ECO-WARRIORS IN ACTION: UNRAVELING THE CONNECTION BETWEEN GREEN TRAINING, ENVIRONMENTAL ORGANIZATIONAL CULTURE, AND EMPLOYEE BEHAVIOR IN EGYPT'S HOTEL INDUSTRY

By

Eslam Sayed AbdelGhany Yasin
Omar El Sayed Qoura

Faculty of Tourism and Hotels, Fayoum University

RESEARCH JOURNAL OF THE FACULTY OF TOURISM AND HOTELS
MANSOURA UNIVERSITY
ISSUE NO. 15, PART 2, JUNE. 2024
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry
Abstract

Considering the difficult challenges facing the hotel sector in terms of hotel employees’ eco-friendly behavior and environmental organizational culture, green training becomes a crucial issue for the hotel industry to address in order to meet employee needs. However, green training for employees is essential to hotels' success. Research on the relationship between eco-friendly conduct and green training through the moderating influence of the hotel industry's environmental organizational culture is lacking. The current study aimed to reveal the influence of green training GT on hotel employees’ eco-friendly behavior EEB, taking into account the role of environmental organizational culture EOC. To examine the proposed model of the study with a random sample of 450 valid responses collected from employees in five-star hotels in Cairo and using structural equation model analyses, The PLS-SEM approach was used to analyze data by WarpPLS software version 7.0. Through the moderating effect of environmental organizational culture, the results demonstrated the beneficial effects of employee green training on eco-friendly behavior. The findings showed that there is a positive correlation between GT and EEB, and there is a positive correlation on the connection between GT and EOC. Furthermore, EOC positively correlates with both GT and EEB, additionally; EOC has a positive moderating impact on the connection between GT and EEB. So, the study enhances green organizational behaviors by demonstrating that organizations promoting green work engagement encourage employees to reciprocate by adopting green citizenship behaviors. This study also offers
practical guidance for the hotel sector and managers to promote green training and hotel employees’ eco-friendly behavior for environmental organizational culture. Findings revealed that an employee’s perception of training, rewards, and recognition significantly contributes to increasing employees’ levels of EOC. The findings indicated that GHRM practices are not implemented in Egyptian hotels in Cairo because of management and staff obstacles. These findings have ramifications for both academics and hoteliers. In light of these findings, theoretical and managerial implications as well as future research directions are discussed. This study may be among the few that examines the influence of green training on hotel employees’ eco-friendly behavior taking, into account the role of environmental organizational culture.

**Keywords:** Green Training, Eco-Friendly Behavior, Environmental Organizational Culture, Hotel, Egypt.
حماية البيئة في قطاع الفندق: كيف يؤثر التدريب الأخضر الثقافة التنظيمية والسلوك البشري للموظفين في مصر

تواجه صناعة الفنادق العديد من المعضلات وانطلاقاً من ذلك تسعى القطاع إلى تطبيق الممارسات الخضراء، ومن المسلم به أن التدريب الأخضر الالكتروني والسلوك الصديق للبيئة، هدف هذه الدراسة إلى دراسة العلاقة بين التدريب الأخضر والسلوك الصديق للبيئة لموظفي صناعة الفندق مع الأخذ بالاعتبار الدور الوسيط للثقافة التنظيمية البيئية، قام الباحث بتصميم استمارة استقصائية وتوزيعها على عينة عشوائية من الموظفين، حيث تم توزيع 500 استمارة بينهم كان الصالح للتحليل. استمراراً و 50 استمارة غير صالحة للتحليل بالإضافة إلى ذلك تم تحليل النتائج المتصل عليها إحصائياً باستخدام برنامج PLS-SEM

تحتوي بيانات الإصدار 7 خصص الباحث إلى أنه لا يوجد أي تطبيق للممارسات الخضراء لإدارة المواد البشرية بصورة ممنهجة. وأظهرت النتائج وجود علاقة ارتباط موجبة بين التدريب الأخضر والسلوك الصديق للبيئة. بالإضافة إلى ذلك، للثقافة التنظيمية البيئية علاقة إيجابية مع التدريب الأخضر والسلوك الصديق للموظفي الفندق. علاوة على ذلك، فإن للثقافة التنظيمية البيئية تأثير إيجابي على التدريب الأخضر والسلوك الصديق للبيئة. وفي الأخير يوصي الباحث على ضرورة تطبيق ممارسات إدارة المواد البشرية الخضراء في كافة الفنادق لما لها من تأثير قوي على السلوك البيئي للعملين بما يضمن الحصول على عِالة شفافة خضراء أو تحويل العِالة المالية إلى عِالة خضراء. وتقدم هذه الدراسة أيضاً إرشادات عملية للممارسات ومديري الموارد البشرية لتوزيع التدريب الأخضر والسلوك الصديق للبيئة للموظفين للعمل في النمط المستدام الفعاله.

الكلمات المفتاحية: التدريب الأخضر، السُلوك الصديق للبيئة، الثقافة التنظيمية البيئية، الفندق، القاهرة.
1. Introduction

Concern for the environment has emerged as an issue for human resource management techniques in organizations, particularly with regard to enhancing employee environmental behavior at work. Achieving sustainable goals requires institutionalizing environmental values and ensuring that the organization's vision and mission align with ecological principles (Aggarwal & Agarwala, 2023). Therefore, the hotel's overall environmental performance is improved by the employees' eco-friendly behavior, which contributes to the attainment of GHRM (Faleye & Trahan, 2011). In summary, there was a significant lack of research on green training and employees' eco-friendly behavior to improve their environmental performance. The focus of contemporary researchers endorsing the role of HR in environmental performance has been on the importance of eco-friendly employee behavior in successfully implementing environmental policies at work.

The global hotel industry is confronted with several obstacles as a result of various environmental changes that lead to intense rivalry (Alharthi et al., 2019; Esteban-Llort, et al., 2018). With the growing importance of environmental awareness, the hotel industry, a major force in the global economy it must integrate sustainable practices into its operations. This is very important (Malheiro et al., 2020; Abdou et al., 2022; Legrand et al., 2022). After the events of an epidemic of coronavirus, The Egyptian hotel and tourism industries have been positively impacted, which has led to significant staff turnover and fierce competition between hotels and the tourism sector.
(Abu-Elhassan, Elsayed, & Soliman, 2016; Abuelhassan, Elsayed, & Soliman, 2017). Thus, In order to improve service and product quality, the hotel industry develops innovative ideas (Alsaadi et al., 2019). Furthermore, over the last few decades, governments and tourism and hotel organizations have shown a great deal of awareness for environmental issues (Robertson & Barling, 2017).

Today's hotel industry and customers must increase their knowledge of and familiarity with addressing environmental challenges (Pharma, Tuková, & Jabbour, 2019). For instance, In order to maintain a greater level of water and energy conservation in their operations and a decline in waste, hotels need to step up their green initiatives to educate staff and guests (Bohdanowicz, Zientara, & Novotna, 2011). This has led to calls for more sustainable practices within the industry (Khatter et al., 2019; Abdou et al., 2020). One important element in an organization's success is said to be employee training (Koch & McGrath, 1996; Kim et al., 2019; Alshamsi et al., 2019). Green training is therefore expanding quickly in the hotel industry as a result of rising guest interest in green hotels, should these present merging Green Human Resource Management (GHRM) practices represent the availability of green training with supervisor support for green training to adopt high environmental performance. This has led to the investigation of hotel firms' environmental management procedures in a number of previous studies (Hsiao, Chuang, Kuo, & Yu, 2014) views of clients and staff members (Kim & Choi, 2013) and attitudes and actions of guests toward hotels' eco-friendly initiatives (Manaktola & Jauhari, 2007).
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt’s Hotel Industry

The concept of green training and hotel employees’ eco-friendly behavior effectively captures the voluntary, proactive actions of employees aimed at environmental sustainability (Hooi et al., 2022). One important tool for encouraging employees to engage in voluntary green behavior is green training, and Human resource management's environmental component is crucial since it can affect both an organization’s overall environmental performance and its employees' eco-friendly behavior. Additionally, the researchers suggest specific green training and development methods, like teaching employees how to do a green workspace analysis, reducing waste, developing green personal skills, recycling, and energy-saving training.

In response, Hotels in Egypt are actively looking for innovative ways to reduce their carbon footprint while also fostering an environmental organizational culture, green staff behavior, green training, and an eco-conscious culture among its employees (Abdou et al., 2023). Zheng et al., (2021) and Elshaer et al., (2021) emphasized the critical importance of employee behavior in ensuring the successful implementation of environmental initiatives in the hotel industry and the degree of employee satisfaction and loyalty to green initiatives. More expressly, employees who demonstrate strong green behavior is proactive environmental allies motivate others to adopt eco-friendly practices, and actively participate in environmental initiatives, especially when they receive encouragement and support from their supervisors (Luu, 2019; Meng et al., 2022). To clearly recognize the connection between eco-friendly conduct and green training for hotel staff, and take into account the moderating effect of environmental
organizational culture. The term environmental organizational culture has various synonyms, such as sustainability-oriented culture, eco-friendly culture, green organizational culture, and environment-friendly culture. These terms have the same concept, which is the extension of organizational culture to include a focus on environmental issues and sustainability (Tahir et al., 2019; Liu & Lin, 2020).

Environmentally conscious behavior and practices inside an organization are encouraged by a common set of values, beliefs, and principles, which is known as environmental organizational culture (Afum et al., 2020). Culture shapes employee thought patterns (Shah et al., 2021). A green culture is built when employees actively integrate environmentally friendly practices into their daily work (Khazal, 2018). This culture is shaped by shared beliefs and assumptions about environmental issues and how they should be addressed. These assumptions translate into expected behaviors for all employees, guiding their actions toward environmental sustainability (Wang, 2019). Few researches have examined the moderating effect of environmental organizational culture in the hotel industry as well as the connection between eco-friendly conduct of hotel staff and green training, a substantial knowledge gap that persists in recognizing the direct relationship between green training and employees’ eco-friendly behavior.

To our knowledge, no prior study has investigated the indirect correlation between training and hotel employees’ eco-friendly behavior in the Egyptian hotel sector, considering environmental organizational culture as a
potential moderating factor. Consequently, an in-depth understanding of the GT-EEB relationship might be provided by empirical research specifically aimed at the hotel sector, which is very desirable. Additionally, such studies can aid in our comprehension of the various elements such as the environmental culture of an organization that may have an impact on eco-friendly behavior in the hospitality industry. However, there is a dearth of empirical research that connects access to and support for green training with environmental performance, regardless of the effect that green training for employees has on hotels' environmental performance. Given the significance of supervisor support for training and HRM's training initiatives in enhancing organizational electiveness (Kuvaas & Dysvik, 2010; Sangkala, Ahmed, & Pahi, 2016) This study tries to explore the connection between employees' eco-friendly behavior and environmental organizational culture and green training. The results of the current study imply that, with some constraints, investing in green training should be viewed as a strategic hotel sector instrument. This is because green training enhances the overall performance of the hospitality sector. Additionally, this paper closed the gap in the literature about employee green training.

2. Theoretical framework hypotheses and a review of the literature

2.1 Green training and hotel employees’ eco-friendly behavior
According to Renwick et al., (2013) creating a green culture and providing environmental training are crucial green practices for creating a green growth plan. Reading the literature reveals that prior research on green organizational culture has not been taken into consideration. In the meantime, research on the connection between training and the environment has made green training a popular subject. Eco-friendly behavior (EEB) among employees is critical to the effectiveness of an organizational environmental performance and management (Lo, Peters, & Kok, 2012). The process of green induction, according to Arulrajah et al., (2016) can be handled in two different ways. The first strategy is general green induction, which involves teaching newly hired applicants the fundamentals of environmental management rules and procedures. Second, by enrolling new applicants in environmental orientation programs tailored to their occupations, green induction particular to their jobs is implemented. Therefore, the goal of the green induction is to raise a new candidate's awareness of greening. Green training has a favorable correlation with employees' eco-friendly behaviors Reusing objects and materials; cutting back on resource usage; and purchasing eco-friendly goods.

Hotels should give environmental training to both new and current employees in order to raise awareness of environmental issues among all staff members at all management levels and to enhance the necessary knowledge and abilities. Therefore, North (1997) cited the several advantages of green training, including raising environmental awareness and achieving high environmental performance. Respect, Ramnus (2002) and Elziny (2019)
stated that the first step in creating environmental training programs is gap analysis, which involves determining the environmental training requirements of applicants in order to provide the environmental skills, knowledge, and attitudes that employees need. Generally, green training significantly contributes in GHRM's success (Shah & Soomro, 2023) as the detrimental environmental externalities of the hospitality industry are lessened by educated green skills and knowledge of the significance of waste management, recycling, and energy-saving (Arulrajah et al., 2015; Jabbour, 2013).

Research on green hospitality management (GHRM) and eco-friendly practices in the Egyptian hotel sector is scarce. Miller, Xu, & Mehrotra (2015) affirm that providing hotel staff with training can have a positive economic impact by developing and expanding their knowledge, skills, and conduct, which in turn improves their eco-friendly behavior. Employee training is defined as methodically planned and coordinated work to give employees a learning experience with the necessary information, skill, attitude, and conduct to carry out their job tasks professionally (Buckley & Caple, 1995). More notably, Shafaei et al., (2020) called attention to the paucity of research on the impact of GHRM on front-line staff. Previous studies have demonstrated that an organization's performance and productivity are highly impacted by its investment in staff training (Nadeem, 2010; Elnaga & Imran, 2013). Thus, by making investments in hotel human resources and offering training in green want skills, knowledge, and behaviors, it is crucial to promote hotel environmental performance. The beneficial effects of the Human Resources Department's
green training methods on environmentally conscious behavior have not been extensively studied (Pharma, Tuková, & Jabbour, 2019). According to earlier studies (Noe & Wilk, 1993) this may have a significant influence on staff members' decisions to take part in green training, which may improve their green practices for improving hotel environmental performance.

Guerci et al., (2016) claim that GHRM promotes environmentally friendly behavior by enhancing pro-environmental information, increasing their incentive to adopt environmentally friendly practices, and providing chances for employee green participation. When it comes to HRM procedures, staff members receive green training that covers the knowledge, abilities, attitudes, and behaviors required for environmental practices (Jabbour, Santos, & Nagano, 2010) in order to fulfill the hotels' environmental goals, it is necessary to raise staff members' knowledge of environmental standards concerns and solutions as well as motivate them to take initiative at work (Daily & Huang, 2001).

Employee eco-friendly behavior an emerging field of research that can be defined as the willingness or intentional behavior exhibited by an employee that have the ability to shield the environment from the damaging consequences (Saeed et al., 2019). Employee actions or behaviors that support green environmental goals while adhering to organizational limits are referred to as eco-friendly conduct. Water conservation, lowering carbon footprints, reusing natural resources, going paperless, using less plastic, and cutting back on trash are a few examples
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry

(Scherbaum et al., 2008). Giving staff members green training on environmental policies and standards, for example, improves their awareness, expertise, and knowledge of environmental problems and solutions (Govindarajulu & Daily, 2004); Therefore, it will increase staff members' environmental actions (Boiral, 2009). One of the key concerns of modern hospitality management is employee training investments (Bulut & Culha, 2010). Thus, along with other HRM activities, access to green training is regarded as the fundamental component of HRM functions (Tanova & Nadiri, 2005; Bulut & Culha, 2010). Accordingly, this study supposes that:

**H1: green training positively influences hotel employees’ eco-friendly behavior**

2.2 Green Training and Environmental Organizational Culture

Being aware of environmental concerns is central to the conceptual framework of green organizational culture (Sloan et al., 2012). Hotels ought to invest in green innovation projects and cultivate a green organizational culture (Gürlek, M., & Tuna, M., 2017). GT measures how deeply employees connect and actively participate in their workplace's sustainability initiatives, reflecting a strong commitment to championing sustainable practices that reduce environmental and social harm (Karatepe et al., 2022) which ultimately translates to improved employee performance through increased engagement and motivation (Aboramadan, 2022). When employees prioritize promoting sustainable practices over maximizing profits, they can be
said to have an ecologically conscious organizational culture (Muisyo et al., 2022). By cultivating an environmental organizational culture, employees are motivated to actively contribute to the organization's vision for environmental sustainability. This translates to tangible actions, such as implementing sustainable practices and advocating for eco-friendly solutions (Tran, 2023).

According to Herrando & Constantinides (2021) the basis for the effectiveness of an environmental organizational culture is that it motivates employees through the observed behavior of others to contribute to a collective effort towards environmental sustainability (Al-Swidi et al., 2021). Organizations with strong morals and values around environmentalism can significantly impact their employees' green behavior. This is why EOC is crucial for the success of environmental practices (Ismail & Hilal, 2023). EOC acts as a foundation for continuous improvement in employee environmental performance. Cultural norms and values profoundly influence individual behavior by encouraging the sharing of green values within an organization (Al-Swidi et al., 2021). When a company encourages an eco-friendly culture, employees are more likely to be active participants in green initiatives (Khammadee & Ninarbon, 2022). In addition, organizations with a strong culture of environmental responsibility and sustainability tend to foster higher levels of work engagement, as employees are more likely to participate actively in environmentally friendly behaviors (Aggarwal & Agarwala, 2023). Consequently, the following hypothesis was formulated:
H2: GT is positively influencing EOC

2.3 Hotel employees’ eco-friendly actions and the environmental organizational culture

Organizational citizenship behavior for the environment, or OCBE, is a new idea that has been introduced to the literature. One of the scientific theories aimed at encouraging eco-friendly conduct in organizations (Daily et al., 2009; Paillé et al., 2013). A healthy organizational culture fosters positive employee behavior, leading to better outcomes (Jain & Jain, 2013). Essentially, organizational culture acts as a set of implicit rules and shared values that guide how employees behave within the organizational hierarchy (Williams, 2022). Lasrado and Arora (2018) noted that organizations looking to enhance their environmental commitment to environmentally conscious behaviors need to foster a corporate culture. An organization's success or failure in environmental management heavily relies on its organizational culture. This culture is expressed through the values and activities that then influence the environmental behaviors of employees and management (Danirmala & Prajogo, 2022).

Organizational culture is defined as “a set of shared mental assumptions that guide actions and interpretations in organizations by defining appropriate behavior for different situations” (Ravasi & Schultz, 2006). Shared values, conventions, symbols, and social stereotypes regarding the management of the workplace environment are all part of
the green organizational culture, which also influences the expected standard actions of individuals (Harris & Crane, 2002; Chang, 2015). Members' attitudes and actions are influenced by the environmental management and protection symbolism found in eco-friendly or green organizational cultures (Umrani, Mahmood, & Ahmed, 2016; Chen, 2011). Furthermore, an environment-friendly organizational culture is pervasive, ubiquitous and long-lasting when there is an environment-conscious team of employees (Umrani, Ahmed, & Memon, 2015; Fernandez et al., 2003). Úbeda-García et al., (2021) Encouraging a pro-environmental organizational culture allows employees to both contribute to sustainability efforts at work and gain valuable experience and knowledge through implementing environmentally friendly actions and practices.

Green behaviors are frequently characterized as employee acts that promote environmental management initiatives (Saeed et al., 2019). The hospitality industry supports employee green behavior by utilizing natural resources, energy, and human talent to conserve materials while safeguarding the environment with environmentally conscious objectives (Su & Swanson, 2019). Recently, there has been a lot of interest in examining the factors affecting green behaviors. Zhang et al., (2019) demonstrated that GHRM positively affected green behaviors. In addition, exposure to an environmental organizational culture, as described by Pan et al., (2022) leads to increased pro-environmental behaviors among employees, even in their personal lives and off work. An environmental organizational culture also encourages employees to embrace environmental innovations in the
hospitality industry (Gürlek & Tuna, 2018). Where Aggarwal & Agarwala (2023) demonstrated how this culture motivates employees to actively engage in sustainable practices like recycling, energy conservation, printing reduction, and water conservation. Organizations with a strong "green" culture, characterized by its environmental focus, cultivate a shared commitment to sustainability among employees. Several studies have highlighted the positive impact of environmental organizational culture on environmental behaviors and performance. For example, Pham et al., (2018) and Muisyo et al., (2022) discovered that a green workplace culture motivates staff members to take on pro-environmental activities outside of work; Al-Swidi et al., (2021) and Khairy et al., (2023) further demonstrated a direct link between green culture and employee green behaviors, and ultimately, Further, Al-Romeedy (2023) concluded that environmental organizational culture effectively promotes organizational citizenship behavior, resulting in reduced environmental damage from the organization's activities.

Employees that practice Environment-friendly behavior conduct both safeguard the environment and shows their commitment to the organization (Gilal et al., 2019). However, as stated by Mishra (2017) Empirical research on the relationship between green human resource practices and environmental performance and environmentally friendly behavior is scarce (Jabour et al., 2013). Employees with a strong organizational commitment are typically those that integrate good beliefs and aspirations into their workplace (Kunda, Ataman, & Behram, 2019). The more emotionally invested the staff is in the company's
environmental conservation initiatives, the greater organizational commitment they will show (Bhattacharya, Korschun, & Sen, 2009). This research proposes that fostering an environmental organizational culture can be a powerful strategy for organizations to promote environmental responsibility and green organizational citizenship behaviors among employees. By engaging in pro-environmental actions, employees are widely recognized as a crucial component of an organization's efforts to achieve organization greening by performing pro-environmental behaviors. Environmentally conscious attitudes and awareness among employees are encouraged by green HR policies, which help the company meet its objectives (Lülfs & Hahn, 2013). Hence, the following hypothesis was proposed:

**H3: EOC positively influences EEB**

### 2.4 The Moderating Role of Environmental Organizational Culture

GHRM strategies deliberately enhance pro-environmental behaviors to enhance green performance (Ansari et al., 2021). Hotels currently recognize and promote eco-friendly practices (Kim et al., 2019). Organizations with a green culture, characterized by shared assumptions, values, symbols, and artifacts that prioritize environmental sustainability, are more receptive to adopting environmentally friendly changes (Harris & Crane, 2002). This is because culture influences employee thinking, leading to a shift towards environmentally conscious behaviors and practices (Rao & Holt, 2005). Green cultures
encourage employees to embrace sustainable practices in their work and cultivate a feeling of environmental responsibility. This shared commitment, actively participated in by all members of the organization, and creates a powerful force for implementing green initiatives and driving positive behavioral change (Rizvi & Garg, 2021).

Employee conventions, values, and beliefs all have an impact on how they behave at work. Furthermore, those who care about the environment are more inclined to adopt environmentally friendly practices (Hameed et al., 2020). Shah et al., (2021) highlighted the goal of environmental organizational culture, which is to foster a new corporate identity by motivating staff to adopt eco-friendly practices. Eventually, the organization will change as a result of the green behaviors of its employees. Muisyo et al., (2022) observed that in order to improve an organization's green competitiveness, elements supporting an environmental organizational culture are essential. These elements encourage staff members to participate in green activities (Roscoe et al., 2019). Tran (2023) suggests that GOC plays a significant role in shaping employee behavior within the organization, emphasizing its impact on green training. Environmentally conscious Organizations foster a work culture where employees actively participate in environmentally friendly initiatives and are more interested in their work (Aggarwal & Agarwala, 2023). Building on this, the following hypothesis was proposed:
H4: EOC positively moderates the relationship between GT and EEB

2.5 The study's theoretical framework and formulation of hypotheses are illustrated in Figure 1 below.

Figure (1): Study's theoretical foundation and hypothesis formation; Author's contribution

3. Research Methodology
3.1 Sampling, Data Collection, Measurement and Analytic approach

Egyptian Hotels (Green Star Hotels) is a national green certification that is managed by the Egyptian Hotel Association (EHA) and overseen by the Egyptian Tourism Ministry. The program of GSH provides the chance for hotels operating in Egypt to get international recognition, on the one hand, to promote their environmental functioning and social criteria, and on the other hand, to decrease their operational costs (Khalil, 2020). The study's
data was gathered from hotel staff in Cairo, one of the major hotel destinations (Moneim, Gad, & Hassan, 2019). The sole reason Cairo's five-star hotels participated in this study was that they offer training on environmental protection and sustainability. Cairo contains 23 five-star hotels (EHA, 2019). To take part in the current study, the general managers or human resource directors of 23 hotels were contacted. In addition, he enquired as to whether the hotels offer environmental education or environmental protection training to their staff. Following the researcher's approval by the general managers of the hotels, the human resources directors gave him access to the information he needed about the staff and permitted him to distribute and discuss the survey with them during breaks. Every hotel employee had an equal opportunity to participate in the survey once the questionnaires were distributed at random. Employees were invited to participate in the survey by the researcher. The goal and confidentiality of the research were communicated to the staff. 500 questionnaires were distributed to employees. There were 450 valid questionnaires collected, and 50 invalid reflecting a response rate of 90.0%.

The questionnaire was reviewed by ten academics and professionals. A questionnaire was distributed from October 2023 through March 2024. The phrasing and description of the items were modified to ensure that they measured all intended constructs. Five-point Likert scales were used to evaluate each response. A Likert-type scale with five points for "strongly agree" and "strongly disagree" assessed each closed-ended question about environmental organizational culture, eco-friendly behavior, and green
training. Using Dhar's (2015) items and Bulut & Culha's (2010) items for eco-friendly behavior, the researcher created six green training items and six eco-friendly behavior items that were modified for the study. A hotel environmental organizational culture with six items was adopted (Kim et al., 2019). An environmental organizational culture scale, consisting of six items, was created by Wang et al. (2020). Employee green behaviors were assessed using a six-item scale developed by Bissing-Olson et al., (2013). The study utilized the statistical software programs used to test the study hypotheses (PLS-SEM) using Warp-PLS software version 7.0 to assess the research hypotheses and examine the measurement and structural model of the study.

4. Results and Discussions

4.1 Demographic data

500 survey questionnaires were distributed and collected 450 (90.0%) complete and valid questionnaires for the analysis of the study's present hypothesis and 50 invalid. Of the 450 employees, 317 (75.3%) were male and 133 (24.7%) were female, Age-wise, the majority of participants (83.0%) were between the ages of 31 and 40, with the 21–30 age group coming in second with 20.0%. The participants' educational level is limited by Master's/PhD (8.3%), Bachelor's (40.4%), and high schools/institutes (51.3%). Remarkably, among individuals who took part, the greatest amount of job experience was between 3 and 5 years (40.0%), the second-highest job experience, which was roughly 33.8%, was between 1 and
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry

2 years. Among the participants, the largest segment (56.5%) worked in the human resources department see table 1
Table (1): Descriptive Statistics of the Profile of Respondents (N=450)

<table>
<thead>
<tr>
<th>Employees Details (N=450)</th>
<th>Classification</th>
<th>Frequency(s)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>317</td>
<td>75.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>133</td>
<td>24.7</td>
</tr>
<tr>
<td>Age</td>
<td>18 – 20 years</td>
<td>73</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>21-30 years</td>
<td>125</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>31-40 years</td>
<td>210</td>
<td>83.0</td>
</tr>
<tr>
<td></td>
<td>41-50 years</td>
<td>25</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>51 &amp; above years</td>
<td>17</td>
<td>11.1</td>
</tr>
<tr>
<td>Education level</td>
<td>High schools/institute</td>
<td>310</td>
<td>51.3</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>130</td>
<td>40.4</td>
</tr>
<tr>
<td></td>
<td>Master/PhD</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>Years of experience</td>
<td>1-2 Years</td>
<td>98</td>
<td>33.8</td>
</tr>
<tr>
<td></td>
<td>3-5 Years</td>
<td>116</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>6-10 Years</td>
<td>41</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>11-15 Years</td>
<td>21</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>16&amp; above Years</td>
<td>14</td>
<td>4.8</td>
</tr>
<tr>
<td>Department</td>
<td>Front Office</td>
<td>30</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Housekeeping</td>
<td>85</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>Food and beverage</td>
<td>45</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>Kitchen</td>
<td>38</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>18</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Human resource</td>
<td>210</td>
<td>56.5</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>24</td>
<td>3.5</td>
</tr>
</tbody>
</table>
4.1.2 Indicator reliability / Loading value

The study's confirmatory factor analysis (CFA) presented in Table 2 showed that item loadings were between 0.752 and 0.867, acceptable levels according to Hair et al. (2010). Every variable, as shown in Table 2, has a Cronbach's alpha and composite reliability score above 0.7, demonstrating scale reliability, and AVE values are above 0.5 for all variables, demonstrating scale reliability (Hair et al., 2020). Furthermore, the variance inflation factor (VIF) is calculated, indicating pathological collinearity and common method bias since it is ≤3.3 (Kock, 2015). The range of the Cronbach's value was 0.90 to 0.95. Similarly, the construct's reliability ranged from 0.92 to 0.96. Table 2 illustrates that the internal consistency of the scales was deemed satisfactory overall.

4.1.3. Reliability of internal consistency

Composite reliability is a useful metric for assessing internal consistency dependability in contrast to Cronbach's alpha (Hair Jr. et al., 2021). The exploratory research criterion figures range from 0.6 to 0.7; the higher the figures, the higher the level of reliability. Nevertheless, values higher than 0.95 are not advised (Hair Jr. et al., 2021). As the table demonstrates, every CR value falls between the range of 0.70 and 0.94 shown in Table 2. Consequently, the outcomes validated the internal consistency and dependability of every variable.
4.1.4. Validity convergence

The Average Variance Extracted (AVE) was utilized to verify the convergent validity. GT, EEB, and EOC had AVE values of 0.76, 0.62, and 0.69, in that order. All values were above the criterion of 0.5, which is the average extracted variance (Fornell, 1981). This suggested that, as seen in Table 2, the constructs in this investigation exhibited satisfactory convergent validity.

4.1.5. Validity in discrimination

The heterotrait-monotrait of correlations (HTMT) ratio correlations can be analyzed to verify the discriminant validity, as can the Fornell & Larcker technique (Fornell & Larcker, 1981). When the values of HTMT ratios are less than the threshold values (Henseler, Ringle, & Sarstedt, 2015) or the square root values of average variance extracted exceed the corresponding correlation coefficients among constructs, discriminant validity is considered to exist (Fornell & Larcker, 1981).

Overview of the Collinearity and Validity Benchmarks: adapted from Hair et al.,
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt’s Hotel Industry

2022

Table 2: The Measurement Model’s Outcomes

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Item loading</th>
<th>CR</th>
<th>CA</th>
<th>AVE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green training (GT)</td>
<td>GT.1</td>
<td>0.784**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GT.2</td>
<td>0.867**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GT.3</td>
<td>0.847**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GT.4</td>
<td>0.752**</td>
<td>0.912</td>
<td>0.877</td>
<td>0.763</td>
<td>1.328</td>
</tr>
<tr>
<td></td>
<td>GT.5</td>
<td>0.805**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GT.6</td>
<td>0.822**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employees’ eco-friendly behavior (EEB)</td>
<td>EEB.1</td>
<td>0.785**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEB.2</td>
<td>0.790**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEB.3</td>
<td>0.778**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEB.4</td>
<td>0.833**</td>
<td>0.926</td>
<td>0.883</td>
<td>0.620</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEB.5</td>
<td>0.824**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Organizational Culture (EOC)

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEB.6</td>
<td>0.785**</td>
</tr>
<tr>
<td>EOC.1</td>
<td>0.828**</td>
</tr>
<tr>
<td>EOC.2</td>
<td>0.813**</td>
</tr>
<tr>
<td>EOC.3</td>
<td>0.838**</td>
</tr>
<tr>
<td>EOC.4</td>
<td>0.863**</td>
</tr>
<tr>
<td>EOC.5</td>
<td>0.843**</td>
</tr>
<tr>
<td>EOC.6</td>
<td>0.824**</td>
</tr>
</tbody>
</table>

\[ \text{Variance inflation factors (VIFs), average variance extracted (AVE), Cronbach's alpha (CA), and composite reliability (CR) ** P value for loading items (<0.001)} \]

Table 3: The Discriminant Validity of Research Model

<table>
<thead>
<tr>
<th>Fornell-Larcker Crite Ratio (HTMT)</th>
<th>Heterotrait-Monotrait Ratio (HTMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT</td>
<td>EFB</td>
</tr>
<tr>
<td>GT</td>
<td>0.833</td>
</tr>
<tr>
<td>EFB</td>
<td>0.607</td>
</tr>
<tr>
<td>EOC</td>
<td>0.494</td>
</tr>
</tbody>
</table>

The sample data showed a range of 0.83 to 0.86 for the values of Fornell and Larcker, as shown in Table 3. Additionally, all of the samples’ HTMT ratios demonstrated that the highest HTMT value of 0.815 as below the criterion value of 0.9 (Henseler et al., 2015).

4.2. Calculating the Structural Model Estimate

4.2.1. Collinearity

According to Hair, Ringle, and Sarstedt, (2011) the values of the inner VIF (variance inflation factor) in multi-collinearity should be less than the criterion value of 5.0. The numbers clearly demonstrated that there was no
multicollinearity in any of the PLS models pertaining to any given data set.

Table 3: Factor of Inner Variance Inflation (VIF)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>GT</th>
<th>EEB</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EOC</td>
<td>2.838</td>
<td>1.328</td>
</tr>
</tbody>
</table>

4.2.2 The determination coefficient (R square)

The determination coefficient, the degree of variance discovered in the endogenous constructs is confirmed by R square. The PLS in the sample model exhibited a moderate level of predictive power, according to the coefficient of determination, or R square, which measures the power of predictors for the outcome. In Table 4, the R squares for GT, EEB, and EOC were 0.431, 0.670, and 0.486, correspondingly.

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT</td>
<td>0.431</td>
<td>0.424</td>
</tr>
<tr>
<td>EEB</td>
<td>0.670</td>
<td>0.668</td>
</tr>
<tr>
<td>EOC</td>
<td>0.486</td>
<td>0.479</td>
</tr>
</tbody>
</table>

4.2.3. Hypothesis Testing (Direct Effects)

Testing the four (H1, H2, H3, and H4) hypotheses put forth in this study's findings. Results revealed that a positive correlation exists between green training (GT) and employees’ eco-friendly behavior (EEB) (b =0.28, R <0.01). This means that when GT increases, EEB tends to be high. Therefore, H1 is supported. In addition, GT has a positive correlation with EOC (b = 0.79, R<0.01), and EOC
has a positive correlation with EEB (b = 0.65, R<0.01). This means that when GT increases, both EOC and EEB tend to be high. Therefore, H2 and H3 are supported. Additionally, EOC has a moderating beneficial effect on the relationship between GT and EEB (b = 0.10, R = 0.02). This means that EOC strengthens the positive relationship between GT and EEB. Thus, H4 is supported. Figure 2 also shows that EOC interprets 63% of the variance in GT (R² = 0.63), while EOC and EOC interpret 68% of the variance in EEB (R² = 0.68).

Figure: Examining the mediation model source; the researcher

Table 5: Significance of Structural Path Model
4.4. Mediation Effects

Total, direct, and indirect effects between GT->EOC->EEB were displayed using PLS-SEM. Table 5's path coefficient value was used to calculate the direct effect, which was shown to be positive and significant (t = 4.19, p = 0.000). Table 6 below illustrates the strong indirect effect of the EOC mediation between GT and EEB (t = 3.375, p = 0.001). In summary, there were strong mediation effects of EOC between GT and EEB, leading to both direct and indirect effects.

Table 6: Mediation Effects between GT-> EOC -> EEB

<table>
<thead>
<tr>
<th>Variables</th>
<th>Original Sample (O)</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT-&gt; EOC -&gt; EEB</td>
<td>0.235</td>
<td>3.375</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Discussion and Implications

In an effort to raise the environmental consciousness of their staff, some hotels are now carefully examining and determining what environmental training is necessary. These hotels provide systematic and comprehensive education, training, and development programs for their staff based on their needs for environmental training. These programs give staff members the knowledge, abilities, and attitudes they need to practice excellent environmental management. The purpose of this research is to discover the relationship between green training and employees’ eco-friendly behavior in the Egyptian hotel sector through the mediating effect of environmental organizational culture.

The goal and objectives were met by gathering primary data through a closed-ended questionnaire. A total of five hundred employees of randomly selected Cairo hotels were given self-administered questionnaires. Out of the questionnaires that were returned, 450 could be used again, representing a response rate of 90.0% of respondents. A five-point Likert scale was used to test the attitude of the participants toward research variables. The PLS-SEM approach was used to analyze data by Warp PLS software version 7.0. The results showed that: Results revealed that a positive correlation exists between Green training (GT) and employees’ eco-friendly behavior (EEB); Green training positively influences hotel employees’ eco-friendly behavior. In addition, GT has a positive correlation with EOC. GT is positively influencing EOC, and EOC has a positive correlation with EEB. EOC positively influences EEB. Furthermore, EOC has a positive moderating impact on the connection between GT and EEB.
Based on the results, the following suggestions can be made to fully integrate greening methods: Hotels should adopt GHRM practices to help manage negative environmental impacts and, greater employee efficiency, motivation, and retention; Hotels should look beyond their profit-making objectives to create a sustainable economy and common value. The identification of the ways in which eco-friendly training affects hotel staff members' behavior is what makes this research valuable. The examination of the data demonstrates that there is a statistically substantial and favorable correlation between eco-friendly conduct among employees and green training. According to a prior study (Masri & Jaaron, 2017), there is a favorable association between the eco-behavior of hotel employees and the GHRM practices that HR manager in the industry implement.

According to the results, when GHRM develops training programs that successfully increase appropriate attitudes, beliefs, and knowledge, employees will also exhibit green behavioral intentions (Dumont et al., 2017). Investigating how green training affects eco-friendly behavior among hotel staff was the goal of this study. Considering the moderating influence of organizational environment, the research model was formulated and examined. Findings revealed that GT positively affects EOC and EEB. Consequently, the present study recommends that HR managers focus more on the job's design. Managers ought to, for instance, incorporate some responsibilities linked to environmental preservation into the job design. Additionally, job advertisements for hotels ought to highlight the significance of their green culture, something
that new hires ought to be aware of. Finally, respondents' analyses agreed that HRM in hotels should establish a set of rules that regulate employees' environmental attitudes. Put another way, an employee who has received training on environmental preservation will be more cautious when it comes to environmental behavioral practices in the hotel, such as conserving materials. In addition, Al-Swidi et al., (2021), Al-Romeedy (2023), and Khairy et al., (2023) concluded that an environmental organizational culture effectively encourages organizational citizenship behavior, leading to reduced environmental damage from the organization's activities, and Shah et al., (2021) and Muisyo et al., (2022) asserted that encouraging an environmental organizational culture is vital for enhancing an organization's green competitiveness. Environmental organizational culture significantly influences employee behavior. Furthermore, the pro-environmental organizational members' values, beliefs, and behaviors shape a green culture (Chang, 2015) influencing their actions toward the environment. According to Saeed et al., (2019) GHRM boosts employees’ knowledge of, motivation for, and commitment to engaging in environmentally beneficial behaviors. The primary objectives of GHRM are to create environmentally conscious employees that inspire them to learn about the environment (Cheema et al., 2020).

Theoretical implications

There are various theoretical implications. First, as far as the researcher is aware, this is the first investigation on the connection between Green Training and Workers' Eco-
Friendly Conduct in the Egyptian Hotel Industry: Environmental Organizational Culture’s Moderating Effect. Based on current research findings, which support earlier findings such as the favorable correlation between employee access to training and organizational commitment and service quality (Bulut & Culha, 2010; Dhar, 2015), Through the development and enhancement of environmental knowledge and skills that appear to be crucial for the achievement of green environmental performance, perceived access to green training programs can improve the components of green environmental hotel performance. This research provides significant theoretical contributions to the field of green training. The findings strengthen organizations promoting green work engagement and foster an environment where employees feel compelled to reciprocate by engaging in more green organizational citizenship behaviors. Moreover, the study's findings contribute to the development of a holistic framework for understanding green organizational behaviors and green training. The recognition of environmental organizational culture as a significant moderator in the EOC-EEB This advocates that organizations should prioritize environmental organizational culture as an integral facet of their strategies aimed at encouraging green engagement and employees' green citizenship behaviors, especially in the hospitality and tourism sectors. It also requires investing in developing employees' environmental awareness through green training and creating a supportive work environment that encourages green practices. Furthermore, Having access to this kind of program enables staff members to acquire the necessary environmental skills for carrying out
specific green activities successfully and avoiding mistakes related to green practices.

**Managerial Implications**

The role of HRM in hotels’ environmentally friendly management is relatively underexplored. This study recommended that HR directors create green training initiatives to raise hotel staff members' environmental awareness, competencies, and practices while enhancing hotels' environmental performance. Also, HR directors ought to focus more on the significant contribution that green training assistance makes to raise the standard of environmental performance in hotels. In order to increase the number and quality of participants in the green training programs, they should construct a supportive environment.

**Limitations and Future Studies**

Every research project, regardless of its rigor, carries inherent limitations that must be transparently acknowledged. First, the study investigated the relationship between GT and EEB and EOC within the context of five-star hotels. Second, the current study investigated the moderating role of environmental organizational culture in the relationship between green training and employees' eco-friendly behavior. Therefore, further research is needed to investigate the mediating or moderating role of other factors like green transformational leadership, green dynamic capabilities, and green organizational identification. The data used in this study was gathered from a selection of Cairo hotels. It was just too hard to visit every hotel in Egypt. Because there isn't much study on this
topic, it is advised that in-depth case studies be conducted in the hotel and tourism sectors to gain deeper understanding of the application of GHRM principles. The use of surveys and questionnaires in this study is one of its methodological shortcomings. A more comprehensive knowledge of the effects of GHRM practices or elements on employees' eco-friendly behavior should be provided by future studies employing qualitative methodologies, such as focus groups and interviews. Future studies should examine certain contracts that could have the most impact on the associations between workers' perceived support for and access to green training, and workers' eco-friendly behavior through perceived advantages from such training. Also, in the future, research should look at potential moderators like organizational support and culture that could increase knowledge about potential moderating mechanisms between employee eco-friendly behavior and green training. Finally, the impact of leadership behaviors on hotel employees' eco-friendly behavior has not been examined in this study.

REFERENCES


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry

- Cheema, S., Afsar, B., & Javed, F. (2020). Employees’ corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry


- Jabbour, C. J. C. (2013). Environmental training in organizations: From a literature review to a
Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry


Eco-Warriors in Action: Unraveling the Connection between Green Training, Environmental Organizational Culture, and Employee Behavior in Egypt's Hotel Industry

Study. *Journal of Cleaner Production, 143*, 474-489.


• Pham, N. T., Phan, Q. P. T., Tučková, Z., VO, N., & Nguyen, L. H. (2018). Enhancing the organizational citizenship behavior for the environment: The roles


Shah, N., & Soomro, B. A. (2023). Effects of green human resource management practices on green
innovation and behavior. Management Decision, 61, 290–312.


management and green leadership on green work engagement. Heliyon, 9(11), 1-12.


