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Perceived behavioral control as a mediator of hotels' green training, environmental commitment, and organizational citizenship behavior: A sustainable environmental practice

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Abstract

By employing a more comprehensive environmental sustainability and behavioral practices and framework, organizations' green human resources, production process among other processes, are also situated at addressing the rising challenge of global warming. To an extent, the gear toward improving the sustainable organization or production entails the environmental sustainability practices, green initiatives, and environmentally friendlier methods against the business-as-usual and the traditional patterns. In so doing, the current study is aimed at examining the effect of green training on organizational citizenship behavior and environmental commitment via the mediating role of perceived behavioral control. By applying the theory of planned behavior, this paper also tests the mediating effect of perceived behavioral control in the organization and the environment. Data from 306 employees working in four and five-star hotels in Istanbul were analyzed using AMOS statistical version 20. The result revealed that green training positively affects environmental commitment and organizational behavior and that perceived behavioral control fully mediates the link. In essence, the investigation equally revealed that it is important to engage employees in environmental sustainability training and related information, especially in compliance with the global drive for the Sustainable Development Goals. The findings and implications of the study are further revealed to serve effective policy tools to organizations, governance, and other stakeholders.

KEYWORDS

environmental commitment, green training, perceived behavioral control, Republic of Turkey, sustainable development, theory of planned behavior

1 | INTRODUCTION

The need for more environmental commitment and behavioral change across the sectors of the economy has increasingly remained one of the core pathways to environmental sustainability (Andresen, 1996). Although many crucial factors drive the performance of a sector such as in the tourism industry, other salient environmental sustainability factors are increasingly gaining prominence. In recent time, the role of environmental commitment, enhancing the innovative capacities,

improving top management team sharing leadership, and dynamic organizational or market culture are increasingly becoming essential to every aspect of an organization (Roscoe, Subramanian, Jabbour, & Chong, 2019; Zhou, Shu, Jiang, & Gao, 2019; Lasisi, Alola, Eluwole, Ozturen, & Alola, 2020). Nevertheless, the complexity of the contemporary and the unsustainable practices and misconduct in the organization's supply chains has continued to be a bottleneck in the business environment. In spite, some challenges in the organizations' supply chain, certain innovations, and behavioral practices especially

that are capable of mitigating environmental hazards have proven to be important in business environments. For instance, the adoption of contemporary and innovatively low-carbon organizational practices has further underpinned the conceptualization of green human resource management (GHRM).

However, economic activities that have been contributed to the tourism industry which has consistently remained one of the largest and fastest-growing industries and a major contributor to the global economies have not been without an endangering effect on the natural and the ecosystem (Alola, 2019a; Alola, Eluwole, Alola, Lasisi, & Avcı, 2019; Alola, Yalçiner, Alola, & Saint Akadiri, 2019; Alola, Olugbade, Avci, & Öztüren, 2019; Balsalobre-Lorente, Driha, Bekun, & Adedoyin, 2020; Trang, Lee, & Han, 2019; Wu & Geng, 2019). Nevertheless, the organizations and economies drive toward becoming a leading competitor has not gone without the resulting consequence of climate delegation. Recently, precisely in July 2019, three countries from the same geographical region (India, Nepal, and Bangladesh) were heavily flooded, and the cause of the environmental disaster was believed to be climate change-induced. Speaking at the G20 meeting which took place in Japan in June 2019, the United Nations minister of environment mentioned that the poor country will be drastically affected if urgent attention is not paid to climate change (G20 Japan, 2019). The prevailing evidence from the low-income countries suggests that the large population of the poor inhabitants is living in a significantly high risk of environmental and global warming hazards (Adedoyin, Gumede, Bekun, Etokakpan, & Balsalobre-Lorente, 2020; Buckley, 2012; Hoogendoorn & Fitchett, 2018). Reflecting from the report of the Intergovernmental Panel on Climate Change (2014), Alola (2019b) posits that carbon emission is a serious threat to the world ecosystem and business environments, thus suggesting the adoption of environmental friendlier practices by hotel and hospitality industries. This is because the certain activities and facilities in the hotel buildings are believed to release carbon emission (CO_2) to the environment to the tune of about 160 to 200 kg per year of a square meter room (Mbasera, Du Plessis, Saayman, & Kruger, 2016). Thus, the continued increase in energy demand by hotels calls for greening hotel training, especially in tourist destinations such as the Middle East and especially in Turkey.

In specific, the environmental pollution arising from the CO_2 emissions in the Middle East countries that include the Republic of Turkey reportedly have the highest growth rate of 2.9% between 2007 and 2017. To this effect, scholars have not only been curious to investigating the carbon emission mitigation mechanism that is associated with the hotel industry (Chen, 2019), but have further focused on hotels' green training (Kuo, Cheng, Chang, & Hu, 2018; Pham, Tučková, & Jabbour, 2019; Pham, Tučková, & Phan, 2019; Zientara & Zamojska, 2018) and environmental sustainability (Zolfani, Pourhossein, Yazdani, & Zavadskas, 2018; Yusoff, Nejati, Kee, & Amran, 2018; Kim, Kim, Choi, & Phetvaroon, 2019; Lasisi, Ozturen, Eluwole, & Avci, 2020). In this regard, and for decades, several environmental initiatives and environmental guidelines have been implemented by different industries. One of such guidelines is from the International Hotel Environmental Initiative, International

Hotel and Restaurant Association (Boiral, 2009). To this effect, employee-training event in the hotel industries is increasingly seen as a crucial factor toward the realization of green and cleaner environments (Bohdanowicz, 2005).

In the case of Turkey, limited research exists in relation to the hotel industry, especially regarding green or environmental training programs and environmental sustainability. For instance, the early work of Demirer, Uludag-Demirer, and Arikan (2003) opined the importance of preventive environmental management training across municipalities. In a subsequent study, Erdogan and Tosun (2009) noted the relevance of environmental training programs for managers, employees, and other stakeholders, especially in hotel management. Through related and much recent studies by Gürlek and Tuna (2018) on the hotel employees' green organizational culture (GOC) in Turkey, the findings suggest that GOC indirectly predicts competitive advantage. This suggests an increasing awareness of Turkish hotel management to green employee training and adoption of practices that further enhances environmental sustainability. Additionally, it further supports the argument that natural connectedness is a notable threat to the solutions of environmental problems (Wang et al., 2016), thus affirming the strategic role of organizations in achieving environmental sustainability.

Considering the above motivations, this research focuses on the greening environment as a contributing factor to environmental sustainability from the perspective of the employees. Therefore, the outlined novelty of the current study is aimed at achieving significant objectives in the following perspectives:

1. Over the years, research on green training has focused on human resources' (HRs') ability to check employee's eco-friendly behavior (Kim et al., 2019; Pham, Thanh, Tučková, & Thuy, 2019) and customer's eco-friendly attitude and willingness to pay (Baker, Davis, & Weaver, 2014) However, studies have neglected the effectual relationship between perceived employee behavioral control and employee organizational citizenship behavior and employee environmental commitment. To this effect, this study investigates the effect of green training on employee organizational citizenship behavior and environmental commitment.

2. In line with the existing literature (Erdogan & Baris, 2007; Rahman & Reynolds, 2019), this study tests the validity of the model employed for the green hotels in Istanbul.

3. Perceived organizational support is likely to be inactive when the organizational support is weak. Therefore, employee perceived behavioral control (PBC) is necessary to support green training in actualizing environmental performance and organizational citizenship behavior. Several researchers have investigated the relationship between organizational supports as a moderating variable in HR practices. For instance, Aktar and Pangil (2017) used the perceived organizational support whereas Shen et al. (2014) and Hur, Shin, Rhee, and Kim (2017) employed the role of work engagement. Therefore, this study will investigate the mediating effect of employee PBC on the relationship of green training through employee citizenship behavior and environmental commitment.

The following are the research questions intended to be answered by the study: (a) To what extend does green training help in environmental sustainability? (b) How does green training help the hotel industry? (c) Is there any effect of graining training on employee's behavior? In light of the objective, the research questions and the hypotheses, a study concept that seemingly drives down the narrative is further illustrated in Figure 1.

The rest of the study are arranged in different sections. The first one is on the theoretical framework for the study. The second stage contains the literature review with hypothesis development. The third stage is the section that describe methodology, and the fourth stage is the analysis of the data. This is followed by the discussion of the result in the fifth part, and the final section includes the implications and the conclusions.

1.1 | Theoretical framework

The theory of planned behavior (TPB; Ajzen, 1985) dominated the behavior research for past decades. According to Noar and Zimmerman (2005), studies have provided a cross-sectional perspective to test TPB and behavior. Also, the study of Ajzen (1991) opined that a behavioral intention often leads to actual intention. The theory (TPB) posited that the more opportunity and resources individuals think they possess, the greater the PBC, where individual behavior is determined by an accord factor (Han, 2015). In specific, the TPB explains behavior as being controlled by intention and perceived control which leads to actual behavior (Chan, Hon, Chan, & Okumus, 2014), such that might be difficult or easy to implement. PBC is an effect of motivational implications of behavior through intentions. This is because the attitude of people increases when they perceived they have greater control over behavior. On the other hand, behavior becomes low even with a favorable attitude but limited control.

The TPB has received attention from several scholars in predicting behavior. Several studies including Han (2015) and Hsu and Huang (2012) have applied the conceptual model and found a supporting argument for the model. Also, Yarimoglu and Gunay (2020) applied the TPB on customers intention to visit green hotels in Izmir and found a positive correction between attitude and intention to visit. By applying the TPB in a diverse field, Hsu and Huang (2012) linked the theory to the motivation of tourists to visit tourist destinations.

In the same line, Goh, Ritchie, and Wang (2017) also applied the TPB to check tourist behavior in Blue Mountains Natural Park in Australia. Applying TPB in destination choices (Lam & Hsu, 2006) and for international traveling (Lam & Hsu, 2004) have since buttressed the significance of the theory. Recently, in the hospitality industry, Kim and Han (2010), Han (2015), and Chan et al. (2014) gave their contribution to TPB and other related variables. Studies have also noted that frequent performance of a particular behavior can make such a behavior an attitude. For instance, Chan and Hawkins (2010) emphasized that the practice of putting off the light when leaving a room becomes a habit or attitude when it is frequently practiced.

2 | LITERATURE REVIEW

2.1 | Relationship between green training and PBC

Adopting the TPB, first, the theory entails capturing determinates of behavior that strengthens the intent of a person and the feasibility for the persons to act according to their behavior (Ajzen & Fishbein, 1980). Planned behavior theory states that behavior is connected to intention in line with the individual capacity to control one's action. Furthermore, if a person behaves in a certain way, the behavior is determined by an intent (Ru, Wang, & Yan, 2018). The TPB stipulates that behaviors are the results of events that have happened. Apart from the influence of social pressure, employees still have the capabilities and opportunities to be influenced by green training. Researchers classify GHRM into three components: green training, green performance, and green employee involvement (Masri & Jaaron, 2017; Pinzone, Lettieri, & Masella, 2015). Thus, green training affects PBC. The PBC entails the perception of erasing or the difficulty in performing in a certain way (Ajzen, 1991). PBC is an additional construct to the theory of reasoned action (Azjen & Fishbein, 1980), reflecting the individual performance over certain cases. The TPB relates to the distinctive measurement of resources in diverse ways. Employees who have undergone green training will perceive a level of control in behaviors.

As noted previously, perceived organizational support is potentially inactive when the organizational support is weak. Therefore, employee PBC is necessary to support green training in actualizing environmental performance and organizational citizenship behavior. The relationship
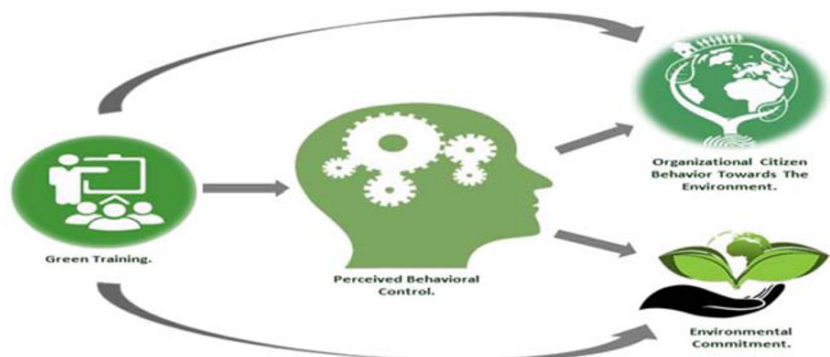
FIGURE 1 The study conceptual description (source: authors' computation) [Colour figure can be viewed at wileyonlinelibrary.com]

between organizational supports as a moderating variable in HR practices and perceived organizational support (Aktar & Pangil, 2017) or work engagement (Hur et al., 2017; Shen et al., 2014) has been investigated. Hence, the current study posited that green training affects PBC by considering the hypothesis as follows:

H1. Green training is positively associated with PBC.

2.2 | The interaction of green training and organizational citizenship behavior

Adopting the TPB, employees react in favor of what they received from the organization. An employee that receives training from the organization is motivated to reciprocate toward the environment and the organization in a positive way (Jiang, Lepak, Han, Hong, Kim & Winkler, 2012). Additionally, green training that positively enhances employee performance is a planned and well-thought-out attempt to increase expertise and attitudes via knowledge acquisition to accomplish a better performance in a given task (Garavan, Costine, & Heraty, 1995). This training directly and indirectly affects employee's behavior. On the other hand, organizational citizenship behavior toward the environment (OCBE), which is not among the employees' job requirements, is a voluntary initiative by an employee to give back to the organization, thus improving the environment (Bornstein, Jager, & Putnick, 2013; Pham, Phan, Tučková, Vo, & Nguyen, 2018). Additionally, Raineri and Paillé (2016) attributed employee attachment to both the organization and environment to an internal motivation. Hence, organizational citizenship behavior toward the environment encompasses the written job description that an employee contributes toward the organization. OCB increases employee contribution to the organization and the society, making it more effective. In addition, green training with OCB helps in environmental commitment (Lamm, Tosti-Kharas, & Williams, 2013). In the recent study of 220 hotel employees, Pham et al. (2019) found a positive relationship between green training and OCBE. The implication is that employees are more attached to the environment and they show a positive relationship with the organization when trained. Therefore, the study posited the hypothesis, thus as follows:

H2. Green training is positively associated with organizational citizenship behavior.

2.3 | Relationship between green training and environmental commitment

In the study of Pérez-López, Moreno-Romero, and Barkemeyer (2015), it shows that environmental management system has an effect on employee green attitudes toward the environment. Ren, Tang, and Jackson (2018) opined that green training may boost environmental commitment, giving the employee a sense of attachment to the environment and enhances employee behavioral response to the organization citizenship behavior (Katou, 2015). Green training,

sustainable and eco-friendly environment as the name continuously evolves, is gaining momentum in the hospitlity industry. According to Jones, Hillier, and Comfort (2014), the quest to make the hotel industry greener is boosting and meeting the demand of hotel guests and to increase positive environmental commitment. Borrowing from the study of Luu (2018), employee internal motivation leads to environmental commitment. In addition, Pham et al. (2019) argued that green training influences employee involvement that stimulates employee commitment. According to the study of Govindarajulu and Daily (2004), green training helps employees receive the training that enhances environment sustainability and increases environmental knowledge and skills. Specifically, Macduffie (1995) argued that green reward policy which discretionary efforts such as the green practices enhances employees' commitment toward improving the work environment. The argument implies that green training potentially has an effect on employee motivation, thus triggering environmental commitment as indicated by the following hypothesis:

H3. Green training is positively related with environmental commitment.

2.4 | Relationship between PBC and organizational citizenship behavior toward the environment

Over time, studies have consistently associated the link between perceived behavior and behavioral intention (Lizin, Van Dael, & Van Passel, 2017; Ru et al., 2018). Although, Ru et al. (2018) opined the role of some uncontrollable external factors such as time and cost. Webb, Soutar, Mazzarol, and Saldaris (2013) suggested that individuals with strong control over intention have a stronger influence over behavior. Many studies have detailed the conceptualization of OCBE as a benefit to both organization and employee (Clark, Zickar, & Jex, 2014; Lemoine, Parsons, & Kansara, 2015; Organ, 1997; Senior & Swailes, 2010). The OCBE was initially conceptualized by Organ (1997), consisting of five dimensions (altruism, courtesy, civic duty, sportsmanship, and conscientiousness). Employees exhibiting OCB are in high demand and are often sought by organizations (Kazemipour, Mohamad Amin, & Pourseidi, 2012; O'Grady, 2018; Ukeje, Lasisi, Eluwole, Titov, & Ozturen, 2020). Also, OCB relationship with several variables, for instance, OCB with the organizational outcome (Swaminathan & Jawahar, 2013), work overload, and employee performance (Kissi, Asare, Agyekum, Yamoah Agyemang, & Labaran, 2019), have called for several more studies. Employee commitment to the environment (Luu, 2018; Luu, 2019; Pham et al., 2019) builds employees' behavior toward the environment that can be utilized to implement sustainable environment (Tang, Chen, Jiang, Paille, & Jia, 2018). This aspect of the organizations promotes the employee's attitude toward the environment and organization values, and to contribute to organizational goals. In the same line, Raineri and Paillé (2016) suggest that the employee's determination to work affectionately for the environment is subject to their perceived relationship in the organization. Considering that PBC ranks employee's confidence in exercising control over both the internal and external

forces in an organization and the environment, it suggests that there is an environmental effect of the impact of perceived behavior control on organizational citizenship behavior. In this case, the proposed hypotheses is as follows:

H4. PBC is positively related with OCBE.

2.5 | Relationship between PBC and environmental commitment

Similarly, environmental psychologists have employed several approaches to better understand the factors that influence proenvironmental behavior (Steg & Vlek, 2009; Yu, Lin, Kao, & Yu, 2019). One of such factor is the environmental commitment. Environmental commitment is a personal commitment to the environment in order to minimize waste, using the environmentally friendly product and willingness to adhere to governmental policies concerning the environment (Yu et al., 2019). Environmental commitment significantly enhances individual attitude toward the environment, thus improving environmental friendliness (Ajzen, 2002). By using a different approach, El-Kassar and Singh (2019) examined the role of management commitment and HR practices among 215 employees in the Middle East and North Africa and Gulf-Cooperation Countries. The study found that management and (green) HR practices moderate both green innovation and organization performance. On the other hand, Singh, Del Giudice, Chierici, and Graziano (2020) found both GHRM and transformational leadership as significant moderators of green innovation and environmental performance. More so, Singh, Chen, Del Giudice, and El-Kassar (2019) employed the resource-based view and dynamic capabilities to further present that environmental performance, environmental training, and competitive advantage are influenced by environmental ethics. Thus, the following hypothesis proposed that PBC has an effect on the way employees behave toward the environment:

H5. PBC is positively related with environmental commitment.

2.6 | Mediating impact of perceived behavior control

Drawing from the TPB, the PBC is the individual's judgment on the decision either to perform a given task or not. Thus, it is proposed to have a significant influence on the behavioral outcome. People are motivated to perform an expected task; therefore, the influence of an individual's attitude toward the organization and the environment is likely to be motivated by green training. According to Boiral (2009), the development of preventive approaches in the 1990s made the human behavior a significant factor in the reduction of pollution. Trained employees on environmental concern issues exhibit learned knowledge by making the employees to be committed to the environment (Paillé, Chen, Boiral, & Jin, 2014).

Illustrating with the TPB, it posited that positive attitude and subjective norms toward intention do not necessitate an action, but control is needed. Environmental commitment, therefore, is a framework of the mind that signifies a sense of attachment and commitment to the environment (Meyer & Herscovitch, 2001). With the growing concern on climate change and environmental issues, green training may increase employee PBC, making them more environmentally friendly and committed (Raineri & Paillé, 2016). Similarly, several authors have demonstrated that employees that are environmentally committed also have a likelihood of displaying OCBE (Alt & Spitzeck, 2016; Paillé & Mejía-Morelos, 2014; Swaminathan & Jawahar, 2013). OCBE (which is not part of employee's role description) contributes positively to both the organization and the environment (Swaminathan & Jawahar, 2013). Therefore, the proposed hypothesis is that PBC would mediate the relationship between green training, organizational citizenship behavioral control, and environmental control. Thus, the following hypotheses:

H6. PBC mediates the relationship between green training and organizational citizen behavior toward the environment.

H7. PBC mediates the relationship between green training and environmental commitment.

The above-described hypotheses (H1 to H7) are clearly illustrated in Figure 2.

3 | METHODOLOGY

3.1 | Sample and procedure

The study employed a cross-sectional method of data collection from employees in four- and five-star hotels in Istanbul for 2 months from July to August 2019. Before the data collection, hotel managers in different departments and their supervisors were asked questions in regard to whether the hotel is practicing green training. A few of the other questions include what is the hotel's attitude toward environmental sustainability and how friendly is the hotel practices toward the environment, if they admitted to adopting a range of environmental policies. Subsequently, the participants were informed about the purpose of the study, and the date for the distribution of
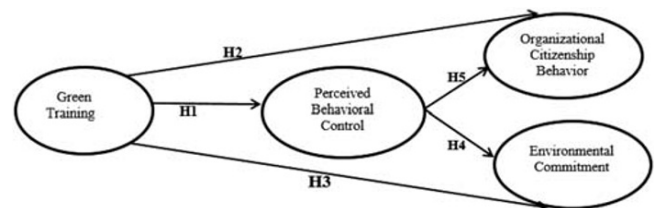
FIGURE 2 The research model

the questionnaire was agreed upon. However, 30 questionnaires were distributed for a pilot test (Alola, Avci, & Ozturen, 2018; Alola, Olugbade, et al., 2019; Isaac & Michael, 1995). The reason for this is to ensure that the questions are readable and comprehensible. The employees filled the pilot questionnaires, and they acknowledged that there were no problems with the questions. There was no need for questionnaire modification after the pilot test.

By using the nonprobability sampling method, researchers used judgmental sampling techniques. This is the most appropriate approach for data collection, given that the study needs to investigate a subset of the population (Bornstein et al., 2013). To this effect, 350 questionnaires were distributed to 14 hotels in Istanbul that agreed to participate in the survey. The questionnaires were distributed to participants through the managers and supervisors in a sealed envelope and were assured of the confidentiality of the study. The respondents filed the questionnaires during work time, sealed in an envelope and submitted through an internal mail system; also, the envelopes were anonymous, and this is the first way to minimize the effect of common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, each survey had a cover page, assuring the respondents the confidentiality of their answers (Talebzadeh & Karatepe, 2019).

After removing the ones with errors and the unuseable ones, 306 questionnaires were coded for the study, and it yielded a usable responds rate of 87.4%. To assure that the sample size is adequate, the study conducted the test of Kaiser–Meyer–Olkin (KMO) because no data were available for the survey population in accordance with hotels that are practicing green training. The KMO is the measure of sampling adequacy (Alola & Alola, 2018; Cerny & Kaiser, 1977; Stewart, 1981). The minimum acceptable value of KMO is 0.6; the present study presents a significant level of KMO at 0.77. In addition, the Bartlett test of sphericity was significant at p1/4 =.000. This shows that the sample used for this study is adequate.

To measure the variables, several scales were adopted from different research. For the study on green training, six items were adopted from the study of Pham et al. (2019); examples of the questions include "providing employee with adequate training in environmental issues," "employees are offered training opportunities on environmental issues," and "frequent environmental training are provided for the employee." In the case of the OCB toward the environment, seven items were adopted from the work of Pham et al. (2019), for instance, "I offer new practices toward improving the hotel's environmental performance," "colleagues are encouraged to consciously imbibe environmental behaviors," and "hotel's environmental efforts are acquainted with." PBC was adopted from the study of Cordano and Frieze (2000), measured with three items: "I decide whether or not I should apply more environmental initiatives," "the needed resources for more environmental initiatives at the facility can be obtained," and "efforts to implement environmental initiatives are supported by facility management." Eight items were adopted from the study of Raineri and Paillé (2016) to measure environmental commitment. Examples of the items include "the

hotel's environmental concern is my concern," "I hurts my conscious if I do not support the environmental efforts of my hotel," and "my hotel's environmental concern is important to me." All the items were rated on the 5-point-Likert Scale from 1 (*strongly agreed*) to 5 (*strongly disagreed*). Because the questionnaires were prepared in English, a back-translation was subsequently employed. This implies that the original questions were prepared in English, translated to Turkish language, then to English, and finally back to Turkish language. This was followed by an established method of McGorry (2000).

4 | ANALYSIS AND RESULT

4.1 | Results

The details of our study's participants (about demography) are reported in Table 1. Specifically, the participants were almost evenly distributed in terms of their age group. About 63.8% of the employees were less than 31 years old.

The remaining 36.2% were aged between 31 and 40 years. In terms of the position held, 216 participants were the lower-level employees and the rest were the managers (intermediate and senior managers), 29.4%. For organizational tenure, more than half of the participants have worked less than 1 year (187 participants), 85 represent the participants that have worked between 1 and 5 years, and the remaining have either 6–10 years (25 participants) or 11–15 years (nine participants), respectively. Demographic variable table is shown in Table 1.

4.2 | Psychometric of the data

To establish convergent and discriminant validity of the dataset, a confirmatory factor analysis (CFA) was carried-out by using AMOS 20.0. The *t*-statistics of all loaded factors are greater than 1.96, thus confirming convergent validity. Standardized loadings, composite reliability score, and average variance extracted (AVE) for each construct were within the acceptable values of 0.7 and 0.5, respectively (see Table 2). The bold-faced figures on the diagonal represent the square root of AVE, which is greater than the interconstruct correlation, thus confirming the discriminant validity of the data (Anderson & Gerbing, 1988; Fornell & Larcker, 1981; Lasisi, Eluwole, Ozturen, & Avci, 2019). Summarily, all initial data checks provided good evidence of a significant relationship among the study variables. Specifically, each dimension is significantly related except for the relationship between perceived organizational control and environmental commitment that failed to correlate. This provided support for further investigation of the study.

Abbreviations: AVE, average variance extracted; CFI, comparative fit index; CR, composite reliability; df, degrees of freedom; GFI, goodness of fit index; IFI, incremental fit index, PNFI, parsimony normed fit index; RMSEA, root-mean-square error of approximation.

TABLE 1 Respondent's profile (*n* = 306)

	Frequency	%
Age (years)		
25 and younger	101	33.0
26–30	107	35.0
31–35	50	16.3
36–40	48	15.7
Gender		
Male	202	66.0
Female	104	34.0
Education		
Primary	20	6.5
High school	69	22.5
Associate	114	37.3
Undergraduate	103	33.7
Marital status		
Single	172	56.2
Married	134	43.8
Department		
F&B	111	36.3
Front office	65	21.2
House keeping	63	20.6
Sales and marketing	19	6.2
Human resources	29	9.5
Security	19	6.2
Position		
Employee	216	70.6
Intermediate manager	57	18.6
Senior manager	33	10.8
Organizational tenure		
Less than a year	187	61.1
1–5 years	85	27.8
6–10 years	25	8.2
11–15 years	9	2.9
Sectorial tenure		
Less than a year	106	23.5
1–5 years	108	43.1
6–10 years	50	14.1
11–15 years	35	4.2
16–20 years	7	13.2
Hotel star rating		
Four-star	173	56.5
Five-star	133	43.5

Abbreviation: F&B, food and beverage.

4.3 | Hypothesis testing

Before proceeding with the actual hypotheses testing of the structural model, we checked for the normality of the data via skewness and kurtosis. The skewness and kurtosis values for green training, organizational citizenship behavior, perceived control, and environmental commitment were between −1.22 to 0.60 and −1.25 to 1.51, respectively. Desirably, these are below the acceptable level of 3.0 (Kline, 2011), thereby demonstrating empirically that the data is normally distributed. In addition, George and Mallery (2010) suggested a range of skewness and kurtosis values to be +2 to −2. Hence, the result shows the normality evidence of the data, thereby affirming the assumption of the usage of CFA for the analysis of the sample (Hair, Black, & Babin, 2010).

Specifically, as observed in Table 3, green training is positively related to perceived control (H1, β = 0.42, *t* = 32.33). Therefore, H1 is accepted. In addition, green training is positively related to organizational behavior (H2, β = 0.39, *t* = 34.96) and positively related to environmental commitment (H3, β = 0.28, *t* = 28.40). Hence, H2 and H3 were supported. Additionally, PBC is positively related to environmental commitment (H4, β = 0.34, *t* = 69.09). H4 was supported. Conversely, we failed to accept in H5 that PBC is positively related to organizational behavior (H5, β = 0.078).

4.4 | Structural equation model

We analyzed the hypotheses using the structural equation model, and the results were further presented in Figure 3. According, to the results obtained from CFA, eight items were below the threshold. One item was deleted from green training, one item from PBC, four items from organizational behavior, and two items from environmental commitment. The indicated results imply that the five-factor measurement model used for the data offers the acceptable fit (χ^2 = 638.995., degrees of freedom [df] = 243, χ^2/df = 2.63; goodness of fit index = 0.84, incremental fit index = 0.81, comparative fit index = 0.900; parsimony normed fit index = 0.80; root-mean-square error of approximation [RMSEA] = 0.070). The ratio of chi-square (χ^2) over the df is 2.63; this value is less than the cutoff criterion of 3, showing an acceptable fit (Alola et al., 2018; Fornell & Larcker, 1981). Moreover, the value of RMSEA is 0.070; it presents an acceptable fit because it is less than 0.08.

Additionally, the hypotheses were further tested; H1 proposed that green training is positively related to PBC. The result of the path coefficient (β = 0.17, *p* < 0.001) shows that H1 is significantly supporting. The result also shows that green training is positively related to organizational citizenship behavior and environmental commitment. Based on the result from the path coefficient, (β = 0.23, *p* < 0.001 and β = 0.20, *p* < 0.001), supporting H2 and H3, respectively. Also, the results found that PBC is positively related to OCBE and environmental commitment (β = 0.078, *p* < 0.001) and (β = 0.39, *p* < 0.001), respectively; therefore, H4 and H5 are supported.

Further, our result presents the mediating effects of PBC (see Table 4). The method of bootstrapping with 5,000 sample-size and a bias-correlated and accelerated confidence interval was employed to examine the indirect effect which should not include zero (Hayes &

TABLE 2 The confirmatory factor analysis: scale items and measurement properties

Construct and items	Standardized loadings	t values	AVE	CR
Green training			0.77	0.52
An adequate amount of training in environmental issues	0.862	Fixed		
Employees can have the chance to be trained on environmental issues	0.352	6.00		
Employees receive environmental training frequently at	0.819	15.16		
Employees use environmental training effectively at	0.536	9.44		
Employees have many opportunities to use environmental training	0.447	7.59		
There is adequate evaluation of employees' performance	0.452	7.71		
Organizational citizenship			0.79	0.55
I suggest new practices that could improve the hotel	0.776	5.05		
I encourage my colleagues to adopt more environmentally	0.402	3.94		
I stay informed of the hotel's environmental efforts	0.312	3.78		
I make suggestions about ways to protect the environment	0.718	5.03		
I volunteer for projects or activities that address the hotel	0.362	0.606		
I spontaneously give my time to help my colleagues	0.333	3.30		
I undertake environmental actions that contribute positively	0.372	Fixed		
Perceived Behavior			0.76	0.59
It is within my control whether or not I implement	0.362	Fixed		
I can obtain the resources needed to increase the number	0.641	3.66		
Facility management supports my efforts to implement	0.534	3.60		
Environmental commitment			0.85	0.50
I really care about the environmental concern of my hotel	0.677	10.29		
I would feel guilty about not supporting the environmental	0.321	5.39		
The environmental concern of my hotel means a lot to me	0.322	4.11		
I feel a sense of duty to support the environmental concern	0.703	10.62		
I feel as if my hotel environmental concerns are mine	0.632	9.69		
I feel personally attracted to the environmental concern of my hotel	0.794	11.71		
I feel obligation to support the environmental efforts of my hotel	0.760	11.32		
I strongly value the environmental efforts of my hotel	0.673	Fixed		

Note. Model fit statistics: χ^2 = 638.995, df = 243, χ^2/df = 2.63, GFI = 0.84, IFI = 0.81, CFI = 0.900, PNFI = 0.80, and RMSEA = 0.070. All loadings were significant.
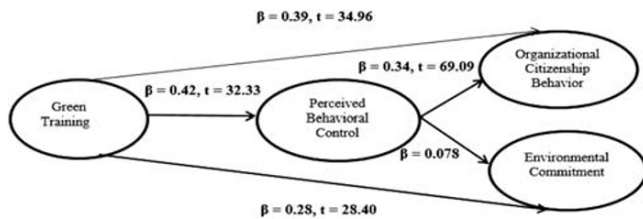
TABLE 3 The correlation of estimated variables

Correlation	1	2	3	4	5	6	7
Gender	-						
Organizational tenure	.404**	-					
Departmental tenure	.481**	.761**	-				
Green training	.489**	.488**	.569**	-			
Organizational behavior	.331**	.390**	.472**	.387**	-		
Perceived control	.306**	.255**	.300**	.419**	.078	-	
Environmental commitment	.135**	.233**	.359**	.281**	.113*	.342**	-

*p = 0.1.
**p = 0.01.

FIGURE 3 Result of structural model test

Scharkow, 2013). In essence, PBC fully mediates the linkage between green training and organizational citizenship behavior (indirect effect = −0.10, lower-level confidence interval [LLCI] = −0.18 and upper-level confidence interval [ULCI] = −0.01, *p* < 0.001). Also, the assumption that PBC will mediate the relationship between green training and environmental commitment was assessed (indirect effect = 0.51, LLCI = 0.04, and ULCI = 0.11, *p* < 0.001). Therefore, H6 and H7 were fully supported in Table 5.

5 | DISCUSSION OF THE STUDY

The study examined the effect of green training on environmental concern directly through perceived organizational control. According to Li, Liao, and Albitar (2020), as environmental concern is growing rapidly, protecting organization's environment is becoming a yardstick for competitive advantage. The findings indicate that green training positively impacts OCBE, EC and PBC (Pham et al., 2019; Pinzone, Guerci, Lettieri, & Huisingh, 2019). In achieving the research objectives, the study developed the model by bridging the gap in the literature (Pham, Tučková, and Jabbour (2019). Second, the study utilized the green training (Teixeira, Jabbour, de Sousa Jabbour,

Latan, & De Oliveira, 2016) and environmental commitment (Pham, Tučková, & Jabbour, 2019) to examine how Green Training (GT) will predict Environmental Commitment (EC) among employees behavior in the hotel industry through the mediating variable PBC. Also, green training is expected to affect OCBE through the mediating effect of PBC. Third, the TPB (Ajzen, 1985, 1991; Kim, Njite, & Hancer, 2013) was applied to explore the mediating effect of PBC on the construct. Based on the result obtained, green training positively impacts PBC, OCEB, and EC. Also, PBC partially mediates the relationship between green training and OCBE and fully mediates the relationship between green training and EC.

The positive influence of green training on environmental commitment is inconsistent with the study of Pham et al. (2019). In specific, Pham et al. (2019) found a positive relationship between green training and OCBE in hotel employees in Vietnam. GT plays a significant role in making the organization greener (Touboulic & Walker, 2015) and a source of competitive advantage. This evidence suggests that hotels should focus on training the employees on the importance and the relevance of greening the environment not only for the benefit of the environment, but for mankind. Interestingly, there was no relationship between PBC and OCBE. Although the PBC is the degree of confidence over internal and external forces in the organizational environment, the main reason behind engaging in organizational citizenship behavior is the social and cultural norms for commitment. Therefore, employees with high normative commitment are expected to have OCB (Cohen & Keren, 2008).

Furthermore, because OCB is a moral factor, PBC might not correlate with the variable. Also, the study of Senior and Swailes (2010) found a positive relationship between OCBE and the organizational outcomes. OCBE as conceptualized by Organ (1997), with several dimensions, has shown a positive correlation (O'Grady, 2018).

TABLE 4 Result of SEM hypotheses

Hypotheses Testing	Std.Est	SE	CR	p	Results
H1: Green training → PBC	0.528	0.174	3.038	0.001	Supported
H2: Green training → OCBE	1.368	0.233	5.877	0.002	Supported
H3: Green training → EC	0.564	0.203	2.834	0.001	Supported
H4: PBC → OCBE	0.623	0.078	7.945	0.001	Supported
H5: PBC → EC	0.966	0.392	2.468	0.014	Supported

Abbreviations: CR, critical ratio; EC, environmental commitment; OCBE, organizational citizenship behavioral environment; PBC, perceived behavioral control; SE, standard error; SEM, structural equation model; Std. Est, standardized estimate.

TABLE 5 Bias-corrected bootstrapped result

Hypothesized relationship	Indirect effect	SE	LLCI	ULCI
Green training ↔ perceived behavior control ↔ environmental commitment	−0.10	0.05	−0.18	−0.01
Green training ↔ perceived behavior control ↔ organizational behavior	0.51	0.04	0.04	0.11

Note. Bias-corrected bootstrapping analysis was conducted with 5,000 resampled size at a 95% confidence interval. The indirect effect was calculated using the unstandardized coefficient.
Abbreviations: LLCI, lower-level confidence interval; SE, standard error; ULCI, upper-level confidence interval.

Acquisition of training is the first step to environmental sustainability, which becomes a top priority for HR management. These studies contribute significantly to HR management, thus answering the first research question: to what extend do green training help in sustaining the environment? Employee green training will be of benefit to both the organization and to the environment by reducing the impact of human activities that directly or indirectly increases carbon emission (Alola, Bekun, & Sarkodie, 2019; Alola, Eluwole, et al., 2019; Alola, Yalçiner, et al., 2019).

Also, the study supports hypotheses H1, H2, and H3. This finding supports extant literature, for instance, the study of Pinzone et al. (2019) noted the role of green HRM toward sustainability using hospital managers. Our study is also consistent with the study of Kim et al. (2019). On hotel employees, this study shows the impact of HR management on employee's behavior toward the environment. Furthermore, our study found that the positive impact of green training on organizational citizenship behavior is in line with the studies of Pham, Tučková, and Jabbour (2019) and Ru et al. (2018). Additionally, the study supports H4 and H5 because it found that PBC has a positive effect on organizational citizenship behavior and environmental commitment. The proposed hypotheses that PBC will mediate between green training and OCBE and EC was supported (H6 and H7). This finding is supported by the study of Shabbir, Shariff, and Shahzad (2016). PBC is the perception that an employee carries out a given task in a certain way as to have control over one's behavior. The control belief comes through training, previous experiences, or information. That is to say, the more employees are trained, the more committed they are to both the society and the environment.

6 | CONCLUSION

The theory underpinning the formulation (model) of this study is the TPB (Ajzen, 1985). In a related investigation, Chan et al. (2014) pointed out that behavior is a function of PBC and that extends to actual behavior. Although the concepts from the aforementioned studies were implemented in the current study, this study found that a significant relationship between green training, organizational citizenship behavior, and environmental commitment was examined through the mediating effort of PBC. By using the employees of the hotel industry especially the green training programs of the HR department of the selected hotels in Turkey, the current study examined the aforementioned relationship by using the TPB theory. In the light of this evidence, there are relevant implications for theory, practice, and policy that could be associated with the study.

6.1 | Theoretical implications

The TPB (Ajzen, 1985) was used to formulate the model for the study. By using the theory, an attempt was made to investigate the nexus of green training, organizational citizenship behavior, and environmental commitment through the mediating effort of PBC. The study of Chan et al. (2014) pointed out that behavior is a function of PBC that

extends to actual behavior. In essence, people tend to have high control over their behavior whenever they perceived control over such behavior and it reduces whenever there is limited control. The application of TPB to the current study is in line with several scholars (Goh et al., 2017; Han, 2015; Hsu & Huang, 2012), buttressing the significance of the theory. Recently, in the hospitality industry, Han and Kim (2010), Han, Hsu, and Sheu (2010), Han (2015), and Chan et al. (2014) gave their contribution of TPB and other related variables, heightening the need to study TPB on behavior and outcome. Scholars reviewed that frequent performance of a particular behavior actually makes that behavior an often occurrence. For instance, Chan and Hawkins (2010) noted that putting off the light when leaving a room becomes a habit if is frequently practiced.

6.2 | Practical implications

This study further demonstrates that environmental sustainability is vital to every organization. It emphasizes that the hotels need green training to keep a healthy and sustained environment. According to the findings of Doppelt (2017), the hotel that is perceived to have concern for the environment will attract more customers in the nearest future. Having employees' minds tailored toward environmental sustainability is beneficial to the organization. For instance, disposing of waste at the right place, turning off the light when necessary, using recyclable cups, reduction in the production of unnecessary waste, and good usage of water contribute to the organization's finance. Once hotels understand the importance of environmental sustainability, the conscious effort to the reduction of CO_2 emission keeps them ahead of their competitors (Gürlek & Tuna, 2018). For hotels to do this, enacting a clear and single policy pointing toward environmental sustainability is important. In addition, green training should be part of "on the work" training; therefore, HR managers should see to it that employees are frequently trained to keep minding the importance of environmental sustainability. Moreover, the study findings suggest that green training has a positive effect on environmental commitment; therefore, policies that will be channeled into supporting employees in environmental concerns should be enacted (Cerchione & Bansal, 2020).

6.3 | Limitation and future research

This study presents a significant contribution to existing literature; despite the contributions made, there are still some limitations which should not be ignored. The major limitations of the cross-sectional method employed in data collections are prone to bias; although the bias was controlled, further study should employ the use of the longitudinal method in data collection. The effect of power distance and uncertain avoidance inherent in Turkish culture may have an effect on the study findings; therefore, generalizing this study should be done with caution. Further study could consider collecting data from countries where the power distance is not high to compare the findings. Data used for the study was collected in four- and five-star hotels in Istanbul; further study could consider collecting data only in

green hotels. The respondent's organizational tenure might also be seen as a limitation, most of the employees have worked less than 1 year, and further study should consider using the employees that have worked for the hotel at least 2 years and above.

Additionally, our study was not in line with the proposed hypothesized relationship that PBC will be positively related to organizational behavior. A further study should be conducted in another region and to test perceived behavioral control as an outcome variable.

CONFLICTS OF INTEREST

The author wishes to disclose here that there are no potential conflicts of interest at any level of this study.

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