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The effects of restaurant green practices on customer intention to purchase eco-friendly products: Evidence from Vietnam*

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Abstract

This research aims to identify how green practices affect customer intention to purchase green products via customers' emotional attachment. Using the PLS-SEM to analyze 358 restaurant guests to find customer intention to purchase green products is a fundamental constituent of a restaurant's success. The results reveal that the application of recycling and composting, energy and water management activities have a positive significant impact on customer intention to purchase green products and pro-environmental emotional attachment, and the application of organic food-green products and materials have a significant impact on emotional attachment, but not trigger on customer intention to purchase green products. Meanwhile, the application of eco-friendly supplies did not affect emotional attachment and customer intention to purchase. Pro-environmental emotional attachment is a key mediator of the customer intention model. The results provided both knowledge and theory of green practices by adding customers' emotional attachment into the theory of planned behavior to understand customer behavior toward green restaurants. It proposes managerial recommendations and building strategies for the long term to increase customer intention to purchase green products in the restaurant industry.

Keywords: green practices, green restaurants, emotional attachment

JEL classification: Z3, L8, L83

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1. Introduction

Tourism industry has become the fastest growth and diversification to meet customers' demand. Nevertheless, the influence of the fast growth lead to unsustainable consumption practices, this action have endangered ecosystems and lack of the resources (i.e., food, water, energy etc.) (Trang et al., 2019). It also leads to increase global issues (i.e., climate change, global warming, pollution). As a result, tourism sectors (accommodation, restaurants etc.,) focus on developing services/products and facilities and management processes with the aim of minimizing negative environmental effects. Monthly average income per capita in HCM City in Vietnam from 2010 to 2021 were ranged from 2.74 to 6.76 million Vietnamese dong per month (Statista, 2023). Thank to growing personal incomes and increase social awareness. As a result, green consumption begins to gain traction among customers in developing economies, green practices are applied and promoted widely in the tourism industry (Trang et al., 2019). Following the National Green Growth Strategy 2011-2020 with a Vision to 2050, the Vietnamese government executes a variety of programs that aims to green existing economic institutions and activities, the government encourage tourism industry apply new methods to develop sustainable tourism. Therefore, Vietnam's government promotes eco-friendly methods and build a program that calls Green Lotus to assess to development in tourism industry to protect the environment and natural resources. Vietnamese enterprises in tourism industry have invested heavily in new technology and equipment according to global standards as well as towards green initiatives and clean production requirements (Minister of Industry and Trade of Vietnam, 2021). The restaurant sector can develop sustainability, when they can benefit from applying environmentally friendly practices (hereafters referred to as green practices, going green, or green initiatives), the restaurants implement green initiatives, so it increases costs to invest on new methods of green practices in the first stage, however, it also saves in operating costs. Moreover, the restaurants are limited knowledge on customer behaviour whether the customers accept the prices when the restaurants increase prices, willingness to pay more for applying green practices, it seems to lack a study (DiPietro et al., 2013-a; Dutta et al., 2008) to identify what factors of green practices elicit customer intention to purchase green products in a green restaurant in HCM City in Vietnam context. Now a growing numbers of Vietnamese are concerned about the environment and are eager to engage in green practices. Thus, lessening restaurant operations' environmental impact while still serving customer needs becomes key drivers for going green of the restaurants to protect customers health and environment. Many studies present that when organizations apply green practices that reduce costs and increase financial savings, fulfill interests of stakeholders and organizational governance (Namkung and Jang, 2013; Park et al., 2020). With a greater emphasis on sustainability, restaurant may attract more visitors who are willingness to pay for services that align with their values and beliefs (Kang et al., 2012; Namkung and Jang, 2013; Schubert et al., 2010).

However, the topic has not been widely studied, with only a handful of research that examines dining intention and the importance of green practices in food and beverage industry context available, some studies just focus on the concept of lodging, retail industry, and brand value of organizations (Jang et al., 2015; Kim and Hall, 2020; Moise and Gil-saura, 2020; Shapoval et al., 2018), not much research examining factors affecting customers' willingness to pay when using green products, previous studies just build their conceptual framework health consciousness, environmental consciousness, or brand consciousness (Namkung and Jang, 2017; Zhang and Kim, 2013). In addition, they did not mention restaurant customers' emotional response to these practices, which is considered to be an important factor belonging to an individual's psychology (Jang et al., 2015), a deeper examination of the impacts of each green practice on behavioral intention like customers' willingness to pay more for green products is necessary (Yu et al., 2017). DiPietro et al. (2013-a) also explored the consumers' perceptions of green practices in quick service restaurants and intent to consume green products more often, they suggested that further research need to identify green practices to determine behaviour of guests and to find out the influence of which factors of green practices affect direct customer intention to purchase eco-friendly products via customers'emotional attachment to the restaurant. Similarly, Jeong and Jang (2010) explored the effects of restaurant green practices on a green image and customers' behavioural intentions, the results confirmed the mediating variable of green ecological image restaurants lead to customers' behaviour intentions to purchase green products based on items recyclable take-out containers, recycling waste, and energy efficient lighting are the most significant. Moreover, Jang et al. (2015) also identified elements of green practices affect direct and indirect green store loyalty and green product loyalty through consumers' emotional attachment. As Schubert et al. (2010) stated that still lacks of research to explore the relationship between use of green practices and consumer attitudes and understand the behaviour of customer Do the guests show their intention to purchase more eco-friendly products/services when the restaurants apply green practices?. In recent study, Mai et al. (2023) have explored green attributes and three mediation of customer behavour to understand how the customer willingness to consume restaurants" services with 1095 samples. The results found that going green have a positive direct effect on satisfaction, and attitudes, but green practices, except of eco-friendliness did not have an effect on customers' emotional attachment. Moreover, the results proved the customers' satisfaction, attitudes, and emotional attachment were mediation netween going green and customers' willingness to consume, however, the weak point of this study, they have not found an insight of customer emotion and attachment to increase customer intention. Therefore, based on the previous studies, their results are a spring board for our research in restaurant industry to continue develop and confirm theoretical and practical importance in Vietnam context. To fill this research gap, the research objectives of this study attempt to find evidence that factors of green practices have influenced on customer

intention to purchase eco-friendly products via customers' emotional attachment, and explore the important relationships among these factors. Therefore, this study attempts to answer the research question (RQ) as below:

RQ1:To what extent do green practices in restaurants affect customer intention to purchase green products?

RQ2: To what extent do green practices in restaurants affect customer proenvironmental emotional attachment to green products?

RQ3: Do customer pro-environmental emotional attachment elicit customer intention to purchase more green products in green practice restaurants?

RQ4: To what extent do customer pro-environmental emotional attachment mediate the relationship between green practices and customer intention to purchase more green products?

The purpose of this study to identify how green practices in restaurants affect customer intention to purchase eco-friendly products via the role of mediating variable of customer emotional attachment. Because it lacks research on green practices in restaurant industry and has not yet conducted an empirical study in HCM City in Vietnam. Moreover, the aim of this study to identify the customer behavour through to explore customer intention to purchase more green products based on what factors. Based on the previous studies (Jang et al., 2015; Schubert et al., 2010; Jeong and Jang, 2010) their results were in inconclusive empirical findings and they just build the measurement items and have not conducted an empirical study (DiPietro et al., 2013-a; Ray Wang, 2012), due to the limitation of the research to identify a conceptual framework of green practices, customer intention to purchase green products, customer pro-environmental emotional attachment factor to understand an insight into customer intention in decisionmaking to purchase or not, as well as this study extended the theory of planned behaviour (Ajzen, 1985; DiPietro et al., 2013-b). As DiPietro et al. (2013-a) just explored the consumer's perspectives on green practices to understand customer intention to purchase green products, and these scholars just developed measurement scales of these factors (DiPietro et al., 2013-a; Ray Wang, 2012; Jang et al., 2015; Schubert et al., 2010; Jeong and Jang, 2010), so it needs to conduct an empirical study in the restaurant context. Therefore, this study attempted to fill this research gap and explore the relationships among green practices and customer intention to purchase eco-friendly products in the restaurants, and identify a mediation variable of customers'emotional attachment to the restaurant to understand the customer behavior in service field. Furthermore, the purpose of this study provides an empirical evidence in Vietnam context because of the dimensions to measure green practices, Customer intention to purchase green products, and customer pro-environmental emotional attachment were carried out in western

countries, it lacks research in the restaurant in Vietnam context, specific in Ho Chi Minh City. From discussion above, that raises the research question of whether green practices in restaurants affect customer intention to purchase green products, and customer pro-environmental emotional attachment to the restaurants when the restaurants apply green practices. To evaluate the relationships among these factors, the authors propose the main hypothesis that green practices applications in restaurants (1) application of recycling and composting management (H₁), application of energy and water management (H₂), application of eco-friendly supplies (H₃), application of organic food-green products and materials (H₄) have a positive effect on Customer intention to purchase green products. Green practices applications in restaurants; (2) application of recycling and composting management (H₅), application of energy and water management (H₆), application of eco-friendly supplies (H₇), application of organic food-green products and materials (H₈) have a positive effect on customer pro-environmental emotional attachment to the restaurants. (3) Customer pro-environmental emotional attachment to the restaurants have a positive effect on Customer intention to purchase green products (H₀). Green practices applications in restaurants (4) application of recycling and composting management (H_{10a}), application of energy and water management (H_{10b}), application of eco-friendly supplies (H_{10c}), application of organic foodgreen products and materials (H_{10d}) indirect affect Customer intention to purchase green products through Customer pro-environmental emotional attachment to the restaurants.

This study contributes a comprehensive framework and provides a broader understanding of how factors of green practices was conducted an empirical evidence in Vietnam context because all the dimensions to measure green practices, customer intention to purchase green products, and emotional attachment were conducted study in western countries. The managers of restaurant may use our results in build strategy to develop of applying green practices in their restaurants. We just escape from the COVID-19 pandemic, so people focus on protecting health and *going green* has become a hot trend and change demand of customers. The rest of this paper presents the theoretical grounding of green practices and customers' patronage intention model. Next part presents the hypotheses and conceptual framework. Then, elaborating research methodology and research design, presenting data analysis and findings. Finally, presenting contribution, implications, and limitations for the further research.

2. Literature review

Throughout the years, many theories were developed to explain human behavioural intention, pro-environmental consumer, and individual's social behaviour is based on reason. Several researchers presented many widely used the theory TPB model,

it reflects that individuals' decisions about behaviour are carefully considered to purchase products/services based on emotion and attachment, expectancy-value of the eco-friendly products/services that were explored in the literature (DiPietro et al., 2013-a; Yarimoglu and Gunay, 2019; Mai et al., 2023; Kim and Ha, 2022), customer intention to purchase green products (DiPietro et al., 2013-b; Ray Wang, 2012; Jang et al., 2015; Schubert et al., 2010; Jeong and Jang, 2010). The TPB provides important assumptions and contributions in many study to explore the human behaviour (Ajzen, 1985; 1991; DiPietro et al., 2013-b; Yarimoglu and Gunay, 2019). Kim and Ha, 2022).

2.1. Theory Planned Behavior (TPB)

The TPB was developed by Ajzen (1991) to understand human behaviors, it includes attitudes and subjective norms and perceived control that lead to predict the customers' behavioral intentions. TPB presents the customers' intentions as the main antecedent of behavior and their willing to carry out the anticipated behavior. Moreover, in this study by Yarimoglu and Gunay (2019) customers' intention was viewed as customers' willingness to choose green hotels, and the results showed that environmentally friendly activities directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. Yarimoglu and Gunay (2019) have built a conceptual framework to extend a TPB by adding customer satisfaction and loyalty to predict customers' intentions to visit green hotels in Turkish and explore the effects of visit intentions on willingness to pay (DiPietro et al., 2013-b), satisfaction, and loyalty. In China, Wang et al. (2018) have conducted an empirical study to explore the consumers' intention to visit green hotels by extending TPB with adding a perceived consumer effectiveness antecedence and environmental concern factor. TPB is a wide theory used to understand human behavior, it reflects pro-environmental behavior, environmental concern such as energy and water saving, recycling and composing, eco-friendly supplies and green purchasing, application of organic food-green products and materials (Wang et al., 2018; DiPietro et al., 2013-a; Jang et al., 2015; Ray Wang, 2012; Schubert et al., 2010; Yusof et al., 2017; Jeong and Jang, 2010). Many studies have extended the TPB by adding new variables to address an usefullness of the TPB model, however, the criteria to add a new variable that must be reasonable to explain a range of human behaviors (DiPietro et al., 2013-a; Jang et al., 2015; Wang et al., 2018; Yarimoglu and Gunay, 2019; Nimri et al., 2020). Kim and Ha (2022) have investigated customer psychological perceptions about green consciousness in the green hotels in Seoul by applying an extended TPB, these scholars stated that to make the TPB more reliable, so the researchers should add more variables to extend the TPB, because the results'superiority has been acknowledged and offered a better prediction of customer behavior in predicting behavior of green hotel customers. Moreover, previous studies have succeeded to

apply the TPB for predicting environmental consciousness and customer behavior, it was used to explore the tourists' intention to return the eco-friendly destinations (Ahmad et al., 2020), green behavior of customers in a hotel (Ting et al., 2019), and willingness to pay premium price for green hotels that came from green consciousness (Kim and Han., 2010). Based on discussion above, this study is consider the helpfulness of TPB to understand the consumers' behaviors in green restaurants, this research used TPB is an anchor to build a research framework by adding customers' emotional attachment to green restaurants (Yuksel et al., 2010; Jang et al., 2015; Wu et al., 2019; Mai et al., 2023).

2.2. Green practices applications in restaurants

A green restaurant is one that makes going green a priority in its operations. Green practices were incorporated into their environmental operational strategy, which included increasing resource efficiency in manufacturing, communicating the company's environmental commitment through green marketing campaigns, pricing green products within an acceptable range, and reducing pollution throughout the supply chain (Dutta et al., 2008; Sun-Hwa et al., 2017). Green standards in developed countries have already evolved into complicated systems with various criteria to fulfill. This trend prompts the restaurant industry to invest significant resources in developing green strategies, as well as encouraging professional restaurateurs to form green institutions such as the Green Restaurant Association (GRA) and Green Table Network. Listed research mostly review the definition of green practices proposed by GRA (Jang et al., 2015; Jeong et al., 2014; Kim and Hall, 2020; Namkung and Jang, 2017; Wang, 2012), including 7 detailed environmental focuses on energy and water efficiency; application of recycling and composting management activities; purchase of sustainable food/eco-friendly products, local and organic ingredients; pollution avoidance; use of non-toxic and chemical products; and sustainable furnishings. Another practice, transparency and education have been added recently (Green Restaurant Association, 2021).

Besides using the formal guideline provided by GRA to determine green practices, scholars also self-proposed their own definitions (Park et al., 2020) who classified green practices based on specific types of action, such as application of recycling and composting management activities, using energy and water efficiency solutions, while Choi and Parsa (2007), Kwok and Huang (2019), Namkung and Jang (2013) classified green practices based on customer concerns, such as health and environmental practices. The emphasis varies according to the scholars' objectives, whether previous studies desire to explore the understanding impacts of green practices on the customers' perspectives in general or deepen in proposing the specific green guidelines, so that the restaurants can make an informed business decision about green initiatives and apply it. With the goal of determining which green practices influence customers' psychology (emotional attachment to the

restaurant) and dining intention in the green restaurants, this study used four dimensions of green practices provided by Jeong and Jang (2010) to formulate the conceptual framework, including application of recycling and composting management activities, application of energy and water management activities, application of eco-friendly supplies, and application of organic food-green products and materials (Mai et al., 2023).

2.2.1. The application of recycling and composting management

In food and beverage industry are encouraged to attain zero-waste and optimize waste production by applying of recycling and composting management activities. As part of green initiative, the restaurants apply recycle all recyclable materials, for instance, the restaurants implement a composition of food waste, recycle food waste to contribute to the improvement of soil quality (Wang, 2012), and minimize the tourism industries' negative effect on the environment (Kim and Ha, 2022). Thus, the focus of the restaurants is as follows: recycle waste, recycle and reuse paper, cardboard, plastic, glass, and aluminum, linen napkins reuse and recycle, table clothes reuse and recycle, recycling bins, use low-pressure shower and washbowl facilities, replaceable table clothes supplies, light sensors, and natural ventilation, conduct food waste composting programs, purchase products made from recycled or rapidly renewable materials (Jang et al., 2015; Ray Wang., 2012; Schubert et al., 2010; Yusof et al., 2017; Jeong and Jang, 2010). In Malaysia, Yusof et al. (2017) predicted the positive relationship between green practices (environmental activities, reuse towels, recycling program) in non-green hotels and customer satisfaction and loyalty. In addition, the results showed that customer satisfaction is a key mediation factor between green practice (environmental activities, reuse towels, recycling program, waste separation, recycling) and customer loyalty to hotels. Moreover, in this study by Yarimoglu and Gunay (2019) found that environmentally friendly activities/green practices (ditching disposables, having guest reuse linens, considering composting) directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. In Vietnam, to be certified as a green restaurant under the Green Lotus label scheme, a restaurant must achieve the criteria to protect environment and natural resources, therefore, the restaurants apply new technology and use renewable energy efficiently to reduce negative impacts on the environment (VNAT, 2015). Alternatively, the ERST recommends restaurants to provide kitchen containers to simplify waste segregation and sorting process (ERST, 2020). In addition to creating values for the restaurant, application of recycling and composting management activities also contribute to Vietnamese government's waste management strategy, which includes reducing, reusing, and recycling garbage via composting and anaerobic digestion (Sang-Arun, 2011; Mai et al., 2023).

2.2.2. The application of energy and water management

In food and beverage industry, the restaurants consume lagre energy and water, thereby, they must use the application of energy and water management activities and facilities to limit the primary source of carbon dioxide emissions danger to environment. Moreover, Kim and Ha (2022) predicted successfully green practices affect customer behavior (willingness to pay premium price, consume intention, revisit intention) based on the TPB. In addition, willingness to sacrifice for the environment were defined the relationship with green consciousness and green behavior, the terms of environmental practices or green practices were defined as a contribution to economy by implementing a saving water and energy, reducing waste. The organizations apply green initiatives to protect the earth and people and attempt to minimize the hotel industries' negative effect on the environment (Kim and Ha, 2022). Thus, the focus of these restaurants to achieve optimum operations and reduce the carbon footprint are as follows: use energy-efficient HVAC (heating, light sensors, natural ventilation, and air conditioning) (Kim and Ha, 2022), use flow restrictions on faucets, and water-less urinals and lighting systems, and install energy-monitoring systems to keep track of total energy consumed (Tan et al., 2018), replace incandescent light bulbs with longer lasting CFL light bulbs or LED, keep the entrance door closed or use a double entrance door (Jang et al., 2015; Wang, 2012; Schubert et al., 2010; Yusof et al., 2017; Jeong and Jang, 2010). In Malaysia, Yusof et al. (2017) predicted the positive relationship between green practices (water saving technology, energy efficient lighting, programmable thermostats, refillable amenity dispensers, maintenance for equipment regularly, air filtration) in non-green hotels and customer satisfaction and loyalty. In addition, the results showed that customer satisfaction is a key mediation factor between green practice (water saving technology, energy efficient lighting, programmable thermostats, refillable amenity dispensers, maintenance for equipment regularly, air filtration) and customer loyalty to hotels. Moreover, in this study by Yarimoglu and Gunay (2019) found that environmentally friendly activities/green practices (conserving energy, limiting water waste, installing eco-friendly filtered water dispensers; water conservation, energy efficiency and renewable energy) directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. These measurement scales of application of energy and water management activities are the most important criterion for the restauranteurs and customers (Wang et al., 2013). Water conservation, like energy-efficient practices, is linked to facility use and building features, according to Lo et al. (2011), who recommended that the restaurants utilize a microbubble or traditional thawing equipment to conserve water, in line with agreement by Hu et al. (2013), who pointed out that the most significant criterion in water-focused practices are to optimize the water-saving facilities, which can consist of installing flow regulators, low-flow toilets, and waterless urinals in bathrooms (Jeong et al., 2014; Jeong and Jang, 2010; Mai et al., 2023). 214

Trang et al. (2019) have explored green hotel attributes and guests' intention generation to visit a green hotel, and the guests practice pro-environmental actions during they stayed in a hotel. The results found four antecedents of green hotel attributes, including energy efficiency, water efficiency, recycling policy and green characteristic with underlie 24 dimensions to measure these factors. The only customer benefit, energy efficiency, and green characteristic have a positive effect on pro-environmental value and attitude and these factors increase positively affect intention to practice environmentally friendly actions and visit a green hotel of guests. However, water efficiency, recycling policy, pro-environmental value did not affect pro-environmental attitude. The weak point of this study is that they did not identify relationship between green practices and guests' intention generation to visit a green hotel. Moreover, it did not analysis the mediation variables of pro-environmental value and attitude in the customer intention model.

2.2.3. The application of eco-friendly supplies

The application of eco-friendly supplies pertain to non-toxic and environmentally friendly products (Laroche et al., 2001) or activities (Wang, 2012). Thus, the focus of these restaurants is as follows: use the environmentally friendly cleaners to wash the dishes, and linen napkins, table clothes, and to clean the tables and floors, use the take-out containers that are biodegradable (paper) or recyclable instead of using Styrofoam (Jang et al., 2015; Jeong and Jang, 2010; Mai et al., 2023). Moreover, GRA encourages the restaurants to minimize waste by purchasing goods that produced from bio-based materials or recycled materials (GRA, 2021), in lieu of plastic utensils, the restaurants encourage the application of eco-friendly supplies with single-use eating wares (Chiu and Hsieh, 2016). However, these replacements incur costly expenditures, and it remains a hurdle for some restauranteurs (Chiu and Hsieh, 2016). Moreover, in this study by Yarimoglu and Gunay (2019) found that environmentally friendly activities/green practices (eco-friendly cleaning supplies) directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. In developing countries, the restaurants focus on the criteria of Green Lotus label certification to apply green practices for proteting environment, and it reduces the disposable containers that is an one of the optional criteria, but it emphasizes the use of sustainable and non-toxic chemicals cleaners, labeled with a Green Mark (VNAT, 2013).

2.2.4. The application of organic food-green products and materials

Menu sustainability presents for organic foods, it reflects the application of organic food-green products and materials that benefit the environment's sustainable development, it is often associated with eco-friendly products and locally grown

produces (Kwok et al., 2016; Mai et al., 2023). Thus, the focus of these restaurants is as follows: use local ingredients, organic food/products on the menu, use fish and seafood harvested sustainably and free of harmful pollutants, the restaurants avoid genetically modified foods (Jang et al., 2015; Ray Wang., 2012; Schubert et al., 2010; Yusof et al., 2017; Jeong and Jang, 2010; Mai et al., 2023) who stated that menu sustainability present the application of organic food-green products and materials, it reflects the owners of the restaurants use locally grown foods to reduce transportation. And it emits fewer carbon emissions than imported foreign commodities, it effectively decreases carbon footprints and global warming (Jones et al., 2004). In Malaysia, Yusof et al. (2017) predicted a positive relationahip between green practices (organic food) in non-green hotels and customer satisfaction and loyalty. In addition, the results showed that customer satisfaction is a key mediation factor between green practice (organic food) and customer loyalty to hotels. Moreover, in the study by Yarimoglu and Gunay (2019) found that environmentally friendly activities/green practices (serving local and organic food) directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. Schubert et al. (2010) conducted t-tests of importance of green practice areas, consumers' attitudes, and behavioral intentions towards environmentally sustainable practices in restaurants, with 455 respondents in five casual dining restaurants, their study have gained an insight into consumers' attitudes, and willingness to pay more for green restaurant practices. However, they didn't find any relationships between green practices (reduce energy usage and waste; use biodegradable or recycled products; use organic products; serve locally grown food) and consumers' attitudes and behavioral intentions and willingness to pay more for green restaurant practices. Their study showed that the customers care of protecting the environment, and the customers would be willing to pay more to offset any additional costs related to green practices.

2.3. Green practices and customer intention to purchase eco-friendly products in green restaurants

Customers' ecological behavior intentions has been widely investigated thanks to the expanding research on customer behavior and the recent green management trend (Kang et al., 2012; Namkung and Jang, 2017). Due to the hesitation while purchasing green products, which often cost more than normal, customers' patronage intention is critical to be examined among different dimensions of eco-friendly behavioral intents. The term *patronage intention* or customer intention to purchase green products that has not been defined academically in consumer behavior research due to its simplicity in meanings. As a result, the author proposes customer intention to purchase green products in a green restaurant (DiPietro et al., 2013-a), or dining intention in short, it reflects the customers' desire to participate

in purchasing eco-friendly products and dining in the green restaurants (Jang et al., 2015; Shapoval et al., 2018). It is noticeable from the literature review that customers' intentions to patronize a green restaurant, this topic has gotten little attention to do a study to identify customers' willingness to pay more or purchase green products (Laroche et al., 2001; Tan and Yeap, 2012). Scholars often combined all behavioral stage aspects into one single variable, termed ecological behavioral intention such as customers' willingness to pay more for green products (DiPietro et al., 2013-a). However, despite the fact that the effects of green practices on customers' behavior represents a patronage intention of consumer who commit to purchase or revisit the green restaurants, this topic have not been well-studied, it has been a scarcity of research on customer patronage intention, as well as it lacks of the various empirical studies to determine the effects of each green practice on the variable of customer intention to purchase green products (Choi et al., 2009; Jeong and Jang, 2010). According to the literature, the following hypotheses were proposed:

 H_1 : Application of recycling and composting management activities have a positive influence on customer intention to purchase green products.

 H_2 : Application of energy and water management activities have a positive influence on customer intention to purchase green products.

 H_3 : Application of eco-friendly supplies have a positive influence on customer intention to purchase green products.

 H_4 : Application of organic food-green products and materials have a positive influence on customer intention to purchase green products.

2.4. Green practice restaurants and pro-environmental emotional attachment

In research marketing, Vlachos et al. (2010) has theoretically and conducted an empirical study, the results has proven that consumers do develop their emotions and their attachments to a particular brand of company, customers' proenvironmental emotional attachment was found to have a great impact on post-purchase behaviour, brand commitment. Other studies indicate that customers have a strong emotion and attachment to a brand or a store, the more emotional bond of customers when their needs were met, such as feelings of self-connection (Hwang and Kandampully, 2012), feel satisfied with a firm, a restaurant, positive feeling to dine in a restaurant (Wu et al., 2019). This is also corroborated by Park et al. (2010) who confirm that customers have positive feelings that can create their attachment to a brand or a place due to the brand's fulfilment of the customers' specific needs and the brand reflects the customers' self-concepts, so the customers have a positive emotion and attachment to a restaurant that led to be elicited by business's green initiatives (Xie et al., 2015), and it increases a familiarity and continues for dining

in a restaurant, in which can create an attachment between the customer and the restaurants (Wu et al., 2019). When customers support green businesses that share a common value, they might have a deeper sense of connection and, as a result, become more emotionally attached to them. As evidenced by the attachment theory (Jang et al., 2015). When a service fulfills their social intimacy and personal needs notably to reflect their self-concepts, so the customers establish a significant influence on customers' pro-environmental emotional attachment to a restaurant (Hwang and Kandampully, 2012). Following this notion, when a service represents customers' beliefs by becoming green, they feel more connected to the service, so the emotional bonds of customers that respondants form with particular green practices of the restaurant (Yuksel et al., 2010; Jang et al., 2015; Wu et al., 2019). Jang et al. (2015) have examined the impacts of green practices on customers' proenvironmental emotional attachment to the restaurant, however, the finding is constrained in the cafe context, and it did not adequately reflect other settings in the restaurant industry, which might led to a bias if other studies employ the latter practice. To fill the research gap, this research looked into the following hypotheses to understand how each green practices have influenced on customers' proenvironmental emotional attachment to the restaurant. Therefore, it is reasonable to assume that green practices could enhance the customers' pro-environmental emotional attachment to the restaurant by adopting and implementing green practices. From the discussion above, the following hypotheses were proposed:

 H_5 : Application of recycling and composting management activities have a positive influence on customers' pro-environmental emotional attachment to the restaurant.

 H_6 : Application of energy and water management activities have a positive influence on customers' pro-environmental emotional attachment to the restaurant.

 H_7 : Application of eco-friendly supplies have a positive influence on customers' pro-environmental emotional attachment to the restaurant.

 H_8 : Application of organic food-green products and materials have a positive influence on customers' pro-environmental emotional attachment to the restaurant.

2.5. Customers' pro-environmental emotional attachment to the restaurant and customer intention to purchase green products

According to self-expansion theory, one can have an inbuilt incentive to absorb the values of the subject into their self-concept. This means, the deeper the emotional connection, the more these subjects represent the individual-self and the more they are significant to one's life goals and personal concerns. In a business context, the

more a customer is inclined to commit to a company, the more likely they make financial sacrifices (Park et al., 2010). The novel relationship between customers' pro-environmental emotional attachment to the restaurant and willingness to pay has not investigated. Because the consumer behavior is reflected a predictor of behavioral intention in many studies, customers' pro-environmental emotional attachment to the restaurant have an impact on customer loyalty, revisit and word-of-mouth, and customers' intention towards green restaurant (Jang et al., 2015; Moise et al., 2019; Zhang and Kim, 2013). For the customer behaviour in patronizing to purchase eco-friendly products of the restaurant, Thomson et al. (2005) found customers' pro-environmental emotional attachment to the restaurant can predict willingness to pay a premium price but not mentioned its association with willingness to dine at the restaurant. Thus, from discussion above, it is reasonable to draw a hypothesis for predicting the effect of customers' proenvironmental emotional attachment to the restaurant on customers' intention in a customer intention to purchase eco-friendly products have not examined in the context of green restaurants in HCM City:

 H_9 : Customers' pro-environmental emotional attachment to the restaurant has a positive influence of customer intention to purchase green products.

2.6. Mediating role of customers' pro-environmental emotional attachment to the restaurant

As the objective of this study was to address a gap in the research by attempting to determine the indirect effect of green practices on customer intention to purchase green products via customers' pro-environmental emotional attachment towards green practices that have not studied yet before (DiPietro et al., 2013-a; Ray Wang, 2012; Yusof et al., 2017; Schubert et al., 2010; Jeong and Jang, 2010). Unlike earlier mentioned factors, we place the factor of customer' pro-environmental emotional attachment as the mediating variable to explore the indirect effect between green practices and customer intention to purchase green products, the novel relationship between customer' pro-environmental emotional attachment and customer intention to purchase green products has not yet to be well-investigated. Despite its prominence as a predictor of behavioural intention in consumer behaviour research, pro-environmental emotional attachment has only been shown to have an impact direct on customer intention to purchase green products, revisiting and word-of-mouth intention towards green restaurant (Jang et al., 2015; Zhang and Kim, 2013). Moreover, Yuksel et al. (2010) have proved successfully a positive relationship between attachment factor and tourists satisfaction in holiday experiences, customer's pro-environmental emotional attachment and destination loyalty of tourists, they point out the consumers can develop their proenvironmental emotional attachment to a place, because the destination can fulfill guests' specific goals, needs activities, its symbolic meaning, therefore, customer's

pro-environmental emotional attachment is an important antecedent to measure consumers satisfaction and customer intention to purchase green products that based on dimensions such as place attachment and place bonding lead to evoke strong emotions that have influence of a person's behavior, intention to purchase (Yuksel et al., 2010) and defined attachment can affect the guests what they feel, see, think, these elements of attachment increased knowledge about a place, emotional connection with place and lead to improve customer intention to purchase green products (Yuksel et al., 2010). Past studies viewed customers' pro-environmental emotional attachment factor was an outcome variable to predict the activity involvement and place characteristics of tourists as well as an antecedent variable to predict consumer loyalty, customer satisfaction (Yuksel et al., 2010). Therefore, this study supposes a new hypothesis to test the effect of these relationships, this study examine indirect correlations between green practices and customer loyalty via consumers' pro-environmental emotional attachment, the following hypothesis was proposed:

 H_{10a} : Customer intention to purchase green products are indirectly affected by application of recycling and composting management through the mediating role of customers' pro-environmental emotional attachment.

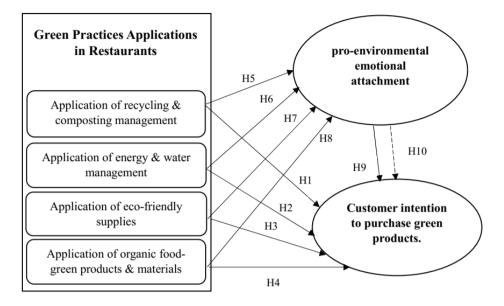
 H_{10b} : Customer intention to purchase green products are indirectly affected by application of energy and water management through the mediating role of customers' pro-environmental emotional ettachment.

 H_{10c} : Customer intention to purchase green products are indirectly affected by application of eco-friendly supplies through the mediating role of customers' pro-environmental emotional attachment.

 H_{10d} : Customer intention to purchase green products are indirectly affected by application of organic food-green products and materials through the mediating role of customers' pro-environmental emotional attachment.

Based on the literature review, the researchers proposed the conceptual framework of the study, is proposed for empirical validation (Figure 1).

Figure 1: Proposed Research Model



Source: Author's elaboration

3. Methodology

As the questionnaire is used as a data collection tool in this section the questionnaire design with measurements used is explained. Followed with sample size and data collection process, as well as target population description. At the end, data analysis methods are presented.

3.1. Questionnaire design and data collection

3.1.1. Measurements and survey instrument

A questionnaire was built based on existing literature reviews and items were adapted from previous studies with factors: four items to measure customer intention to purchase green products were dapted from DiPietro et al. (2013-a), Jang et al. (2015), and Shapoval et al. (2018), nine items to measure customers' pro-environmental emotional attachment (Yuksel et al., 2010; Jang et al., 2015), factors of green practices consist of five items to measure application of recycling and composting management activities; seven items to measure application of energy and water management activities; three items to measure application of eco-

friendly supplies; four items to measure application of organic food-green products and materials (Jang et al., 2015; Ray Wang, 2012; Schubert et al., 2010; Yusof et al., 2017; Jeong and Jang, 2010). To ensure the content validity based on the literature review and items used in prior studies, a drafted questionnaire was built and get viewpoints of two experts of manager restaurants and two academic lecturers in food and beverage field to review and evaluate the items and get feedback to revise the questionnaire if it needs to change some errors like phrase, words, difficult understand the terminology, then the questionnaire was modified, and we conducted a pretests with three guests who were having lunch in restaurants to re-evaluate the importance of all the measurement scales of these factors. A questionnaire was the main instrument of data collection for this study. This research was assessed all measurement scales on an instrument 5-point Likert-scale, equivalent to strongly disagree, disagree, neutral, agree, and strongly agree respectively, using a selfadministered questionnaire (Eby et al., 2013) sent to informant. A questionnaire included two sets of questions and was divided into two main parts. The first parts measured the respondents' evaluation about factors of green practices, then, the respondents rated their level of agreement with statements pertaining to a customers' pro-environmental emotional attachment to a restaurant, and customer intention to purchase green products. The second part was designed to generate descriptive information about the respondents. It included gender, age, the level of education, occupation, average income, frequency of dining at restaurants, and frequency of choosing to dine at green practice restaurants, all of which affects customer perception and satisfaction with green practice restaurants. All the items of the constructs were adapted from extant studies to augment content validity (see Table 1).

3.1.2. Sample size and data collection

To obtain a heterogeneous sample and get the generalizations and collect different perceptions of consumers, so we collected data in diverse group of guests' restaurants to reach research objectives. This research was designed as an exploratory and confirmatory study to test a causal relationship to examine consumer behavior about green practices in the restaurants in HCM City, Vietnam, HCM City is known for being the convergence place of many long-standing culinary cultures, the busiest and most developed cuisine area in Vietnam, and it has therefore been selected as a test market for testing consumer behavior about green practices. In HCM City has 307 restaurants (vietnamtourism, 2022), we selected 12 restaurants in the sample to survey the restaurant customers based on the hotel green restaurants that were got certificate green lotus or an eco-label of Vietnam's government (vietnamtourism, 2015), then we also selected 12 restaurants based on rating from tourists on Tripadvisor (2022), Topbrands (2022), justfly. vn and Digiticket (2022). Moreover, the respondents participated in this study

should meet certain criteria. First, we selected guests who were having dinner in the restaurants while they are waiting to serve. Second, we split guests in three segments, we selected two five stars food and beverage restaurants, and they agreed to participate, four casual dining restaurants were selected because these restaurants are frequented by the most diverse group of customers, and finally six fine dining restaurants were selected because they are frequented by the most business tourists and rich people, therefore 12 restaurants were selected in this study because of the frequented by the most green consumers. Third, all these guests voluntary to participate in this study. Finally, the restaurant guests who are aged from 18 years or older were selected to answer the questionnaire. These restaurants support us to deliver a survey questionnaire directly to their guests we conducted a survey from Wednesday to Sunday during the day time and evening hours, a hard copy questionnaire was administered to the guests and took approximately eight minutes to complete. Regard to sample size of empirical data collection in this study, some scholars suggested that a minimum subjects to item ratio of at least 5:1 in EFA (Hair et al., 2011). The conceptual framework in this study go with 6 variables includes 32 items, so the minimum number of respondents for this study was at least 192 cases (32x6), however, the more respondents are the better to increase the reliability of data collection (Hair et al., 2011).

3.1.3. The target population

The population of this study focuses on customers of restaurants and often dine in green practice restaurants in Ho Chi Minh City (HCM City), customers aged between 18 and 70 years old. Due to the limit time, we used convenience sampling technique to collect data. The questionnaire was provided in both Vietnamese and English as the target population was Vietnamese and foreigners who are living in HCM City. A total of 400 questionnaires were administered to restaurant guests. The final sample included 358 completed questionnaires, and there were 42 cases that were not completed answering all questions, the total number of respondents of the survey in this research showed there were 30 foreigners, and 328 Vietnamese. The data has been collected directly by staff of restaurants and the researchers from February to September 2022.

3.2. Data analysis method

This study was designed as an exploratory and confirmatory research to identify the influence of green practices on Customer intention to purchase green products in the green practice restaurants through customers' pro-environmental emotional attachment. Multiple statistical techniques were employed in order to obtain more accurate results and better conclusions. For instance, the collected responses were coded and screened for errors before any analytical techniques were applied.

Statistical Package for the Social Science (SPSS) version 20.0 and Smart-PLS software with a version 3.0 to evaluate research model (Hair et al., 2011) for variance-based structural equation modelling (SEM) using the partial least squares (PLS) path modelling was used to run the data. SPSS was first used to screen the data and detect missing values and outliers, analyse descriptively, as well as test the distribution of the demographic data. PLS-SEM was then used to assess the correlations between latent variables in the conceptual model, PLS-SEM was selected because it is suitable for the study of complex constructs and both exploratory and confirmatory research, it demonstrated on maximizing the variance of endogenous latent variables interpreted by the exogenous variables in reverse to reflect the experimental covariance matrix (Prayag and Lee, 2019), and this research model was developed using many extant theories. As such, the prediction among latent variables in the model required PLS-SEM (Hair et al., 2011). The non-parametric bootstrapping was measured with 2000 replications (Hair et al., 2011).

The data obtained after running PLS-SEM was assessed in two steps to analysis the collected data (Hair et al., 2011). First step, the 358 valid data were tested for the reliability and validity of measurement scales of the outer model by using composite reliability (CR), average variance extracted (AVE), and Cronbach's alpha. At the second step, we focused on identifying the potential relationship amongst these constructs, the structural model assessed with the appropriate results of the measurements in this research model, as well as the significance and effects of path coefficients. Hair et al. (2019) stated that the PLS is used for prediction-oriented research, and it aims to maximize the explained variance of dependent variables, and it also can be used if less rigid theoretical backgrounds are available. Regard to the inner model explains the relationships between the exogenous variables of green practices (application of recycling and composting management activities, application of energy and water management activities, application of eco-friendly supplies, application of organic food-green products and materials) and endogenous latent variables (customers' pro-environmental emotional attachment, customer intention to purchase green products) along with the outer model explains the relationships among the latent variables and their observed indicators and was used to test the research hypotheses by evaluating the inner model (β) path coefficient sizes and significance. Using the non-parametric bootstrapping method (Hair et al., 2011).

4. Empirical data and analysis

This section covers analysis of the participant's profile and presents measurement model results. Also, to test the posited hypotheses, assessment of the structural model through testing multi-collinearity, predictive power of structural model and predictive relevance are presented. At the end of the section mediating analysis is presented and explained.

4.1. Profile of participants

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From the results of the descriptive analysis, it provides the demographic profile of 358 the respondents from 12 restaurants in HCM City in Vietnam. Most respondents were female (62.6%) who are intention to purchase green products in the restaurants, while the male accounted for 37.4%. Most of the respondents were between the ages of 18 to 70, and the largest group aged between 18 and 25 years (65.1%), the second large group aged between 26 and 30 years (20.1%), the third large group aged between 31 and 40 years (10.9%), finally, aged between 41 and 70 years (3.9%). Most restaurant customers are working age i.e., Generation Z who spend more on their daily needs. A large of the respondents had obtained a bachelor's degree (45%) and higher/graduate degrees (40%) and had obtained college experience (14.5%). In terms of occupation, most respondents were college students (51.1%). This was followed staff by 36.3 percent who worked full-time, and 12.6% with higher positions in a company such as manager, vice manager, director, vice director. In terms of the respondents' monthly income, roughly 36.6 percent of the respondents had low to middle level incomes (<11 million Vietnam Dong), while 32.4 percent of the respondents earned high incomes (>11 million Vietnam Dong). The remaining 31 percent of the respondents earned less than five million Vietnam Dong per month. In terms of eating habits, respondents were asked about their level of frequent dining at a green restaurant. About half (52.8%) of the respondents did not routinely dine in a green restaurant, while 26.5 percent of the respondents had dined in a green restaurant at least once a week. The remaining 20.7 percent of the respondents reported dining in a green restaurant at least twice a week.

4.2. Measurement model results

First stage, we have assessed the convergent validity and consistency reliability for each indicator and utilized (CR) composite reliability and (AVEs) average variance extracted to examine it. Composite reliability (CR) was applied to estimate internal reliability (Netemeyer et al., 2003) and average variance extracted (AVE) was to assess convergent validity (Fornell and Larcker, 1981). The minimum value for composite reliability was at least 0.7 and for average variance extracted was from 0.5 (Fornell and Larcker, 1981; Hair, et al., 2014). Table 1 describes the results of composite reliability of all the constructs. In Table 1 presents CR ranged from 0.811 to 0.940, in line with Hair et al. (2011) suggested that CR should be 0.6 is accepted. The AVEs ranged from 0.522 to 0.741 for each factor in line with Hair et al. (2019) pointed out that the AVEs should be 0.5 or higher is acceptable, this result indicated that all constructs reflect the model of high levels of internal consistency reliability and the convergent validity. The primary method assessed internal consistency and reliability, was Cronbach's Alpha. Cronbach's Alpha values are greater than 0.7 that consider to be appropriate reliability of the measured constructs Hair et al. (2019),

in this study Cronbach's Alpha ranged from 0.712 to 0.926. Hair et al. (2011) pointed out that the factor loading did not exceed 0.60 that should be excluded, in our study there are some indicators were excluded such as RC1, EW1, EW2, EW3, EA7 because these indicators of application of recycling and composting management activities, application of energy and water management activities have factor loadings are less than 0.60 (see Table 1).

Table 1: Summary of dependent variables and independent variables with measurement model evaluation

Constructs and Indicators	Factor Loading
Customer intention to purchase green products: WiCo (Cronbach's Alpha = 0.751, CR = 0.843, AVE = 0.574)	
WiCo1: I believe that restaurant should use local products for their menu whenever possible.	0.805
WiCo2: I prefer to patronize intention with businesses that are environmentally friendly	0.674
WiCo3: I prefer to purchase services from organizations that practice green initiatives	0.819
WiCo4: I am willingness to pay up to 5 percent more for environmentally safe services.	0.724
Customers' pro-environmental emotional attachment: EA (Cronbach's Alpha = 0.926, CR = 0.940, AVE = 0.664)	
EA1: I feel this green restaurant is a part of me.	0.804
EA2: I identify strongly with this green restaurant.	0.848
EA3: Visiting this green restaurant says a lot about who I am.	0.833
EA4: I am very attached to this green restaurant.	0.855
EA5: I feel a strong sense of belonging to this green restaurant.	0.881
EA6: This green restaurant means a lot to me.	0.859
EA8: At times that I eat out at other restaurants and feel uncomfortable because of their unfriendliness with the environment, these green practice restaurants come to mind.	0.697
EA9: If someone praised these eco-friendly restaurants, I would feel pleased.	0.804
Green Practices Applications in Restaurants:	
Application of recycling and composting management activities: RC (Cronbach's Alpha = 0.712, CR = 0.811, AVE = 0.522)	
RC2: Provide recycling bin in store	0.622
RC3: Conduct food waste composting programs	0.630
RC4: Purchase products made from recycled or rapidly renewable materials	0.837

Constructs and Indicators	Factor Loading
RC5: Reuse materials from other construction sites or buildings that have closed	0.777
Application of energy and water management: EW (Cronbach's Alpha = 0.743, CR = 0.838, AVE = 0.565)	
EW4: Replace exit lights with LED's	0.730
EW5: Use motion detectors for lights in the restroom	0.715
EW6: Use of a system which monitors and controls comfortable temperatures efficiently with the HVAC (Heating, Ventilating and Air Conditioning) system	0.812
EW7: Keep the entrance door closed or use a double entrance door	0.747
Application of eco-friendly supplies: ES (Cronbach's Alpha = 0.825, CR = 0.896, AVE = 0.741)	
ES1: Use of environmentally friendly cleaners for dishes, and linen.	0.873
ES2: Use of environmentally friendly cleaners for tables and floors.	0.905
ES3: Use of take-out containers that are biodegradable (paper) or recyclable instead of using Styrofoam.	0.801
Application of organic food-green products and materials: MS (Cronbach's Alpha = 0.748, CR = 0.840, AVE = 0.567)	
MS1: Offer local ingredients on the menu.	0.752
MS2: Offer organic food on the menu.	0.748
MS3: Offer fish and seafood harvested sustainably and free of harmful pollutants.	0.787
MS4: Avoid genetically modified foods.	0.724

Notes: CR: composite reliability; AVE: average variance extracted.

Source: Author's calculation

After indicator's reliability and convergent validity were confirmed, the discriminant validity was assessed, in this study employed the ratio by Fornell and Larcker (1981) to found the square root of AVEs, each latent variable should be greater than the correlations among the construct, and it can be used to establish discriminant validity in case the square root of AVE values are bigger than other correlation values among the latent variables (Hair et al., 2019). Other latent variables were well established the discriminant validity. As Hair et al. (2011) pointed out that an indicator's loadings that should be higher than all of its cross loadings, the Fornell-Larcker criterion demonstrates that each latent variable shares more variance with its own indicators than the other latent variables in the conceptual model. Therefore, each variable's square root value of AVE should be greater than its highest correlation compared with the other constructs. Furthermore, the item loadings of a construct should be greater than the loadings of

other constructs. Table 2 presents the results of discriminant validity was supported all constructs, it ranged from 0.723 to 0.861, which indicated that the identified components fit the Fornell-Larcker criteria (Fornell and Larcker, 1981; Hair et al., 2019).

Table 2: Discriminant validity of Fornell and Larcker criteria results

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Application of eco-friendly supplies	0.861					
(2) Customers' pro-environmental emotional attachment	0.266	0.815				
(3) Application of energy and water management	0.522	0.375	0.752			
(4) Application of organic food-green products and materials	0.574	0.376	0.483	0.753		
(5) Application of recycling and composting management	0.571	0.432	0.550	0.564	0.723	
(6) Customer intention to purchase green products	0.369	0.662	0.455	0.445	0.532	0.758

Source: Author's calculation

4.3. Assessment of the structural model results

4.3.1. Testing multi-collinearity

Before assessing the structural model, we evaluated multi-collinearity among variables to prevent misleading regression results. When there are inter-correlations across predictor variables in a model, the value of the endogenous variables cannot predict independently, so the variance inflation factor (VIF) was used to check the multi-collinearity problems. All VIF's results are all below the cutoff value of 5, indicating that there are no collinearity issues across predictor constructs (Hair et al., 2021). According to Hair, et al. (2010) proposed the acceptable criterion for VIF smaller than 4; otherwise, If VIF values bigger than 5 that indicated that multicollinearity would exist problems in predictor variables, collinearity problems (Hair, et al., 2017; Jintanee Ru-Zhue et al., 2022). From the collinearity statistics in our study, VIF values range from 1.306 to 1.961, which indicated that multicollinearity is not a problem in this data. The measure outcomes of conceptual framework have been agreeable. After that, the explanation of the target endogenous variables (customers' pro-environmental emotional attachment, customer intention to purchase green products) variance were exploited to investigate the adequate of the predictive model.

4.3.2. Testing predictive power of structural model

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Next, the model fit was evaluated by examining the predictive power of the structural model was estimated the R² weight of endogenous constructs were valued. The R² value is between 0 and 1, with greater values exhibiting a higher explanatory power. As a guideline of Peng and Lai (2012) suggested that the thresholds of R² values at 0.75, 0.50, and 0.25 can be assessed as substantial, moderate, and weak predictive accuracy (Hair et al., 2011; Jintanee Ru-Zhue et al., 2022). Following this, our results point out that the coefficient of determination (R²) was 0.234 for customers' pro-environmental emotional attachment, it indicated that 23.4% of the variation in customers' pro-environmental emotional attachment was weak predictive accuracy by application of eco-friendly supplies, application of energy and water management activities, application of organic food-green products and materials, application of recycling and composting management activities. Following, the R² weight of customer intention to purchase green products were 0.529 that indicated that 52.9% of the variation in customer intention to purchase green products were moderately predicted accuracy by customers' pro-environmental emotional attachment, application of eco-friendly supplies, application of energy and water management activities, application of organic foodgreen products and materials, application of recycling and composting management activities. In this study the results of R² are substantial and moderate respectively with suggestion by previous scholars (Jintanee Ru-Zhue et al., 2022; Hair et al., 2011; Peng and Lai, 2012).

4.3.3. Testing predictive relevance

Following we used Blindfolding to measure predictive relevance. The instrument to evaluate the inner model. The value of Q^2 is bigger than zero Hair et al. (2011), so the exogenous constructs were predicted relevance for the endogenous variables are acceptable model fit. In this study, the average cross-validated redundancy achieved 0.142 for customers' pro-environmental emotional attachment, 0.280 for customer intention to purchase green products, which were higher than zero. Therefore, there was a high predictive relevance for customers' pro-environmental emotional attachment, customer intention to purchase green products to exhibit adequate model fit Hair et al. (2011). Therefore, there was predictive relevance for customers' pro-environmental emotional attachment, customer intention to purchase green products in the research model. Effect size (f²) is quantified by changes in the R² when a particular construct is removed from the model. This determines if the removed construct significantly impacts the endogenous constructs. As a rule of thumb, f² values of 0.02, 0.15, and 0.35 are the small, medium, and large effects of an exogenous construct, respectively, while f² values below 0.02 represent no effect. application of recycling and composting management activities ($f^2 = 0.056$) and customers' pro-environmental

emotional attachment ($f^2 = 0.730$) had the highest f^2 values and change in R^2 of customers' pro-environmental emotional attachment and customer intention to purchase green products, respectively, a structural model fitted reasonably to the data in this research model. Additionally, except for the application of eco-friendly supplies, all the predictors affected customers' pro-environmental emotional attachment. Conversely, two of the five predictors, i.e., customers' pro-environmental emotional attachment and application of recycling and composting management activities affected customer intention to purchase green products in green practice restaurants. After running the PLS model, non-parametric bootstrapping (Wetzels et al., 2009) was utilized to examine the significance of the path coefficients. Table 3 illustrates that all the paths were significant except for three hypotheses H_3 , H_4 , H_7 . Figure 2 present the results of test hypotheses, this research based on *non-parametric bootstrapping* with 2000 replications to test the structural model and at the level of confidence interval 95% (Hair et al., 2011; 2019; Jintanee Ru-Zhue et al., 2022).

Table 3: Summary Results of Path Coefficients – Direct effects

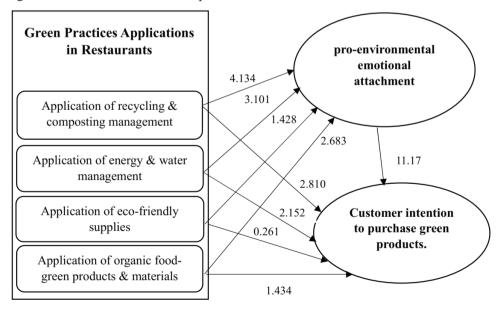
Hypotheses	Direct Effects	β	T-value	P-value	Decision
H ₁	Application of recycling and composting management → Customer intention to purchase green products	0.197	2.810	0.005	Supported
H_2	Application of energy and water management → Customer intention to purchase green products	0.111	2.152	0.032	Supported
H_3	Application of eco-friendly supplies → Customer intention to purchase green products	0.015	0.261	0.794	Rejected
H ₄	Application of organic food- green products and materials → Customer intention to purchase green products	0.080	1.434	0.152	Rejected
H ₅	Application of recycling and composting management → Customers' pro-environmental emotional attachment	0.287	4.134	0.000	Supported
H_6	Application of energy and water management → customers' pro-environmental emotional attachment	0.180	3.101	0.002	Supported

Hypotheses	Direct Effects	β	T-value	P-value	Decision
H_7	Application of eco-friendly supplies → Customers' proenvironmental emotional attachment	-0.098	1.428	0.153	Rejected
H_8	Application of organic food- green products and materials → Customers'pro-environmental emotional attachment	0.183	2.683	0.007	Supported
H ₉	Customers' pro-environmental emotional attachment → Customer intention to purchase green products	0.504	11.173	0.000	Supported

Source: Author's calculation

Given that the explanatory power and out-of-sample predictive power are confirmed, the assessment of statistical significance and relevance of the path coefficients is performed. Table 3 illustrated the path-coefficients' results. Figure 2 shows the structural model, which has resulted from the PLS analysis.

Figure 2: Results of Structural Equation Model



Source: Author's elaboration

The first research question *To what extent do green practices in restaurants affect customer intention to purchase green products?* the results show that there are two factors of application of recycling and composting management activities (β = 0.197; p = 0.005; t = 2.810) have positive relationship with customer intention to purchase green products, following is application of energy and water management activities with a low effects of customer intention to purchase green products (β = 0.111; p = 0.032; t = 2.152). Therefore, H₁ and H₂ are completely supported. Except of application of eco-friendly supplies and application of organic food-green products and materials did not directly affect customer intention to purchase green products, so H₃ and H₄ were rejected since they did not have statistical significance (p-value > 0.05). The rejection of these hypotheses implied a disconfirmation of application of eco-friendly supplies, application of organic food-green products and materials did not affect customer intention to purchase green products in green restaurants.

The second research question To what extent do green practices in restaurants affect customers' pro-environmental emotional attachment to green products? the result shows that three of four factors of green practices, including application of energy and water management activities, application of organic food-green products and materials, application of recycling and composting management activities have significantly and directly impact on customers' pro-environmental emotional attachment with 5 percent significance. Recycling and Composting is the most influenced on customers' pro-environmental emotional attachment with (β = 0.287; t = 4.134; p = 0.000), ranking second is application of organic food-green products and materials have directly influenced on customers' pro-environmental emotional attachment with ($\beta = 0.183$; t = 2.683; p = 0.007), following is the application of energy and water management has directly influenced on customers' pro-environmental emotional attachment with ($\beta = 0.180$; t = 3.101; p = 0.002). Consequently, the hypothesis H₅, H₆, and H₈ were totally supported, while hypothesis H₇ was rejected, meaning that application of eco-friendly supplies has no bearing on fostering customers' pro-environmental emotional attachment.

The third research question *Do customers' pro-environmental emotional attachment elicit customer intention to purchase green products in green practice restaurants?* the results showed that customers' pro-environmental emotional attachment and customer intention to purchase green products in a restaurant implement green practices was discovered and yield a remarkable significant with ($\beta = 0.504$; t = 11.173; p = 0.000). Therefore, the H_9 was completely supported. This meant that if a customer had a strong pro-environmental emotional attachment to the green practices of the restaurant, he or she would more likely assign their willingness to pay more to that restaurant over others.

4.3.4. Mediating Analysis

Additionally, to answer the research question 4 *To what extent do customers' pro- environmental emotional attachment mediate the relationship between green practices and customer intention to purchase green products?* the mediating analysis results were presented in Table 4, the results illustrated that customers' pro-environmental emotional attachment completely mediated the correlation between green practices and customer intention to purchase green products, including: application of recycling and composting management activities (β = 0.144) most strongly affected customer intention to purchase green products followed by application of organic food-green products and materials (β = 0.092) and application of energy and water management activities (β = 0.091). Therefore, these hypothesis H_{10} (H_{10a} , H_{10b} , H_{10d}) were totally supported. However, application of eco-friendly supplies did not have indirect impact on customer intention to purchase green products through the mediation of customers' pro-environmental emotional attachment, the H_{10c} was rejected.

Table 4: Summary Results of Indirect Effects

Hypotheses	Indirect Effects	β	T-value	P-value	Decision
$ m H_{10a}$	Application of recycling and composting management → customers' pro-environmental emotional attachment → Customer intention to purchase green products	0.144	3.764	0.000	Supported
$ m H_{10b}$	Application of energy and water management → customers' proenvironmental emotional attachment → Customer intention to purchase green products	0.091	3.034	0.002	Supported
H _{10c}	Application of eco-friendly supplies → customers' pro-environmental emotional attachment → Customer intention to purchase green products	-0.049	1.391	0.164	Rejected
$ m H_{10d}$	Application of organic food- green products and materials → customers' pro-environmental emotional attachment → Customer intention to purchase green products	0.092	2.564	0.010	Supported

Source: Author's calculation

5. Results and Discussions

To elicit customer intention to purchase green products, in the first objectives, this study found a strong relationship between green practices of application of recycling and composting management activities and customer intention to purchase green products, that confirmed the measurement scales were built by (DiPietro et al., 2013-a) are in line with previous studies (Jang et al., 2015; Shapoval et al., 2018; Laroche et al., 2001; Tan and Yeap, 2012). Another important finding is that the customers evaluate the green practices of application of energy and water management activities revealed a second strong significant relationship with customer intention to purchase green products, which confirmed the theories were built from (DiPietro et al., 2013-a; Dutta et al., 2008; Ray Wang 2012), are in line with Jang et al. (2015). What is curious about this result is that there is no relationship between green practices of application of eco-friendly supplies; application of organic food-green products and materials and customer intention to purchase green products, because the restaurant customers didn't evaluate these factors are the most critical elements affect their behavior intention to purchase the green products, and it is consistent with Schubert et al. (2010) conducted t-tests of importance of green practice areas, their study have gained an insight into consumers' attitudes, and willingness to pay more for green restaurant practices. However, they didn't find any relationships between green practices (reduce energy usage and waste; use biodegradable or recycled products; use organic products; serve locally grown food) and behavioral intentions and willingness to pay more for green restaurant practices. However, it is in contrary to previous studies (Choi et al., 2009; Jeong and Jang, 2010; Jang et al., 2015; Shapoval et al., 2018; Yusof et al., 2017; Yarimoglu and Gunay, 2019). Yarimoglu and Gunay (2019) found that environmentally friendly activities/green practices (eco-friendly cleaning supplies), serving local and organic food directly affect customers' intentions to visit a green hotel in Turkish, and the results also predicted the effects of visit intentions on willingness to pay. The study has proven that the application of recycling and composting management activities; application of energy and water management supported the restaurants to achieve customer intention to purchase more ecofriendly products/services directly. However, the awareness of customers towards application of eco-friendly supplies and application of organic food-green products and materials cannot be taken heavily as far as restaurant industry is concerned to understand whether customer intention to purchase green products, the customers did not support application of eco-friendly supplies and application of organic food-green products and materials as an antecedent of green practices. Additionally, the customers/Vietnamese may plant organic gardens at home to cater to their meals, because Vietnam is a cultural architecture, so they can respond favorably to the opportunity of being served themself with fresh, locally/home grown, organic food, and create an eco-friendly scene when they grow trees, plants to serves as their organic foods in their gardens. Therefore, the customers here did not evaluate the application of organic food-green products and materials are an important factor to affect them to pay more for eco-friendly products.

On the question two to identify the relationship between green practices and customers' pro-environmental emotional attachment, this study found that the highest important factors of green practices are application of recycling and composting management activities affect customers' pro-environmental emotional attachment toward green restaurants, this result was confirmed the theories were built from previous studies (Vlachos et al. 2010; Jang et al., 2015; Xie et al., 2015). Another finding showed the second important factor is application of organic food-green products and materials are associated with customers' pro-environmental emotional attachment, are in line with (Jang et al., 2015; Ray Wang, 2012; Schubert et al., 2010). The third important factor is application of energy and water management activities affect customers' pro-environmental emotional attachment toward the green restaurant of the customers, this finding was confirmed the theories from DiPietro et al. (2013a); Ray Wang (2012); this result also reported by Jang et al. (2015); Schubert et al. (2010); Jeong and Jang (2010). One unexpected finding was that the customers did not evaluate the significance of application of eco-friendly supplies affect customers' pro-environmental emotional attachment toward green restaurants, this finding was contrary with previous studies (Jang et al., 2015; Hwang and Kandampully, 2012; Yuksel et al., 2010), because the awareness of customers towards application of ecofriendly supplies cannot be taken heavily as far as restaurant industry is concerned to understand customers emotion and attachment to the restaurants, the customers did not support application of eco-friendly supplies as an antecedent of green practices that did not increase their emotion and attachment.

On the research question three whether customers pro-environmental emotional attachment elicit the customer intention to purchase green products in green practice restaurants, this study found that customers evaluate the significance of customers' pro-environmental emotional attachment toward green restaurants lead to enhance the customers' willingness to purchase more green products and services, this finding was consisted with previous studies (Jang et al., 2015; Hwang and Kandampully, 2012; Yuksel et al., 2010). Similarly, Jang et al. (2015) also identified elements of green practices affect direct and indirect green store loyalty and green product loyalty through customers' pro-environmental emotional attachment. The results indicated that the awareness of customers towards customers' pro-environmental emotional attachment can be taken heavily as far as restaurant industry is concerned to understand customer intention to purchase green products in green practice restaurants, in this study showed that the customers do support customers' pro-environmental emotional attachment to a green restaurant. Customers' pro-environmental emotional attachment is as an antecedent of customer intention to purchase green products that did increase their emotion and attachment lead to pay more and consume more.

Lastly, research question four, to identify the role of mediating variable of customers' emotional attachment mediate the relationship between green practices and customer intention to purchase green products. Three of four factors, including application of organic food-green products and materials, application of energy and water management activities, application of recycling and composting management activities affect indirect customer intention to purchase green products via customers' pro-environmental emotional attachment, in line with previous studies (Yuksel et al., 2010; Jang et al., 2015). As such, of all the independent variables, application of organic food-green products and materials, application of energy and water management activities, application of recycling and composting management activities were found to play a significant role in forecasting both customers' pro-environmental emotional attachment to a green practice restaurant and customer intention to purchase eco-friendly products. Therefore, if a restaurant shows their customers see the restaurants use an application of recycling and composting management activity system, the customer is more likely to fall in the restaurant and customer intention to purchase green products. The application of organic food-green products and materials and application of energy and water management activities were significant variables when considering the mediating role of customers' pro-environmental emotional attachment and the level of customer intention to purchase green products. This result suggests that there is not direct effect of application of organic food-green products and materials on customer behavioral intention to purchase green products, however, there is a relationships' indirect relationship between application of organic food-green products and materials and customer intention to purchase green products through customers' pro-environmental emotional attachment construct, the results are better explained the restaurant customers' behavior about green purchasing products. The result indicated that respondents were highly concerned about food safety and the application of energy and water management activities in the restaurants. Therefore, if the green practice restaurants focus on efficiently managing energy and water usage and use sustainable food sources, they are more likely to impress their customers and create a good impression. Then, if the customers develop a strong customers' pro-environmental emotional attachment, they show their commitment to the restaurant and customer intention to purchase green products. The study also showed that the positive awareness of customers towards green practices has influence on customer intention to purchase green products indirectly through customers' pro-environmental emotional attachment. However, the awareness of customers towards application of eco-friendly supplies cannot be taken heavily as far as restaurant industry is concerned to understand indirectly whether customer intention to purchase green products through customers' pro-environmental emotional attachment, the customers did not support customers' pro-environmental emotional attachment play as a mediation variable to explore a cause effect of application of eco-friendly supplies and customer intention to purchase green products.

5.1. Theoretical contributions

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The first contribution of this study found the impacts of green practices on customer customer intention to purchase eco-friendly products, based on the path analysis revealed that restaurant's green practices had a direct influence on customers' willingness to pay more, the results have confirmed the measurement scales that were developed by DiPietro et al. (2013-a) because the restaurants use the application of recycling and composting, energy and water management activities to achieve financial benefits, reduce environmental costs and meet eco-friendly consumers' demand, attain competitive advantages in restaurant industry, this result complies with the findings of Dutta et al. (2008), Jeong and Jang (2010), and Namkung and Jang (2013).

The second contribution of this study found the impacts of green practices on customers' pro-environmental emotional attachment had proved that three factors of green practices (application of energy and water management activities, application of organic food-green products and materials, application of recycling and composting management activities) contribute to the formation of customers' pro-environmental emotional attachment to a green restaurant (Yuksel et al., 2010; Jang et al., 2015). In similar vein, proposed by Jang et al. (2015) that the strengthened their report on the significance of this relationship because the effects of restaurants' green practices on customers' emotional response are still rarely examined until now, so our study has filled the gap based on Jang et al. (2015) suggestion and our study reached this objective, and it also supports the confirmation on the impacts of place identity on place attachment provided by (Jang et al., 2015).

The third contributions of this study found the empirical results that showed that customers' pro-environmental emotional attachment had a positive effect on the customer intention to purchase eco-friendly products/ services in the green restaurants, so the results have confirmed the measurement scales from previous studies (the customer feel this green restaurant is a part of me, the customer identify strongly with this green restaurant, the customers visit this green restaurant says a lot about who they are, the customers feel very attached to this green restaurant, the customers feel a strong sense of belonging to this green restaurant, this green restaurant means a lot to them, the customer eat out at other restaurants and feel uncomfortable because of their unfriendliness with the environment, these green practice restaurants come to mind, if someone praised these eco-friendly restaurants, the customer would feel pleased (Jang et al., 2015; Hwang and Kandampully, 2012; Yuksel et al., 2010).

The four contributions of this study found the indirect impacts of green practices on customer intention to purchase eco-friendly products via customers' proenvironmental emotional attachment, this is the first study to find the role mediation variable of customers' pro-environmental emotional attachment between green

practices and customer intention to purchase eco-friendly products/ services that were endorsed in Vietnam context, so the results have confirmed the measurement scales from previous studies (DiPietro et al, 2013-a; Jang et al., 2015; Shapoval et al., 2018). This result yielded the assertion that customers' pro-environmental emotional attachment to an object or services are associated with a financial investment that is willing to pay up to 5 percent or more for protecting environment and safe services (DiPietro et al, 2013-b). The customers also believe in restaurant, where the restaurants use local products, so the customers patronize intention with these businesses and environmentally, therefore, the customers purchase eco-friendly products or the services from organizations that implement green initiatives.

5.2. Practical implications

As the level of green consciousness increases among customers in HCM City and around the world, restaurants should focus more on green operation strategies to have a competitive advantage. This study provides several methods of eliciting customer intention to purchase more eco-friendly products as well as to increase the customer intention to purchase more eco-friendly products in restaurant market. In practice, the restaurants should invest more finance to application of recycling and composting, energy and water management activities, this study did not found the significant of menu sustainability and eco-friendly supplies, therefore, the restaurants should focus more on these factors to increase the customer customer intention to purchase more, the restaurants were also encouraged to attain application of eco-friendly supplies to establish customers' pro-environmental emotional attachment to the services of restaurants. The restaurants consider using suppliers of foods to offer organic foods to customers, such as the restaurants purchase local products and organic food to carry out commitment a sustainability menu. Moreover, the government should support finance and reduce tax for these green restaurants. In addition, the managers should cooperate with suppliers who must invest technology and use green practices to produce in organic foods that increase to protect sustainability environment and foster customers' proenvironmental emotional attachment with the friendly services and indirectly trigger their willingness to dine at the green restaurants.

Furthermore, the government should issue the green certificate for the restaurants that applied green practices and are strongly encouraged the restaurant and hospitality industry to apply green practices such as recycle and compost since it influences customers' pro-environmental emotional attachment toward the services of restaurants as well as the customers' patronizing decisions to choose the green restaurants, the other factors of green practices affect customers' willingness are application of recycling and composting management activities, so the managers of restaurants should provide recycling bins in the restaurant, conduct a food

waste program, purchase products manufactured from recycled or fast renewable materials, and reuse the materials from other construction sites. Therefore, the managers of restaurants should create effective application of recycling and composting management activities, use sustainably sourced ingredients, and implement application of energy and water management activities.

This study supports the idea that, not only in developed countries but in Vietnam as well, customers are greatly concerned with these three factors and recognize that they are factors to develop business sustainability. This could take time and multiple tries as application of recycling and composting management activities are not something that everyone is enthusiastic to adopt due to the complexities involved and the application of recycling and composting management activities in Vietnam is incomplete. Besides the application of recycling and composting management activities, other factors are also important to maintain and improve the business of restaurants are the execution of energy-and-water efficient solutions that can bring fruitful results to restaurant's operations by enhancing customers' proenvironmental emotional attachment and willingness to dine at the restaurants.

Based on demographic analyses, this study found that female customers accounted for 62.6%, who are intention to purchase green products in the restaurants. Moreover, the restaurant customers are young group between 18 to 25 years old, the young customers accounted for 65.1% to be willingness to purchase the green products and support green practices in the restaurants to protect environment as well as willingness to return to dine at the green restaurant because of its environmental functions, and when they visit this green restaurant, so the manager of restaurants and marketers should focus on this group and invest finance to advertise the services of restaurant to this young group. Furthermore, the managers of restaurants should consider using equipment that provides seating where takes advantage of bright sunlit dining areas could also impress environmentally conscious customers. When customers are more informed of a restaurant's green practices and their positive impact on the surrounding environment, they will be more likely to form an customers' pro-environmental emotional attachment and increase customer intention to return these restaurants.

6. Conclusions

This study has reached the research objectives to identify what factors of green practices affect customer intention to purchase green products via customers' pro-environmental emotional attachment to a restaurant. The current work contributed to the extant literature by verifying previous results and confirming the measurement scales in restaurants in Vietnam context adopted from the previous studies. Moreover, this research contributed to extending the TPB by adding

customers' pro-environmental emotional attachment into the TPB to explore the customers' behavior and intention to purchase green products.

Firstly, the results yield a positive significant statistical relationship between green practices (application of recycling and composting management activities, application of energy and water management) and customer intention to purchase green products, the study proved the adoption of the application of recycling and composting management activities are the most significantly impacting practices on customers' patronage intention at a green restaurant, these measurement scales are the most important indicators of green practices drive customer behavioral intentions at a coffee shop, it also confirmed the application of recycling and composting management activities in restaurants HCM City context, the items are using recyclable take-out containers and implementing recycling program are positive significant in this study. The restaurants apply the saving water and energy efficiency and joining recycling programs that lead to affect more on customers' behavioral intention to purchase green products. As a result, the green initiatives in green restaurants have a positive impact on customer intention to purchase ecofriendlier products or services in the restaurant industry. The results proved that green practices, including the application of recycling and composting, energy, and water management activities are an antecedent of customer intention to purchase green products. Secondly, the contribution of this study found the impacts of green practices on customers' pro-environmental emotional attachment had proved that three factors of green practices (application of energy and water management activities, application of organic food-green products and materials, application of recycling and composting management activities) contribute to the formation of customers' pro-environmental emotional attachment to a green restaurant and customers' pro-environmental emotional attachment, respectively. It also overcomes the limitation of previous studies by testing green practices that directly affect customers' emotions and attachment to green restaurants, which confirmed three factors are important and antecedents of customer emotional attachments that contribute to the formation of customers' pro-environmental emotional attachment to green restaurants. The results proved that green practices, including the application of energy and water management activities, the application of organic food-green products and materials, application of recycling and composting management activities are an antecedent of customers' pro-environmental emotional attachment. In addition, this study proved customers' pro-environmental emotional attachment plays a dependent variable to investigate the causes of green practices.

Thirdly, customers' pro-environmental emotional attachment increases their intention to purchase eco-friendly products. Therefore, restaurant marketers need to promote communicating essential information to customers and the market regarding green values to potential customers. We recommend that the restaurants

reinforce their message to customers to lead them to bond their emotions and attachment by presenting the advantages, benefits, and results of protecting the environment through user-friendly programs so that the customers may recognize the green activities of the restaurants behind the operation of green restaurants.

Fourthly, this study found the indirect impacts of green practices on customer intention to purchase eco-friendly products via customers' pro-environmental emotional attachment, the results yielded three factors of green practices, including the application of organic food-green products and materials, application of energy and water management activities, application of recycling and composting management activities have a positive indirect effect on customer intention to purchase eco-friendly products through the mediation of customers' proenvironmental emotional attachment to the green practice restaurants. The results proved that customers' pro-environmental emotional attachment is a key mediation between green practices (application of energy and water management activities, application of organic food-green products and materials, application of recycling and composting management activities) and customer intention to purchase green products. And the results also proved that customers' pro-environmental emotional attachment plays an independent variable, mediation, and dependent variable in our study in HCM City in Vietnam context. This study fills the previous research gap that limitations did not apply to examine customers' pro-environmental emotional attachment play different roles in the research model at the same time.

Our study has achieved successful research objectives. However, it still has some limitations. Firstly, further research should explore various segments of restaurant guests such as nationality. The current study has neither found the influence of the application of eco-friendly supplies, application of organic food-green products and materials nor customer intention to purchase green products. Furthermore, there is no relationship between the application of eco-friendly supplies and customers' proenvironmental emotional attachment. Therefore, further research should investigate to test it in other fields. Secondly, the adopted green practices from previous studies that applied these measurement scales in the green hotels and coffee stores conducted in Western countries, we used these constructs to confirm their theories in a developing country such as Vietnam. Thus, the results have limitations that cannot explain customer behavioral intention related to green practices, customers' pro-environmental emotional attachment, and customer intention to purchase green products. Having been verified on a different group of customers with high environmental consciousness, it may lead to getting a weak point in the HCM City context in our research. Thirdly, since this study provided a novel conceptual framework by extending TPB, further research should verify its veracity and add more factors in the research model such as green consciousness, familiarity, satisfaction, and motivational factors that should be better results than we used customers' pro-environmental emotional attachment in this study. Future research should use these variables that may broaden knowledge of customers' perceptions of green practices and their relationship to patronage intention and apply other methodologies to explore the concepts of green practices like qualitative method, or mixed methods. To ensure the largest possible sample with the least amount of administration, we used a non-probability convenience sampling technique was used to collect data. However, this method of sampling technique has some limitations, like the ability to draw the target sample is not representative of the population. In the future research should be based on a probability sample when the researcher carried out an exploratory study that uses random sampling.

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References

- Ajzen, I., (1985) "From intention to action: the theory of planned behavior". In Kuhl, J., Beckmann, J., ed., *Action Control from Cognition to Behavior*, New York: Springer Verlag.
- Ajzen, I. (1991) "The Theory of Planned Behavior" *Organizational behavior and human decision processes*, Vol. 50, No. 2, pp. 179–211, https://doi.org/10.1016/0749-5978(91)90020-T.
- Ahmad, W., et al. (2020) "Schwartz Personal Values, Theory of Planned Behavior and Environmental Consciousness: How Tourists' Visiting Intentions Towards Eco-friendly Destinations are Shaped?", *Journal of Business Research*, Vol. 110, pp. 228–236. https://doi.org/10.1016/j.jbusres.2020.01.040.
- Chen, J. S., Legrand, W., Sloan, P. (2009) "Determining the Motivations of German Restaurant Goers to Eat Healthy Meals", *Journal of Culinary Science & Technology*, Vol. 7, No. 2–3, pp. 93–104, https://doi.org/10.1080/15428050903313358.
- Chiu, J.-Z., Hsieh, C.-C. (2016) "The Impact of Restaurants' Green Supply Chain Practices on Firm Performance" *Sustainability*, Vol. 8, No. 1, https://doi.org/10.3390/su8010042.
- Choi, G., Parsa, H. G. (2007) "Green Practices II: Measuring Restaurant Managers' Psychological Attributes and Their Willingness to Charge for the "Green Practices" Journal of Foodservice Business Research, Vol. 9, No. 4, https://doi:10.1300/J369v09n04 04.
- Choi, G., et al. (2009) "Consumers' Environmental Concerns and Behaviors in the Lodging Industry: A Comparison between Greece and the United StatesFootnote", *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 10, No. 2, pp. 93–112, https://doi.org/10.1080/15280080902946335.

- DiPietro, R. B., Cao, Y., Partlow, C. (2013-a) "Green Practices in Upscale Foodservice Operations: Customer Perceptions and Purchase Intentions", *International Journal of Contemporary Hospitality Management*, Vol. 25 No. 5, pp. 779–796, https://doi.org/10.1108/IJCHM-May-2012-0082.
- DiPietro, R. B., Gregory, S., Jackson, A. (2013-b) "Going Green in Quick-Service Restaurants: Customer Perceptions and Intentions", *International Journal of Hospitality & Tourism Administration*, Vol. 14, No. 2, pp. 139–156, https://doi.org/10.1080/15256480.2013.782217.
- Dutta, K., et al. (2008) "A Comparative Study of Consumers' Green Practice Orientation in India and the United States: A Study from the Restaurant Industry", *Journal of Foodservice Business Research*, Vol. 11, No. 3, pp. 269–285, https://doi.org/10.1080/15378020802316570.
- Eby, S. F., et al. (2013) "Validation of Shear Wave Elastography in Skeletal Muscle", Journal of Biomechanics, Vol. 46, No. 14, pp. 2381–2387, https://doi.org/10.1016/j.jbiomech.2013.07.033.
- ERST Environmentally and Socially Responsible Tourism Capacity Development Programme (2020), *Responsible Tourism for the food & beverage services sector in Vietnam*. Available at: https://vietnamtourism.gov.vn/esrt/FileDownload28.pdf [Accessed: October 10, 2022].
- Fornell, C., Larcker, D. F. (1981) "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research*, Vol. 18, No. 1, pp. 39–50, https://doi.org/10.1177/002224378101800104.
- Green Restaurant Association (2021) *Green Restaurant Association Certification Standards*, Green Restaurant Association. Available at: https://www.dinegreen.com/certification-standards [Accessed: June 6, 2022].
- Hair, J. F., Ringle, C. M., Sarstedt, M. (2011). "PLS-SEM: Indeed a Silver Bullet", *Journal of Marketing Theory and Practice*, Vol. 19, No. 2, pp. 139–152. https://doi.org/10.2753/MTP1069-6679190202.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., Chong, A. Y. L. (2017). "An Updated and Expanded Assessment of PLS-SEM in Information Systems Research". *Industrial Management & Data Systems*, Vol. 117 No. 3, pp. 442–458. https://doi.org/10.1108/IMDS-04-2016-0130.
- Hair Jr, J. F., et al. (2014) "Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research", *European Business Review*, Vol. 26 No. 2, pp. 106–121, https://doi.org/10.1108/EBR-10-2013-0128.
- Hair, J. F, et al. (2017) "An Updated and Expanded Assessment of PLS-SEM in Information Systems Research" *Industrial Management & Data Systems*, Vol. 117 No. 3, pp. 442–458, https://doi.org/10.1108/IMDS-04-2016-0130.

- Hair, J. F., et al. (2019) "When to Use and How to Report the Results of PLS-SEM", *European Business Review*, Vol. 31, No. 1, pp. 2–24, https://doi.org/10.1108/EBR-11-2018-0203.
- Hair, J. F., et al. (2021) Partial least squares structural equation modeling (PLS-SEM) using R: A workbook, Springer Cham.
- Hu, M., Horng, J., Teng, C. (2013) "A Criteria Model of Restaurant Energy Conservation and Carbon Reduction in Taiwan", Journal of Sustainable Tourism, Vol. 21, No. 5, pp. 37–41, https://doi.org/10.1080/09669582.2012.721787.
- Hwang, J., Kandampully, J. (2012) "The Role of Emotional Aspects in Younger consumer Brand Relationships", *Journal of Product & Brand Management*, Vol. 21 No. 2, pp. 98–108, https://doi.org/10.1108/10610421211215517.
- Jang, Y. J., Kim, W. G., Lee, H. Y. (2015) "Coffee Shop Consumers' Emotional Attachment and Loyalty to Green Stores: The Moderating Role of Green Consciousness", *International Journal of Hospitality Management*, Vol. 44, pp.146–156, https://doi.org/10.1016/j.ijhm.2014.10.001.
- Jeong, E. H and Jang, S.C. (2010) "Effects of Restaurant Green Practices: Which Practices are Important and Effective?", *Caesars Hospitality Research Summit*, Vol. 13 t [Internet]. Available at: https://digitalscholarship.unlv.edu/hhrc/2010/june2010/13/ [Accessed: June 6, 2022]
- Jeong, E., et al. (2014). "The Impact of Eco-friendly Practices on Green Image and Customer Attitudes: An Investigation in a Café Setting", *International Journal of Hospitality Management*, Vol. 41, pp. 10–20, https://doi.org/10.1016/j.ijhm.2014.03.002.
- Jones, P., Comfort, D., Hillier, D. (2004). "A Case Study of Local Food and its Routes to Market in the UK", *British Food Journal*, Vol. 106 No. 4, pp. 328–335. https://doi.org/10.1108/00070700410529582.
- Kang, K. H., et al. (2012) "Consumers' Willingness to Pay for Green Initiatives of the Hotel Industry", International Journal of Hospitality Management, Vol. 31, No. 2, pp. 564–572. https://doi.org/10.1016/j.ijhm.2011.08.001.
- Kim, M. J., Hall, C. M. (2020) "Can Sustainable Restaurant Practices Enhance Customer Loyalty? The Roles of Value Theory and Environmental Concerns", *Journal of Hospitality and Tourism Management*, Vol. 43, pp. 127–138, https://doi.org/10.1016/j.jhtm.2020.03.004.
- Kim, T., Ha, J. (2022) "An Investigation of Customer Psychological Perceptions of Green Consciousness in a Green Hotel Context: Applying a Extended Theory of Planned Behavior", *International Journal of Environmental Research and Public Health*, Vol. 19, No. 11, https://doi.org/10.3390/ijerph19116795.
- Kim, Y., Han, H. (2010) "Intention to Pay Conventional-hotel Prices at a Green hotel a Modification of the Theory of Planned Behavior", *Journal of Sustainable Tourism*, Vol. 18, No. 8, pp. 997–1014, https://doi.org/10.1080/09669582.2010.490300.

- Mai, K. N., Nhan, D. H., Nguyen, P. T. M. (2023) "Empirical Study of Green Practices Fostering Customers' Willingness to Consume via Customer Behaviors: The Case of Green Restaurants in Ho Chi Minh City of Vietnam", *Sustainability*, Vol. 15, No. 5, https://doi.org/10.3390/su15054263.
- Kwok, L., Huang, Y.-K. (2019) "Green Attributes of Restaurants: Do Consumers, Owners, and Managers Think Alike?", *International Journal of Hospitality Management*, Vol. 83, pp. 28–32, https://doi.org/10.1016/j.ijhm.2019.03.011.
- Kwok, L., Huang, Y. K., Hu, L. (2016), "Green Attributes of Restaurants: What Really Matters to Consumers?", *International Journal of Hospitality Management*, Vol. 55, pp. 107–117, https://doi.org/10.1016/j.ijhm.2016.03.002.
- Laroche, M., Bergeron, J., Barbaro-Forleo, G. (2001) "Targeting Consumers who are Willing to Pay More for Environmentally Friendly Products", *Journal of Consumer Marketing*, Vol. 18 No. 6, pp. 503–520, https://doi.org/10.1108/EUM000000006155.
- Lo, J. Y., Chan, W. W., Wong, K. (2011) "A Comparison of Cold-Water Thawing Options in Chinese Restaurants", Cornell Hospitality Quarterly, Vol. 52, No.1, pp. 64–72, https://doi.org/10.1177/1938965510389427.
- Minister of Industry and Trade of Vietnam (2021) *The trend of green consumption is becoming more and more important*, Minister of Industry and Trade of Vietnam. Available at: https://moit.gov.vn/phat-trien-ben-vung/xu-huong-tieu-dung-xanh-ngay-cang-duoc-quan-tam-nhieu-hon.html [Accessed: May 6, 2022].
- Moise, M. S., Gil-Saura, I., Ruiz-Molina, M. E. (2020), "Green Practices as Antecedents of Functional Value, Guest Satisfaction and Loyalty", *Journal of Hospitality and Tourism Insights*, Vol. 4, No. 5, pp. 722–738, https://doi.org/10.1108/JHTI-07-2020-0130.
- Namkung, Y., Jang, S. (2013) "Effects of Restaurant Green Practices on Brand Equity Formation: Do Green Practices Really Matter?", *International Journal of Hospitality Management*, Vol. 33, pp. 85–95, https://doi.org/10.1016/j.ijhm.2012.06.006.
- Namkung, Y., Jang, S. (2017) "Are Consumers Willing to Pay more for Green Practices at Restaurants?", *Journal of Hospitality & Tourism Research*, Vol. 41, No. 3, pp. 329–356, https://doi.org/10.1177/1096348014525632.
- Nimri, R., Patiar, A., Jin, X. (2020) "The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour". Journal of Hospitality and Tourism Management, Vol. 45, pp. 535–543. https://doi.org/10.1016/j.jhtm.2020.10.013.
- Park, C. W., et al. (2010) "Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers", *Journal of Marketing*, Vol. 74, No. 6, pp. 1–17, https://doi.org/10.1509/jmkg.74.6.1.

- Park, E. O., et al. (2020), "The Effects of Green Restaurant Attributes on Customer Satisfaction Using the Structural Topic Model on Online Customer Reviews", *Sustainability*, Vol. 12, No.7, pp. 28–43, https://doi.org/10.3390/su12072843.
- Peng, D. X., Lai, F. (2012) "Using Partial Least Squares in Operations Management Research: A Practical Guideline and Summary of Past Research", *Journal of Operations Management*, Vol. 30, No.6, pp. 467–480, https://doi.org/10.1016/j.jom.2012.06.002.
- Prayag, G., Lee, C. (2019) "Tourist Motivation and Place Attachment: The Mediating Effects of Service Interactions with Hotel Employees", *Journal of Travel & Tourism Marketing*, Vol. 36, No. 1, pp. 90–106, https://doi.org/10.108 0/10548408.2018.1494087.
- Ru-Zhue, J., et al. (2022), "The Effect of Technological Organization on Cost Innovation and Value Creation", *Emerging Science Journal*, Vol. 6, No. 2, pp. 322–336, https://doi:10.28991/ESJ-2022-06-02-09.
- Sang-Arun, J. (2011) Organic Waste in Asia: 3Rs Tackle Climate Change, Asia-Pacific Network for Global Change Research [Internet]. Available at: < https://www.apn-gcr.org/wp-content/uploads/2020/09/9c43a725d46b5eb33e761c638f 3ffd7d.pdf> [Accessed: March 16, 2023].
- Schubert, F., et al. (2010) "Exploring Consumer Perceptions of Green Restaurants in the US". Tourism and Hospitality Research, Vol. 10, No. 4, pp. 286–300, https://doi.org/10.1057/thr.2010.17.
- Shapoval, V., Murphy, K. S., Severt, D. (2018) "Does Service Quality Really Matter at Green Restaurants for Millennial Consumers? The Moderating Effects of Gender Between Loyalty and Satisfaction", *Journal of Foodservice Business Research*, Vol. 21, No. 6, pp. 591–609, https://doi.org/10.1080/15378020.2018. 1483698.
- Statista search (2023). Available at: https://www.statista.com/statistics/1211852/vietnam-monthly-average-income-per-capita-in-ho-chi-minh-city/ [Accessed: February 6, 2023].
- Sun-Hwa, K., Kiwon, L., Ann, F. (2017) "The Review of "green" Research in Hospitality, 2000-2014 Current Trends and Future Research Directions", *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 1, pp. 226–247. https://doi.org/10.1108/IJCHM-11-2014-0562.
- Tan, B., Yeap, P. (2012) "What Drives Green Restaurant Patronage Intention?", *International Journal of Business and Management*, Vol. 7, No. 2, pp. 215–223. https://doi.org/10.5539/ijbm.v7n2p215.
- Tan, B. C., et al. (2018) "A Qualitative Study of Green Practices Adoption for Restaurants in Malaysia", Vol. 15 No. 8, pp. 1087–1099, https://doi.org/10.1108/ SRJ-07-2017-0119.
- Thomson, M., MacInnis, D. J., Park, W. (2005) "The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands", *Journal of*

- Consumer Psychology, Vol. 15, No. 1, pp. 77–91, https://doi.org/10.1207/s15327663jcp1501 10.
- Trang, H. L. T., Lee, J. S., Han, H. (2019) "How do Green Attributes Elicit Proenvironmental Behaviors in Guests? The Case of Green Hotels in Vietnam", *Journal of Travel & Tourism Marketing*, Vol. 36, No. 1, pp. 14–28, https://doi.org/10.1080/10548408.2018.1486782.
- Tripadvisor (2022) *The best restaurants in HCM City*. Available at: https://www.tripadvisor.com.vn/Restaurants-g293925-Ho_Chi_Minh_City.html [Accessed: October 10, 2022].
- Topbrands (2022) *Top 10 most luxurious restaurants in Ho Chi Minh City*. Available at: https://topbrands.vn/top-nha-hang-sang-trong-bac-nhat-o-tphcm [Accessed: October 10, 2022].
- Digiticket (2022) *Ten luxurious 5-star restaurants in Ho Chi Minh City, beautiful view, best food.* Available at: https://digiticket.vn/blog/nha-hang-5-sao-tphcm/ [Accessed: October 10, 2022].
- Justfly (2022) *Top 22 most famous and delicious restaurants in Saigon*. Available at: < https://justfly.vn/discovery/vietnam/ho-chi-minh-city/nha-hang-noitieng>[Accessed: October 10, 2022].
- VNAT-Vietnam National Administration of Tourism, Ministry of culture sport and tourism (2013) Tourism Sustainable Label for Restaurants Green Lotus Label. Available at: https://vietnamtourism.gov.vn/esrt/default.aspx-portalid=5&tabid=387&itemid=85.htm [Accessed: September 10, 2022].
- VNAT- Vietnam National Administration of Tourism. (2015). Granting certificate of green lotus label for 33 accommodations. Available at:< https://vietnamtourism.gov.vn/en/post/9877> [Accessed: September 10, 2022].
- Vlachos, P. A., et al. (2010) "Consumer retailer emotional attachment: Some antecedents and the moderating role of attachment anxiety", *European Journal of Marketing*, Vol. 44, No. 9/10, pp. 1478–1499, https://doi.org/10.1108/03090561011062934.
- Wang, R. (2012) "Investigations of Important and Effective Effects of Green Practices in Restaurants", *Procedia-Social and Behavioral Sciences*, Vol. 40, pp. 94–98, https://doi.org/10.1016/j.sbspro.2012.03.166.
- Wang, Y. F., et al. (2013) "Developing Green Management Standards for Restaurants: An Application of Green Supply Chain Management", *International journal of Hospitality management*, Vol. 34, pp. 263–273, https://doi.org/10.1016/j.ijhm.2013.04.001.
- Wang, J., et al. (2018) "Extending the theory of planned behavior to understand consumers' intentions to visit green hotels in the Chinese context", International Journal of Contemporary Hospitality Management, Vol. 30, No. 8, pp. 2810—2825. https://doi.org/10.1108/IJCHM-04-2017-0223.

- Wetzels, M., Odekerken-Schröder, G., Van Oppen, C. (2009) "Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration", *MIS quarterly*, Vol. 33, No. 1, pp. 177–195, https://doi.org/10.2307/20650284.
- Wu, H.-C., et al. (2019) "Relationships between restaurant attachment, experiential relationship quality and experiential relationship intentions: The case of single friendly restaurants in Taiwan". *Journal of Hospitality and Tourism Management*, Vol. 40, pp. 50–66, https://doi.org/10.1016/j.jhtm.2019.06.002.
- Xie, C., Bagozzi, R. P., Grønhaug, K. (2015) "The Role of Moral Emotions and Individual Differences in Consumer Responses to Corporate Green and Nongreen Actions", Journal of the Academy of Marketing Science, Vol. 43, No. 3, pp. 333–356, https://doi.org/10.1007/s11747-014-0394-5.
- Yarimoglu, E., Gunay, T. (2020) "The Extended Theory of Planned Behavior in Turkish Customers' Intentions to Visit Green Hotels", Business Strategy and the Environment, Vol. 29, No. 3, pp. 1097–1108, https://doi.org/10.1002/bse.2419.
- Yuksel, A., Yuksel, F., Bilim, Y. (2010) "Destination Attachment: Effects on Customer Satisfaction and Cognitive, Affective and Conative Loyalty", *Tourism Management*, Vol. 31, No. 2, pp. 274–284, https://doi.org/10.1016/j.tourman.2009.03.007.
- Yusof, Y., et al. (2017), "The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry", *International Journal of Green Economics*, Vol. 11, No.1, pp. 1–14, https://doi.org/10.1504/IJGE.2017.082716.
- Zhang, B., Kim, J. H. (2013) "Luxury fashion consumption in China: Factors affecting attitude and purchase intent", *Journal of Retailing and Consumer Services*, Vol. 20, No. 1, pp. 68–79, https://doi.org/10.1016/j.jretconser.2012.10.007.

Učinci zelene prakse restorana na namjeru kupca da kupe ekološki prihvatljive proizvode: Dokazi iz Vijetnama

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Sažetak

Cilj je ovog istraživanja utvrditi način na koji zelene prakse utječu na namjeru kupca da kupi ekološke proizvode putem emocionalne povezanosti kupaca. Korištenje PLS-SEM-a za analizu gostiju iz 358 restorana kako bi se utvrdila namjera kupca da kupi ekološke proizvode temeljni je dio uspjeha restorana. Rezultati istraživanja upućuju na to da primjena recikliranja i kompostiranja, aktivnosti gospodarenja energijom i vodama imaju pozitivan utjecaj na namjeru kupca da kupi zelene proizvode i pro-ekološku emocionalnu privrženost te da primjena organske hrane –zelenih proizvoda i materijala na ekološku proizvodnju imaju značajan utjecaj na emocionalnu privrženost, ali ne i na namjeru kupca da kupi zelene proizvode. U međuvremenu, primjena ekološki prihvatljivih zaliha nije utjecala na emocionalnu privrženost i namjeru kupaca za kupnjom. Emocionalna vezanost za zaštitu okoliša ključni je posrednik modela namjere kupaca.Rezultati su osigurali i znanje i teoriju zelene prakse dodajući emocionalnu privrženost kupaca teoriji o planiranom ponašanju kako bi se razumjelo ponašanje kupaca prema zelenim restoranima. Predlažu se menadžerske preporuke i strategije izgradnje za dugoročno povećanje namjere kupca da kupi zelene proizvode u ugostiteljstvu.

Ključne riječi: zelene prakse, zeleni restorani, emocionalna vezanost

JEL klasifikacija: Z3, L8, L83

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