson et al., 2011 and Arulrajah et al., 2015). In addition, managers need to regularly provide feedback to staff on their role in attaining environmental objectives to improve their ecological performance (Jackson et al., 2011 and Arulrajah et al., 2015); this feedback will help staff to improve their behavioral and technical competencies related to environmental.

- **Green Employee Relations.**
In order to implement an effective environmental management system, HR executives should encourage their staff to participate in developing and designing new eco-friendly ideas through empowering them (Jabbour & Santos, 2008 and Ahmad, 2015). For this purpose, employees can negotiate with their managers in green suggestion schemes and problem-solving circles where they offer unique ideas to manage important issues (Liebowitz, 2010).
Moreover, Sudin (2011) indicated that encouraging employee participation produces socially or ecologically oriented entrepreneurs within the organization.

Employees should therefore be engaged in formulating the organization's environmental plan to generate and develop the required expertise to market green products and services (Margaretha & Saragih, 2012). This participation will help managers to expand preventive solutions inside their organizations, manage emergency circumstances and identify pollution sources. These practices finally lead to improve positive employees' eco-friendly behavior resulting in a good environmental performance (Boiral & Paille, 2012 and Renwick et al., 2013).

2.2. Employees’ green culture eco-friendly behavior

Recently, a concept called organizational citizenship behavior for the environment (OCBE) has emerged in the literature. This concept is one of the scientific approaches that seek to support environmentally friendly behavior within institutions (Daily et al., 2009 and Paillé et al., 2013). Moreover, Daily et al. (2009, p. 246) defined (OCBE) as “discretionary acts by employees within the organization not rewarded or required that are directed toward environmental improvement”. Some researchers found that OCBE is limited to only voluntary and discretionally behaviors. Meanwhile, eco-friendly conduct focuses on such particular behaviors that are appropriate in the hotels context linked to energy use, water use, and waste reduction (Kim et al., 2019). This search assumes that GHRM practices will have a significant positive impact on hotels employees’ eco-friendly behavior.

All in all, it must be stressed that environmentally friendly GHRM practices lead to the growth of "green" human assets, i.e. highly qualified employees who follow and comprehend the values of ecological development. Hence, Literature confirms the importance of GHRM in improving employee's environmental performance. Therefore, the researcher focuses on the GHRM in hotel sector. Following these views, six hypotheses and a proposed model (see Fig. 1) are presented below.

**H1.** Green employee job analysis and planning practices have a positive impact on employees’ eco-friendly behavior.

**H2.** Green employee job Advertising and selection practices have a positive impact on employees’ eco-friendly behavior.

**H3.** Green employee training and development practices have a positive impact on employees’ eco-friendly behavior.

**H4.** Green employee compensation and reward practices have a positive impact on employees’ eco-friendly behavior.
H5. Green employee performance appraisal practices have a positive impact on employees’ eco-friendly behavior.

H6. Green employee relations practices have a positive impact on employees’ eco-friendly behavior.

![Proposed research model of the association between GHRM and employees’ eco-friendly behavior in hotels](image)

Fig. 1: Proposed research model of the association between GHRM and employees’ eco-friendly behavior in hotels

3. Research methodology
This study provides an investigation of the interrelationship between hotels’ GHRM and employees' environmentally performance in hotel sector. The purpose of this research is to identify the impact of GHRM on hotel employees’ eco-friendly behavior. A questionnaire was distributed from January 2019 through June 2019. This questionnaire was conducted with 220 employees from 6 hotels applied GHRM using convenience sampling technique.

3.1. Survey Structure
The study employed a questionnaire survey as the data-gathering instrument. The GHRM elements scale was adapted and revised from "Arulrajah et al.,
2015; Masri & Jaaron, 2017; Bombiak & Marciniuk-Kluska, 2018 and Kim et al., 2019". The survey was fine-tuned through discussions with various hotel employees who had more than one year experience.

The final version of the survey was divided into three main sections. The first section asked employees for profiling information (i.e., gender, age, length of employment, education level, working positions, job role, and department). In the second section, employees were asked to rate 23 items on a five-point Likert-type scale ranging from: ‘never’ (1); to ‘always’ (5) about their opinions regarding how human resources management applies the green elements in hotel. In the third section employees were asked to rate 10 items on a five-point Likert-type scale ranging from: ‘never’ (1); to ‘always’ (5) to evaluate their eco-friendly behavior. The 33 items are divided into seven variables: green employee job analysis and planning (5 items), green employee job advertising and selection (4 items), green employee training and development (4 items), green employee compensation and reward (3 items), green employee performance appraisal (4 items), green employee relations (3 items), and employees’ eco-friendly behavior (10 items).

3.2. Research Population and Sampling Technique

The target population for this study was five-star hotel employees who may have an interest and/or influence. In summary, the survey was designed to measure the relationship between GHRM and employees' eco-friendly behavior. The minimal sample size requirement to use Structural Equation Model (SEM) should be 10 times the number of variables being analyzed (Floyd & Widaman, 1995). Accordingly, in this research, three hundred questionnaires distributed, two hundred and twenty (n 220) valid questionnaires were completed and returned, thus achieving a response rate of 73.3 percent (See table 1).

| Table 1: Employees' response rate |
|-----------------------------------|
| Hotel Code | Distributed No. | Response Rate | Valid | Invalid | Valid Percentage |
|-----------|-----------------|---------------|-------|---------|------------------|
| 1. H001   | 50              | 36            | 14    | 72%     |
| 2. H002   | 50              | 45            | 5     | 90%     |
| 3. H003   | 50              | 32            | 18    | 64%     |
| 4. H004   | 50              | 38            | 12    | 76%     |
| 5. H005   | 50              | 29            | 21    | 58%     |
| 6. H006   | 50              | 40            | 10    | 80%     |
| Total     | 300             | 220           | 80    | 73.3%   |

3.3. Data Analysis

Data analysis involved three key steps: (1) checking data for incompleteness, (2) coding data and (3) choosing the right statistics. In this research all these steps have been adopted. For the descriptive analysis, SPSS version 20 was used to analyze the relationship between GHRM and employees' eco-friendly behavior.
behavior scale descriptively. On the other hand, Structural equation modeling (SEM) was used to test the measurement model of GHRM and employees' eco-friendly behavior using AMOS 4. Moreover, goodness-of-fit measures were utilized to assess the structural fit of the hypothesized model. The final questionnaire items are listed in Table 2 along with their sources.

Table 2: Construct measurements

| Construct                        | Code | Measure                                                                                                                                                                                                 | Mean | Std. dev. |
|----------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| **Green Job Analysis**           | G.JA1| HRM incorporates a number of environmental protection related duties and responsibilities in each job in the hotel.                                                                                   | 2.50 | .846      |
|                                  | G.JA2| HRM uses cross-functional teams as job design techniques to successfully manage the environmental issues of the hotel.                                                                                | 2.60 | .903      |
|                                  | G.JA3| HRM interests in including the environmental dimension as a duty in job description.                                                                                                                  | 2.85 | .756      |
|                                  | G.JA4| HRM interests in including the green competencies as a part of competency requirements in job specification.                                                                                  | 3.37 | .720      |
|                                  | G.JA5| HRM designs new jobs and positions in order to focus exclusively on environmental aspects of the hotel.                                                                                          | 3.85 | .734      |
| **Green Job Adv. and Selection**| G.J&S1| HRM expresses certain environmental values in the job advertisements of the hotel.                                                                                                                      | 2.35 | .799      |
|                                  | G.J&S2| HRM indicates the preference of the hotel to recruit candidates who have competency to ecological knowledge and skills in the recruitment message.                                                      | 2.03 | .947      |
|                                  | G.J&S3| HRM selects applicants who are sufficiently aware of greening to fill job vacancies.                                                                                                                  | 3.15 | .920      |
|                                  | G.J&S4| HRM announces you about your commitment to ecology during the personal interview.                                                                                                                   | 3.79 | .735      |
| **Green Training and Development**| G.T&D1| HRM identifies the hotel's employee needs of environmental issues when training requirement analyzed                                                                                             | 4.68 | .504      |
|                                  | G.T&D2| HRM provides ecological training for employees and managers to increase their environmental awareness                                                                                            | 4.42 | .739      |
|                                  | G.T&D3| Training materials are available online for employee to reduce paper cost                                                                                                                              | 3.25 | 1.11      |
|                                  | G.T&D4| Providing opportunities to everybody to be trained on environmental management aspects.                                                                                                            | 3.96 | .733      |
| **Green Compensation and Rewards**| G.C&R1| HRM develops rewards system for completion of ecological projects (awards, subsidies to wages).                                                                                                      | 3.33 | .672      |
|                                  | G.C&R2| HRM offers incentives to encourage environmentally friendly activities and behaviors.                                                                                                          | 3.33 | .851      |
|                                  | G.C&R3| HRM provides advisory services and support to solve ecological problems.                                                                                                                          | 3.10 | .850      |
| **Green Performance Appraisal**  | G.PA1| HRM establishes a clear set of rules and regulations which regulates employees to be concerned with environmental protection.                                                                       | 2.93 | .793      |

Cont.
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| Green Employee Relations | Cont. |
|--------------------------|-------|
| G.PA3 HRM observes employees' environmentally-attitudes when performing professional tasks (such as paper use reduction). | 2.77 .892 |
| G.PA4 HRM formulates and publishes the rules of conduct relating to eco-behavior. | 2.61 1.03 |
| G.PA4 HRM sets penalties or dismissal for environmental management breaches. | 1.84 .851 |

| Employees’ Eco-friendly Behavior | Cont. |
|----------------------------------|-------|
| EFB1 I turn off the electric appliances, such as computers, TV monitor, etc before i get off work. | 4.51 .637 |
| EFB2 I turn off the light when I leave a room that is unoccupied. | 4.56 .573 |
| EFB3 I sort and recycle garbage in the workplace. | 3.06 .779 |
| EFB4 I conserve materials at work | 3.46 .796 |
| EFB5 I limit water use in toilet to save water. | 4.35 .691 |
| EFB6 I pay close attention to water leak | 4.35 .716 |
| EFB7 I involve and participate in ecological suggestion schemes in the hotel. | 3.01 1.02 |
| EFB8 Green practices improve corporate reputation of our hotel. | 4.12 .681 |
| EFB9 I feel proud of my environmentally friendly practices within my hotel. | 4.38 .655 |
| EFB10 Environmental practices helped me to develop my practical performance | 4.50 .630 |

Source: Adopted from (Kim et al., 2019; Bombiak and Marciniuk-Kluska, 2018; Masri and Jaaron, 2017; and Arulrajah et al., 2015)

4. Analysis of Findings
4.1. Respondents’ Profiles
The responses of the participants regarding the hotel profiles (as presented in table 3) show that employees were from various age groups, with the largest group (i.e., 46.4 percent) aged from 21 up to 30 years old. In addition, employees comprised 65.0 percent males and 35.0 percent females. With regards to length of employment, the majority of employees had a less than five years of work experience (i.e., 77.3 percent). In terms of education, the majority of employees had a university degree (i.e., 65.5 percent). Finally, the majority of employees work in the departments of food and beverage and rooms with percentage of 36.4 and 31.8 respectively.
The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

| Table 3: Profile of respondents (N=220) |
|----------------------------------------|
| Demographic Data                       |
| Frequency | % |
| Age   |
| Less than 21  | 42 | 19.1 |
| 21 up to 30  | 102 | 46.4 |
| 31 up to 40  | 67  | 30.5 |
| More than 40 | 9  | 4.1 |
| Gender |                                  |
| Male | 143 | 65.0 |
| Female | 77  | 35.0 |
| Length of Employment |                                  |
| 1 up to 5 | 170 | 77.3 |
| 6 up to 10 | 47  | 21.4 |
| 11 up to 15 | 2   | .9 |
| More than 15 | 1 | .5 |
| Educational Level |                                  |
| Primary | 2 | .9 |
| Secondary | 35 | 15.9 |
| University | 144 | 65.5 |
| Post | 39 | 17.7 |
| Department |                                  |
| Rooms | 70 | 31.8 |
| F&B | 80  | 36.4 |
| Sales and Marketing | 30 | 13.6 |
| Human Resources | 28 | 12.7 |
| Maintenance | 9 | 4.1 |
| Other (Specify………. | 3 | 1.4 |

4.2. Structural Equation Modeling

Confirmatory factor analysis (CFA)

This study adopted a lot of strategies to ensure the validity of the questionnaire survey. The first strategy included an external auditing procedure; some parts of this study were reviewed by internal reviewers. The second strategy was adopting peer review or debriefing as the research methods were discussed and reviewed with many peers studying in the same field. The third strategy was a rich description of the survey issues to participants.

Moreover, Confirmatory Factor Analysis (CFA) was used to measure the reliability and validity of the six GHRM practices scale and eco-friendly behavior scale. As shown in table 4, the initial model was not a satisfactory fit and so some modification indices were suggested to improve the model fit. More accuracy, five items were removed from scale. The first item was from green job advertising and selection process scale (i.e., G.J&S4). Moreover, two items were removed from green employee relations (i.e., G.ER2 and G.ER3). The other two items were removed from employee eco-friendly behavior (EEP5 and EEP10). In addition, the remaining item of green
employee relations scale was transferred to green compensation and rewards scale for the intensity of its bonding. As a result of moving this item, the group name has been changed to "green compensation, rewards and empowerment" to fit its own items.

Finally, a good model fit was achieved for the measurement model: incremental fit index (IFI) = 0.936, Tucker–Lewis index (TLI) = 0.925, comparative fit index (CFI) = 0.935, which were all greater than the recommended level of 0.90 and root mean square error of approximation (RMSEA) = 0.049, lower than the cut off value of 0.05 (Arbuckle, 2011). The results of CFA showed that the lowest value of CR and Cronbach’s α for all of the constructs was 0.74, which exceeded the minimum acceptable value of 0.70 (Pallant, 2005), proving that data are considered to be reliable. Additionally, the values of Average Variance Extracted (AVE) for all constructs exceeded the minimum acceptable value of 0.50 indicating good convergent validity (Hair et al., 2010).

| Table 4: Factor loadings, validity analysis, and reliability test of the measurement model |
|---------------------------------|-----------------|-------|-----|-----|
| Construct                        | Factor Loading  | CR    | A   | AVE |
| Green Job Analysis and Planning  |                 | 0.863 | 0.865 | 0.564 |
| G.JA1                           | .699            |       |     |     |
| G.JA2                           | .906            |       |     |     |
| G.JA3                           | .856            |       |     |     |
| G.JA4                           | .664            |       |     |     |
| G.JA5                           | .580            |       |     |     |
| Green Job Advertising and Selection Process | 0.829 | 0.817 | 0.621 |
| G.J&S1                          | .684            |       |     |     |
| G.J&S2                          | .920            |       |     |     |
| G.J&S3                          | .741            |       |     |     |
| Green Training and Development  |                 | 0.766 | 0.740 | 0.528 |
| G.T&D1                          | .748            |       |     |     |
| G.T&D2                          | .835            |       |     |     |
| G.T&D3                          | .572            |       |     |     |
| Green Compensation, Rewards and Empowerment | 0.880 | 0.878 | 0.653 |
| G.C&R1                          | .619            |       |     |     |
| G.C&R2                          | .833            |       |     |     |
| G.C&R3                          | .962            |       |     |     |
| G.ER1                           | .780            |       |     |     |
| Green Performance Appraisal     |                 | 0.850 | 0.843 | 0.587 |
| G.PA1                           | .749            |       |     |     |
| G.PA2                           | .795            |       |     |     |
| G.PA3                           | .719            |       |     |     |
| G.PA4                           | .798            |       |     |     |
| Employees' Eco-friendly Behavior|                 | 0.897 | 0.894 | 0.528 |
| EFB1                            | .744            |       |     |     |
| EFB2                            | .632            |       |     |     |

Cont.
The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

|   | Cont. |
|---|-------|
| EFB3 | .725 |
| EFB4 | .586 |
| EFB6 | .630 |
| EFB7 | .600 |
| EFB8 | .835 |
| EFB9 | .973 |

Note: All factor loadings were significant at ≤ .001; CR = Composite reliability; α = Alpha reliability; AVE = average variance extracted.

Structural Models and Hypotheses Testing
As a result of CFA which discussed above, the research proposed model was modified. More specifically, green employee relations practices were excluded from the model, proving that it is important to restate the research hypotheses which were formulated and presented in Fig. 1. Finally, hypotheses of the research became as follows:

H1. Green employee job analysis and planning practices have a positive impact on employees’ eco-friendly behavior.

H2. Green employee job advertising and selection practices have a positive impact on employees’ eco-friendly behavior.

H3. Green employee training and development practices have a positive impact on employees’ eco-friendly behavior.

H4. Green employee compensation, rewards and empowerment practices have a positive impact on employees’ eco-friendly behavior.

H5. Green employee performance appraisal practices have a positive impact on employees’ eco-friendly behavior.

Standardized path coefficients (β) were utilized to test the postulated hypotheses in a causal diagrammatic as shown in Table 5. These estimates can be described as positively strong since all of Absolute t-value > 3.29, p< 0.001. The findings revealed strong relationship between green job analysis and planning; green job advertising and selection process; green training and development; green compensation, rewards and empowerment; green employee performance appraisal and employees' eco-friendly behavior, supported H1 ((β= 0.21, p < 0.001); H2 ((β= 0.10, p < 0.001); H3 ((β= 0.17, p < 0.001); H4 ((β= 0.12, p < 0.001) and H5 ((β= 0.13, p < 0.001), respectively.

In conclusion, it is noted that the GHRM practices enhances employees’ eco-friendly behavior.
Table 5: Standardized parameter estimates of the structural model

| Hypotheses | Path       | Beta coefficients (β) | t-values | Results |
|------------|------------|-----------------------|----------|---------|
| H1         | G.JA       | Eco-behavior          | 0.21     | 8.68*** | Supported |
| H2         | G.J&S      | Eco-behavior          | 0.10     | 4.78*** | Supported |
| H3         | G.T&D      | Eco-behavior          | 0.17     | 8.42*** | Supported |
| H4         | G.C&R      | Eco-behavior          | 0.12     | 6.61*** | Supported |
| H5         | G.PA       | Eco-behavior          | 0.13     | 6.43*** | Supported |

*Absolute t-value > 1.96, p< 0.05; **Absolute t-value > 2.58, p< 0.01; ***Absolute t-value > 3.29, p< 0.001.

5. Discussion and Implications

The value of this research is the identification, prioritization, and validation of GHRM practices, which influence employees' eco-friendly behavior in hotels. The analysis of the results confirms that there is a statistically positive and significant relationship between the five GHRM practices and EEP. In other words, GHRM practices such as green job analysis, advertising, employees' interviews, training, compensation, and performance appraisal had positive impacts on employees' eco-friendly behavior in hotels. This is consistent with previous study (i.e., Masri & Jaaron, 2017) which showed that there is a positive correlation between GHRM practices adopted by human resources managers in hotels and their employees' eco-behavior.

Therefore, the current study suggests that HR managers should pay more attention to the way the job is designed. For example, managers should design the job in a way that incorporates a number of environmental protection related duties. Moreover, hotel job advertising should emphasize the importance of hotels' green culture that new employees should understand. In addition, the results of this study reveal that HR managers should identify their employees' needs of environmental issues when they analyze training programs. In other words, employee who has been trained on how to preserve the environment will be more careful towards environmental behavioral practices in the hotel e.g., conserving materials. Taking this approach, HR managers also have to incentive their employees and develop a rewards system to motivate their staff to engage in environmental initiatives. Finally, respondents' analysis agreed that HRM in hotels should establish a set of rules that regulate employees' environmentally attitudes.

6. Limitations and Suggestions for Future Research

This study is based on data collected from a sample of green star hotels in Cairo. Absolutely, it was too difficult to sample all hotels in Egypt. Hence,
The Impact of Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior

the investigated hotels were limited to those located in Cairo. Moreover, restaurants industries, travel agencies and/or tour operators that also belong to the tourism industry are not voiced in this research. So, it is suggested that in-depth case studies be performed in hospitality and tourism industries to obtain more insight into the use of GHRM practices for improved EEP, due to the scarcity of researches related to this subject. One of the methodological limitations of this study is the use of questionnaires survey. Future studies using qualitative methods, including interviews and focus groups, should provide a broader understanding of the impacts of GHRM elements or practices on employees' eco-friendly behavior.

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تأثر إدارة الموارد البشرية الخضراء على السلوك الصديق للبيئة لموظفي الفندق

محمد ناجي الزيني
كلية السياحة والفنادق، جامعة حلوان

تسعى العديد من المؤسسات التجارية في الأونة الأخيرة في دعم القضايا البيئية من أجل الحفاظ على الموارد الطبيعية، وتأتي الفنادق على رأس هذه المؤسسات من خلال تطبيق نظام النجمة الخضراء. ومن هذا المنظور بدأت الإدارات المختلفة داخل القطاع الفندقي في محاولة تطبيق هذه الممارسات الخضراء داخل كل قسم على حدٍ. إدارة الموارد البشرية الخضراء هو تطوير لهذه الأفكار من خلال نشر ثقافة الحفاظ على البيئة لدى العاملين داخل الفندق في مختلف دورات وظائف القسم. لذلك تهدف هذه الدراسة إلى قياس تأثير ممارسات إدارة الموارد البشرية الخضراء على السلوكيات البيئية لموظفي الفندق. قدم البحث سرداً مفصلاً لممارسات إدارة الموارد البشرية الخضراء والتي انحصرت في ستة ممارسات رئيسية والهدف منها في دعم السلوكيات البيئية لدى العاملين بالفندق.

وفي الجانب التطبيقي قام الباحث بتصميم استمارة استقصاء وتوزيعها على العاملين بالفندق التي تطبق هذه الممارسات بشرط الأقل مدة خبرة العاملين عن عام داخل هذه الفندق. أوضحت الدراسة أن هناك عدد بسيط جداً من العاملين يقوم بتطبيق مفهوم إدارة الموارد البشرية الخضراء ولذا، من الممكن أن العنبرة لهذه الفندق فقط تم توزيع عدد 300 استمارة استقصاء في ستة فندق لمدة ستة أشهر (من يناير 2019 وحتى يونية 2019) وبدأت التحليل وجد أن هناك عدد فقط 200 استمارة استقصاء صالحة للتحليل الإحصائي. أشتملت استمارة الاستقصاء على قياس العوامل السة لـ إمارات إدارة الموارد البشرية والمثأر لها. بعد ذلك جمعت البيانات باستخدام برنامج AMOS 4 حيث أكمل النتائج على وجد ارتباط وثيق بين الممارسات الخضراء لإدارة الموارد البشرية وبين السلوكيات البيئية لدى العاملين وقدم البحث نموذج مبسط لأكثر هذه الممارسات تأثيراً. وفي الأخير يوصي الباحث على ضرورة تطبيق هذه الممارسات في كافة الفنادق لما لها من تأثير قوي على السلوكيات البيئية للعاملين.