

THE INFLUENCE OF HOTEL MANAGERS' INTENTIONS FOR GREEN  
MARKETING PRACTICES: AN APPLICATION OF THE THEORY OF PLANNED  
BEHAVIOR IN TURKEY

A Thesis

by

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## ABSTRACT

What drives hotel managers to adapt green practices in their hotel especially in developing countries with less policy and control of environmental impacts? In seeking to answer this question, the developing country of Turkey was selected as an ideal context given the lack of sustainable development throughout its hospitality industry. Applying Theory of Planned Behavior (TPB) as the main theoretical framework, this research studied how hotel managers' behavioral intentions are related to determinants within the TPB, and how managerial intentions predict their green marketing behavior. In addition to the existing constructs within the TPB model, environmental attitude (as measured through the NEP Scale) was added as a modification. Ultimately, the framework aimed to assess how marketing intentions translates to actual green marketing behavior among hotel managers throughout Turkey.

Based on previous studies, an online survey was designed to measure the above constructs. A census was taken of all one-to five-star hotels and boutique hotels registered to Republic of Turkey Tourism and Culture Ministry. To potentially increase the response rate of participation, the researcher offered hotel managers an incentive of planting a tree for every completed questionnaire through TEMA (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats). Overall, 160 hotel managers completed questionnaires (i.e., a response rate of 8.3%). The result of the study indicates that environmental attitude, attitude toward green marketing, subjective norms and perceived behavior control each significantly

predict managers' intention to practice green marketing. Furthermore, the study found a strong relationship between managers' intention to practice green marketing and green marketing behavior.

Finally, theoretical relations and several implications associated with hotel managers and green marketing were presented. Additionally, the limitations of the study followed by suggestions for improvements and possible directions for future research were discussed. This study contributes to the organizational greening and green marketing literature by increasing the understanding of how managers' attitudes and intentions toward green marketing are associated with green marketing practices at hotels in a developing country. Although managers should seriously pay attention to environmental issues and act responsibly, they do not always behave accordingly, because their behavior is directed by some constraints. Thus, financial aid seems to be especially important in developing countries. Governments should support hospitality sector by providing economic incentives for the industry to adopt environmentally sound practices. This may include certain creating environmental requirements in the hotel environmental standardization procedures and monitoring the process throughout time. Collaboration with stakeholders in regards to green marketing will also aid in alleviating problems with the hospitality tourism sector.

## DEDICATION

I dedicate this work to my parents, Ekrem Polat and Gul Polat and my husband, Emrah Yilmaz. Thank you all for your endless love and support.

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## CHAPTER I

### INTRODUCTION

The economic and social benefits that tourism offers us for tomorrow will depend on the decisions made today. We have a limited environment in which to live, and much of it is already compromised by various industrial and technological developments. Furthermore, global climate change, depletion of the stratospheric ozone layer, over-consumption of natural non-renewable resources and air pollution—all contribute to great uncertainty for the natural environment in the coming years. Adopting environmental management is no longer an option, but an obligation necessary for sustainability and business success within the hospitality and tourism industries. Research about a company's response to environmental concerns has mainly focused on the manufacturing industry; companies based in the service sector have been slower than the manufacturing industry in responding to environmental issues and have therefore attracted much less research attention (Alvarez, 2001; Ayuso, 2006). Kirk argued that there is a dilemma in persuading hospitality companies to take environmental management seriously, because the hospitality industry consists of a large number of small operations, which minimally contribute to environmental pollution and are responsible for minimal consumption of energy, water, food and other resources. However, the overall impacts of all of these small individual operations have a significant effect on global resources (Kirk, 1995; Kirk, 1998).

## **Tourism and the Hotel Industry**

According to the United Nations Environment Programme's (UNEP) 2011 Green Economy Report, the tourism industry (representing 5% of the world's gross domestic product (GDP), contributing to about 8% of total employment) is one of the most important contributors to the global economy and with the right investments and decisions, can continue to grow over the decades while mitigating its environmental impacts. The tourism industry is highly dependent on the natural environment because of the characteristics of its functions and services (Curtin & Busby, 1999) and has been concerned with the impacts that tourism can have on natural resources (Claver, 2007; Shunnaq, 2008). Tourism has been shown to generate negative environmental impacts by consuming large amounts of local and imported non-durable goods, energy and water. According to UNEP and the United Nations World Tourism Organization (UNWTO) (2007), tourism is responsible for 5% of the world's CO<sub>2</sub> emissions, largely created by transport (75% of all emissions) and to a lesser extent by accommodation (approximately 20% of emissions from tourism). This is a comparatively small, yet important, footprint that the tourism sector has assumed as a priority to be addressed.

The importance of high environmental quality for the development of tourism was recognized by the WTO in the late 1970s. According to the first Earth Summit held in Rio de Janeiro in 1992, which emphasized the need for businesses to comply with environmental regulations and policies to mitigate global environmental problems, tourism was one of the priority industries that had the potential to make a positive contribution to a healthier planet. Following the 1992 Rio Earth Summit, the green

movement gained attention within the hospitality industry. As an emerging strategy, environmental management has become more attractive to hotel managers because it ensures managers derive benefits for their firm while preserving natural resources—which is a great management challenge (Cramer, 1998).

“Hotels constitute a key element of the organized chain of activity in the travel and tourism industry, and occupy a crucial place in concerns over environmental protection related to tourism and travel” (Erdogan & Baris, 2007, p. 604). Buildings contribute considerably to global environmental impacts (Scheuer, 2003) due to their energy consumption compounded by greenhouse gas (GHG) emissions (Blengini, 2009) emerging from different services and activities in operating a building. Hotels are one of the most energy-demanding buildings among all categories of the building stock (Dascalaki & Balaras, 2004) because of their 24-hour-based operation (Deng, 2003) and their broad range of facilities and functions. In Greece and Spain among commercial buildings, hotels consume the most energy with a share of 1/3 of their total energy demand; in France, the UK and USA the share of hotels is lower, but yet significant, at 18%, 16% and 14% respectively (Dascalaki et al., 2004). It is believed that a large portion of hotels’ energy consumption is waste, thus energy conservation opportunities would help hotels significantly reduce their carbon footprint (Khemiri & Hassairi, 2005). Only 10% of hotels worldwide currently have sound energy management programs; the majority of them have limited awareness of their energy consumption and carbon emission (Dascalaki et al., 2004). Therefore more environmental practices in hotels are needed and more research about this topic is required.

Being an environmentally-friendly hotel would provide the following benefits: contributing to the sustainability of natural resources, reducing future costs, having a competitive advantage in responding customer expectations of being environmentally-conscientious and affording the opportunity for greater recognition by media and among stakeholders (Newman & Breeden, 1992). Therefore, environmental management creates a win-win situation, in which both the hotel industry and environment benefit (Cortes, 2007). It is important to know what determines hotels' environmental activities and commitment. Environmental legislation, the availability of resources and capabilities and stakeholders (e.g. customers, local communities, government agencies and public interest groups), are important factors in environmental decision-making and actions (Banerjee, 2003). Some research has revealed a connection between managers' perceptions of environmental issues and choice of environmental management, thus managers' environmental perception is an effective factor to practice proactive environmental management (Sharma, 2000).

### **Tourism in Turkey**

Turkey's geographical location forms a bridge between Europe and Asia. The country serves as a nexus of East and West culture. As a result of this, Turkey is a popular destination for travelers seeking the Aegean and Mediterranean coastline. Statistics for 2008 indicated that about 58.5% of incoming tourists visiting Turkey choose the country for vacation (sea, sun, and sand tourism), 11.1% for visiting their friends or families and 6.4% choose Turkey solely for its culture (Okumus, 2012; TURSAB, 2009). Although Turkey has a rich source of culture including famous

cuisine, historical architecture, history of different civilizations and religions, traditions, local dresses, handcrafts, festivals etc., “Turkey has been positioned as more a sun, sea, and sand destination than a cultural destination” (Okumus et al., 2012, p. 638).

Since the 1980s, tourism in Turkey has growth enormously, as the country is now among the top 10 tourism destinations worldwide in terms of tourist arrivals and receipts (UNWTO, 2013). According to the World Travel & Tourism Council (WTTC) Travel and Tourism and Economic Impact 2014 Report, the direct contribution of travel and tourism to GDP in 2013 in Turkey was TRY 71.1bn (4.6% of GDP) and it is forecasted to rise by 6.1% in 2014.

Tourism is one of the main financial sources of foreign currency earning and employment creation. Because of the economic necessities, decision makers promote tourism development without taking into account the principles of development and sustainable tourism (Tosun, 2000). The implication of the Turkish tourism development policy is derived from this point of view. The Turkish government in 1982 enacted the Tourism Encouragement Law No. 2634 to accelerate mass tourism development. The law has provided a large amount of scale and monetary incentives for both private and public entrepreneurs’ investments which has taken place in tourism zones and centers as determined by the Tourism Incentive Act No.2634 (Dal, 2011). The Tourism Investment Law of 1982 has caused excessive development of tourism establishments in coastal areas throughout the country, putting high pressure on natural resources.

Tourism plans in Turkey have focused mainly on maximizing foreign tourist numbers. Tosun (2000) identified the main shortcomings of the tourism development

approach in Turkey as follows: (1) lack of flexibility and decentralization, (2) lack of comprehensiveness and integration, (3) lack of a community perspective, (4) lack of consistency, co-ordination and co-operation and (5) being driven by an industry dominated by international tour operators, multinational companies, major domestic business interests and central government. In 2007, the Ministry of Culture and Tourism stated the vision of Turkish Tourism in a tourism development plan as: “With the adoption of sustainable tourism approach, tourism and travel industry will be brought to a leading position for leveraging rates of employment and regional development and it will be ensured that Turkey becomes a world brand in tourism and a major destination in the list of top five countries receiving the highest number of tourist and highest tourism revenues by 2023” (Ministry of Culture and Tourism, 2007, p. 4). Even though, the vision includes mention of a sustainable tourism approach, how to apply sustainable tourism was not well-explained in the tourism development plan.

Coastal tourism in Turkey is a remarkable source of revenue and beaches are one of the major assets. However, coastal tourism is in danger because of excessive coastal development, uncontrolled hotel construction, erosion and pollution (Birdir, 2013). “The tourism facility developments in the prime Aegean and Mediterranean coastal regions took place to a large extent in a haphazard way” (Brotherton & Himmetoglu, 1997, p. 77). Even though the Ministry of Tourism has developed physical land-use planning and development guidelines, implementation of the land-use planning regulations are ignored easily by private entrepreneurs because there is little regulatory incentive (Tosun, 2001).

The construction of hotels and other facilities has not been integrated into the nature and traditional architectural styles which is defined as architectural pollution. Moreover, environmental pollution has become a major problem in many tourist destinations in Turkey; sewage disposal systems were installed only to meet the local residents' needs without taking into account tourism development. Sewage disposal systems have been compromised because a carrying capacity was not established when establishing the infrastructure. Many hotels outside the main settlements have not linked their sewage disposal system to the main system because of installation costs; therefore it is possible that non-solid waste finds its way into natural water supplies (Tosun et al., 2001).

Seeing that there is no strict control and regulation that would have prevented hoteliers from polluting the environment, it is important for the future of tourism in Turkey to identify why some hoteliers adapt to environmental management while others ignore it. Since sustainable marketing (i.e., making a net-positive contribution to society through environmental, social and economic development) is an important component of environmental management, this study will investigate whether a relationship exists between hotels' green marketing practices (as an outcome) and managerial attitudes and intentions (as predictors). Although marketing is known as a key driver of consumption and some people may perceive sustainability and marketing are as different as "chalk and cheese," there is a synergy between these two concepts (Ferdous, 2010). More importantly, marketing can promote both consumers' and businesses' environmentally-friendly behavior and serve to accelerate sustainability.

## CHAPTER II

### LITERATURE REVIEW

This study investigated how managers' behavioral intentions toward green marketing are related to determinants within the Theory of Planned Behavior (TPB) (attitudes, subjective norms, and perceived behavior control) and environmental attitude (which is included as an additional determinant into the TPB). This study also developed an understanding of how green marketing intentions predict actual green marketing behavior. In this literature review, the theory of planned behavior (TPB) is initially discussed. Previous literature about the New Environmental Paradigm (NEP) (which was used to determine managers' environmental attitude) and green marketing is also reviewed. Finally, proposed hypotheses of this study are included at the close of this chapter.

#### **The Theory of Planned Behavior**

The TPB is a psychological model, which has grown out of the initial theory of reasoned action (TRA) (Fishbein & Ajzen, 1975) examining the factors that influence behavior. According to TRA, most human behaviors can be predicted from a person's intention because such behaviors are volitional and under the control of intention (Ajzen & Fishbein, 1980). TRA had been widely used as a model to predict behavioral intentions and behaviors in the area of marketing and consumer behaviors (Lam & Hsu, 2004; Lee, 2005; Sheppard, Hartwick, & Warshaw, 1988). Even though it has strong predictive power, the applicability of TRA has been questioned because it is not

sufficient to predict individual's behavior which can also be determined by non-volitional factors (Ajzen, 1985). TPB includes an additional dimension of perceived behavioral control as the determinant of behavioral intention. Thus, this additional dimension leads TPB to be more applicable to behaviors that cannot be fully controlled by individuals (Corby, Jamner & Wolitski, 1996).

Fishbein & Ajzen (1975) indicated that people are essentially rational, and they “make systematic use of information available to them” and are not “controlled by unconscious motives or overpowering desires”, neither is their behavior “capricious or thoughtless” (Fishbein et al., 1975, p. 15). Despite the fact that there is no perfect relationship between intention and actual behavior, intention is still considered to be the best predictor of behavior (Ajzen et al., 1985, 1991; Lam & Hsu, 2004). Ajzen (1991) also points out that, the stronger intention that an individual has to perform a specific behavior, the more likely the individual will engage in the behavior. According to the theory, this intention is based on three determinants: attitudes toward the behavior, subjective norms and perceived behavioral control. As a common rule, the more positive the attitude and subjective norm, and the greater the perceived behavioral control, the stronger should be the person's intention to perform the behavior (Davis, 2002).

When people have an adequate degree of actual control over the behavior, people are expected to perform their intentions when the opportunity arises (Davis et al., 2002). In many studies using the TPB model, behavioral intention is considered as a proxy measure of likely behavior (Sparks & Pan, 2009). Although the model certainly has its

limitations, it has been an influential attitude-behavior model because of its clarity and simplicity (Regis, 1990).

TPB has been used extensively in a variety of contexts across numerous fields and disciplines, including tourism and hospitality (Han, Hsu & Sheu, 2010; Han & Kim, 2010; Lam et al., 2004; Quintal, Lee & Soutar, 2010; Sparks, 2007; Sparks et al., 2009). For instance, it has been used to explore consumers' intention to consume ready-to-eat meals (Olsen, 2010), the social psychology of seat-belt use (Simsekoglu, 2008), teachers' intentions to teach physically active physical education classes (Martin, Kulinna, Eklund & Reed, 2001), blood donation behavior (Holdershaw, 2011), and attitudes toward wine tourism (Sparks et al., 2007). Additionally, the model has been validated to predict a large variety of intentions and behaviors. Some additional constructs are used by different scholars to enhance the predictive power of TPB, such as the achievement of personal goals, moral norms, anticipated emotions, self-identity process, past behaviors etc. Given the adaptability of TPB in various contexts and settings, and the purpose of the present study, TPB is considered an appropriate framework to utilize.

### *Attitude*

The first determinant of behavioral intention is attitude. Ajzen (1991) described such measures as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (p. 188). While deciding whether to perform a specific behavior, a person is likely to evaluate the benefits and the costs of the outcomes of the behavior (Cheng, Lam & Hsu, 2006). An individual's positive

attitude toward a certain behavior strengthens his/her intention to perform said behavior (Ajzen et al., 1991). In other words, people have a favorable attitude when the results of the behavior are positively evaluated and, thus, they are likely to engage in that specific behavior (Ajzen et al., 1991; Han, Hsu & Lee 2009).

Han, Hsu & Sheu (2010) explained the formation of hotel customers' intentions to visit a green hotel. They found that attitude toward a behavior had a greater influence on visit intention than subjective norm and perceived behavioral control. According to this finding they inferred that it could be effective for green hotel managers to focus on the ways to increase positive attitude to enhance hotel customers' intention to visit a green property. Furthermore, the study suggested that creating strong positive outcome beliefs through various media can contribute to enhancing attitude. "Marketers at a green hotel should actively find ways to increase environmental concerns (e.g., promoting green campaigns) that potentially contribute to building their favorable attitude toward a green consumption in the long-term" (Han et al., 2010, p. 331). By doing so, they noted that customers would be more socially-responsible toward the environment, and be more likely to choose green hotels.

### *Subjective Norms*

"The ultimate determinants of any behavior are the behavioral beliefs concerning its consequences and normative beliefs concerning the prescriptions of others" (Ajzen & Fishbein, 1980, p. 239). Subjective norms represent an individual's estimate of the social pressures on him/her to perform or not perform the behavior (Ajzen et al., 1991). People are not only affected by groups to which they belong, but also by reference groups which

they refer to opinion or judgment (Wang & Ritchie, 2010; Wang & Ritchie, 2012).

Social reference groups can have a major influence on individuals' beliefs, attitudes, and choices because people always turn to particular groups for their standards of judgment (Hsu & Huang, 2012). Subjective norms include two key elements which function together. The first is an individual's beliefs about how other people would like him/her to behave (normative beliefs). The second is motivation to comply with the significant referents' opinions about the behavior (motivation to comply) (Ajzen et al., 1991; Ajzen et al., 1980).

In a hospitality setting, Han and Kim (2010) developed a modified model of the TPB by taking such variables as service quality, customer satisfaction, overall image, and frequency of past behavior into account in order to better predict green hotel customers' intention to revisit. The study found that subjective norms, which are perceived social pressure from customers' significant referents, have the greatest direct effect on intention to revisit a green hotel among three variables under consideration (i.e., attitude, subjective norms and perceived behavior control). In the study it was indicated that a persons' perceived social pressure from referents to engage in a certain behavior induces his/her positive or negative evaluation of a behavior. Possible positive connections between subjective norms and attitudes toward behaviors were also tested in previous studies (e.g. Chang 1998; Han & Kim, 2010; Han et al., 2010; Ryu & Jang, 2006). Chang (1998) mentioned that adding a path from subjective norms to attitude was important to increase the strength of the model. Ryu and Jang (2006) found that perceived subjective norm has a positive effect on attitude toward a certain behavior.

Similarly, Han and Kim found a direct, positive and significant relationship between subjective norms and attitude (2010) and they inferred that social pressure from critical referents is important to explain customers' eco-friendly purchasing behavior. Given such evidence, the current study proposed to add a path from subjective norm to attitude.

#### *Perceived Behavior Control*

TPB includes an additional dimension of perceived behavior control as the determinant of behavioral intention. Thus, this additional dimension leads TPB to be more applicable to behaviors that cannot be fully controlled by individuals (Corby et al., 1996). Perceived behavioral control refers to an individual's perception of his/her ability to conduct a behavior (Ajzen et al., 1991; Huchting, Lac, & LaBrie, 2008). This construct has two aspects: The first aspect of this construct is control beliefs, which specify an individual's personal assessment of presence or absence of the facilitators of the behavior, such as money or skill. The second one is perceived power, which means his/her personal evaluation of the impact of the factors in facilitating the certain behavior (Ajzen et al., 1991; Huchting et al., 2008; Lam et al., 2006). Although managers should seriously pay attention to environmental issues and act responsibly, they do not always behave accordingly, because their behavior is directed by some constraints (Martin, 2010). Thus it is important to evaluate perceived behavior control to understand the behaviors that cannot be fully controlled by individuals. (Corby et al., 1996).

In a tourism context, Lam and Hsu (2010) found that perceived behavior control had the greatest impact in determining Chinese travelers' behavioral intention, marked by a negative correlation. This means that the higher degree of perceived travel barriers

for travelling to a destination causes the lower degree of intention of traveling to the destination. Lam and Hsu (2010) indicated that a possible reason of this finding can be the various constraints, high expenses, short vacation leaves, visa application procedures, and safety issues, affecting Chinese tourists when they choose a travel destination.

### **Environmental Attitude and the New Environmental Paradigm (NEP)**

Natural scientists started to investigate which human behavior were harmful to the environment more than 50 years ago, and their work was soon followed by social scientists who were searching to understand how humans relate to the environment (Hawcroft, 2010). In the recent past, The New Environmental Paradigm (NEP) has been widely used to explore individuals' environmental worldviews. The extensive use of NEP has been demonstrated by a meta-analysis covering over 300 articles citing the measure (Dunlap & Van Liere, 2008).

In contrast with the Dominant Social Paradigm (DSP) which acknowledges “the fact that human societies depend on their biophysical environment for survival”, the goal of NEP is to measure the adherence of individuals to an “ecological worldview” (Van Liere & Dunlap, 1980). According to the DSP, *homo sapiens* are exempt from ecological constraints. On the other hand, the environmental paradigm mentions that human beings are governed by the same physical laws which regulate the growth and development of all other species. Thus, the NEP rejects the “exemptionalist” perspective on human societies (Van Liere et al., 1980). The ideas included in the NEP seek to preserve the balance of nature, questioning the belief that all humanity has the right to rule over

nature or anthropocentrism (Dunlap et al., 2008). To measure environmental concern, Dunlap and Van Liere (1978) developed a 12-item scale that consists of three components: (1) humans' ability to upset the balance of nature, (2) the existence of limits to growth, and (3) humans' right to rule over the rest of nature.

To gain a better understanding about the human behavior toward nature, social scientists have been trying to measure peoples' environmental attitudes in a valid and reliable way. "Environmental attitudes are a psychological tendency expressed by evaluating the natural environment with some degree of favour or disfavour, and are a crucial construct in the field of environmental psychology, discussed in more than half of all publications in this area" (Hawcroft et al., 2010, p. 143). The NEP as a useful scale to measure the overall relationship between humans and the environment, is naturally used as a unidimensional measure of environmental attitude (Hawcroft et al., 2010). As the NEP has become broadly accepted to measure environmental attitudes, actual environmental problems have become more complicated such as ozone depletion, climate change, deforestation, loss of biodiversity, etc (Dunlap, 2000). Due to this, Dunlap and colleagues decided to revise the original NEP scale because of the imbalance of pro- and anti-NEP statements (as two of the three facets contained only pro-trait and one facet contained only con-trait items) in the scale, a narrowness of the original three factors, and some sexist terminology (e.g., "mankind") (Dunlap et al., 2000).

A revised NEP which was named as the "New Ecological Paradigm" was therefore created in an effort to make it more psychometrically sound and avoid sexist terminology (Dunlap et al., 2000). In addition to the three original facets of the reality of

limits to growth, antianthropocentrism, the fragility of nature's balance, the facets of rejection of exemptionalism (which is the belief that humans are exempt from the constraints of nature), and the possibility of an eco-crisis (which is catastrophic environmental changes or ecocrises caused by human beings) were added to broaden the content of the measure. The New Ecological Paradigm includes 15 items.

The NEP has been used widely as a measure for environmental attitudes in a tourism context. Uysal (1994) found that there is a weak linkage between demographic variables and the NEP. Several other studies used environmental attitudes to investigate the relationship between the NEP and socio-demographic characteristics. (Formica & Uysal 2002; Jurowski, Uysal, & Noe 1993; Zografos & Allcroft, 2007). On the other hand, in several studies, the NEP was found related to site-specific preferences and motivational factors (Khan 2004; Kim, Borges, & Chon 2006; Uysal et al. 1994). Accordingly, Luo and Deng (2008) found that individuals, who are more concerned about eco-crises, tend to be closer to nature, to learn about nature, and to escape from their daily routines. Therefore they indicated that environmental attitudes and nature-based tourism motivations are closely and positively related. Thus, the previous studies show that the NEP could be an applicable scale used in a tourism context.

### **Green Marketing**

In recent decades, green consumerism has been rising, and many companies have declared themselves committed environmentalists, integrating environmental aspects in the development of their company policies and strategies. By the 1990s, people started to worry more about the environment because of climate change, global warming, and

depletion of natural resources, realizing the effects of climate change in their daily lives (Strick & Fenich, 2013). Every year, increasing numbers of individuals are willing to pay premiums for environmentally-friendly goods which are recycled or recyclable (Laroche, Bergeron & Barbaro-Forleo, 2001).

Consequently, environmental features of products possibly affect the preferences and decision making process of consumers. If companies supply environmental products to satisfy their customers' environmental needs, then their customers would have more positive ideas about their products (Chen, 2010). Many marketing researchers claim that increasing customers' positive pre/post-purchasing decisions is the key to firms' long-term success (Kim & Han, 2012).

The traditional marketing approach which is based on a classic economic paradigm and aggressive selling tactics to sell more products, still dominates much of the world's marketing practices. "Partially shunned and minimally understood, some people perceive sustainable tourism marketing to be an oxymoron in sustainable tourism where much of marketing is hijacked as promotion" (Jamrozy 2007, p. 117). For a long time, the classic definition of marketing by the American Marketing Association was "the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives" (Lush, 2007). Because the previous philosophy was not beneficial for both companies and society in the long run, new marketing applications and definitions evolved. The most recent definition of marketing put forth in July 2013 by the American Marketing Association was, "Marketing is the activity, set of

institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (AMA, 2013).

As a contrast to the traditional marketing perspective, to apply green marketing management successfully, pro-environmental ideas should be integrated into all aspects of marketing (Ottman, 1992). According to Wolfe and Shanklin (2001), the term “green” refers to actions that decrease negative impacts on our environment and can alternatively be called “eco-friendly,” “environmentally-responsible,” “environmentally-friendly” and “sustainable”. The AMA claims green marketing involves, “The marketing of products that are presumed to be environmentally safe (retailing definition); The development and marketing of products designed to minimize negative effects on the physical environment or to improve its quality (social marketing definition); The efforts by organizations to produce, promote, package, and reclaim products in a manner that is sensitive or responsive to ecological concerns (environments definition).” (AMA, 2013)

Pressure to embrace green marketing and management in the hospitality and tourism industry cannot be ignored by firms anymore. As a result, companies need to adapt to new green business models that can help perpetuate their future existence. Some organizations perceive green marketing as an opportunity to achieve their objectives. Today it is possible to see green certifications and eco-labels in many industries. These certifications or eco-labels help people to determine whether the product or service has green qualifications. In the hotel industry, many hoteliers use “green hotel” labels as a marketing tool to attract potential customers (Pizam, 2009). Green hotels can be defined

as environmentally-responsible hotels which follow environmental guidelines, practice eco-friendly practices, adopt an environmental management system and commit themselves for environmental improvement by displaying eco-labels or a green globe logo (Han , 2009). Manaktola and Jauhari (2007) stated that marketing a hotel's environmentally-friendly practices can increase the competitiveness of a hotel by differentiating itself from others. Although few hotel customers would agree to pay a premium to purchase green hotel practices such as staying in a “green” room (Millar & Baloglu, 2011), a green image can still play a critical role in customers' decisions making process and buying behaviors (Prendergast & Man, 2002; Lee, 2010). It is assumed that corporate reputation will be the most competitive factor and it will take the place of product innovation and design, quality and service over the next 50 years (Martin, 2010). Molina and Azorin (2009) claim that managers are considering environmental issues during their decision making process, not only to comply with the business ethics and social responsibilities but also to ensure sustainable economic success (Myunga, McClaren & Li, 2012).

Green marketing is also practiced when the hospitality industry promotes recycling, energy savings, and other environmental practices. “Environmental marketing can go a step further when creating a new environmental consciousness that promotes preservation and conservation in the future” (Jamrozy et al., 2007, p.123). Furthermore, the greening of hotels' facilities avoids criticism of existing hotel practices because the green practices would satisfy eco-friendly customers' green needs and fulfill the requirements of government regulations (Kim et al., 2012). Chen (2010) indicated that

there are five reasons for businesses to develop green marketing which are to: comply with environmental pressures; obtain a competitive advantage; improve corporate images; seek new markets or opportunities; and enhance product value.

While many organizations implement long-term, proactive environmental strategies, some companies launch environmentally-friendly products which can mislead people with false promises (Davis, 1991). Accordingly, some hotels can be accused of “green washing”, which is promoting environmentally-friendly programs while hiding environmentally-unfriendly practices of the hotel (Strick et al., 2013). Thus many companies fear being accused of “green washing” while promoting their green products (Peattie & Crane, 2005). To get a successful result from green marketing strategies, companies should earn green trust which is “a willingness to depend on a product, service, or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance” (Chen et al., 2010, p. 312).

### **Hypothesis Development**

Applying TPB as the main theoretical framework, this research focuses on how marketing managers’ behavioral intentions are related to determinants within the theory of planned behavior, and how managerial intentions predict their green marketing behavior. According to Ajzen (1991), modifying the TPB model by changing paths and adding different constructs in a specific context often provides better understanding of the theoretical mechanism of the model and increases the predictive power of the model. Therefore, the theory can be broadened by modifying the TPB (Ajzen et al., 1991;

Perugini & Bagozzi, 2001). The study was designed to extend the previous study by Ferdous (2010); however it included additional determinants to increase the explanatory power of the TPB Model. Including different determinants to increase the explanatory power of the TPB model was also suggested by Ferdous (2010) for future studies. Thus, the current study attempted to extend the TPB model by including the construct, environmental attitudes (AT) (as measured by the NEP), and by altering the path in the model to improve our ability to predict intention and understanding of hotel managers' decisions to embrace and engage in green marketing.

The inclusion of NEP in the current study allowed for an investigation of the influence of general environmental attitudes on environmental activism intentions, either directly or via identity. According to a study investigating intentions to engage in environmental activism (Fielding, McDonald & Louis, 2008), inclusion of the NEP into the TPB model in their study provided the opportunity to investigate the influence of general environmental attitudes on environmental activism intentions. Even though environmental attitudes would not have a direct effect on a specific behavior, it would affect behavioral intention. For instance a study in 2007 with 855 Swedish household consumers showed that although attitudes of environmental concern did not have direct effects on WTP (willingness to pay for green electricity), it was mediated by ATT (attitude toward green electricity) (Hansla & others, 2008). Therefore the current study raised the question whether managers' environmental attitudes affects their attitudes toward green marketing (Hypothesis 1) and whether managers' environmental attitudes affects their green marketing intention (Hypothesis 2). The study also investigated

whether environmental attitudes have an impact on actual green marketing behavior (Hypothesis 3).

The theory of planned behavior assumes that a psychological approach (based on a study of managers' intentions relating to the environment) will provide valuable findings for both environmental practice and management theory. Although managers' environmental intentions toward the natural environment are one of the factors that affect the companies' actions toward environmental problems, little is known about managers' behavioral intentions toward the environment (Martin, 2010). Furthermore, while numerous research investigated consumers' views of green marketing, few studies have examined companies' green marketing practices (Baker & Ozaki 2008; Ferdous et al., 2010; Karna, Hasen & Juslin 2003; Rosell 2008).

This research, by selecting Turkey, has three main purposes. First it addresses the need for more research on sustainable marketing within an emerging or developing nation (Ferdous et al., 2010). The study was designed to extend the previous study by Ferdous (2010) which was conducted in Bangladesh. As Ferdous (2010) suggested, considering other developing countries for future studies and involving more explanatory variables is necessary to better understand green marketing behavior. Turkey as a developing country (World Bank, 2013), with its lack of sustainable development in the hospitality tourism industry, was considered an ideal country. Secondly, Turkey is among the top-10 tourism destinations worldwide in terms of tourist arrivals and receipts (UNWTO, 2013). Adapting green practices (including green marketing practices) is critically important for both conserving natural resources and for

the future of tourism in Turkey. Finally, this work can provide applicable suggestions for future sustainable tourism development in Turkey.

Overall, based on the TPB Theory, the present study proposed the following ten hypotheses (which are found in Figure 1):

H1: Managers' environmental attitudes are significantly related to their attitudes toward green marketing.

H2: Managers' environmental attitudes have a significant effect on the intention of managers to practice green marketing.

H3: Managers' environmental attitudes have a significant effect on actual green marketing behavior.

H4: Managers' attitudes toward green marketing are significantly related to their intention to practice green marketing.

H5: Managers' attitudes toward green marketing have a significant effect on actual green marketing behavior.

H6: Managers' subjective norms are significantly related to their intention to practice green marketing.

H7: Managers' subjective norms has a significant effect on their attitudes toward green marketing.

H8: Managers' perceived behavioral control (PBC) has a significant effect on their intention to practice green marketing.

H9: Managers' perceived behavioral control (PBC) has a significant effect on actual green marketing behavior.

H10: Managers' intention to practice green marketing has a significant effect on actual green marketing behavior.

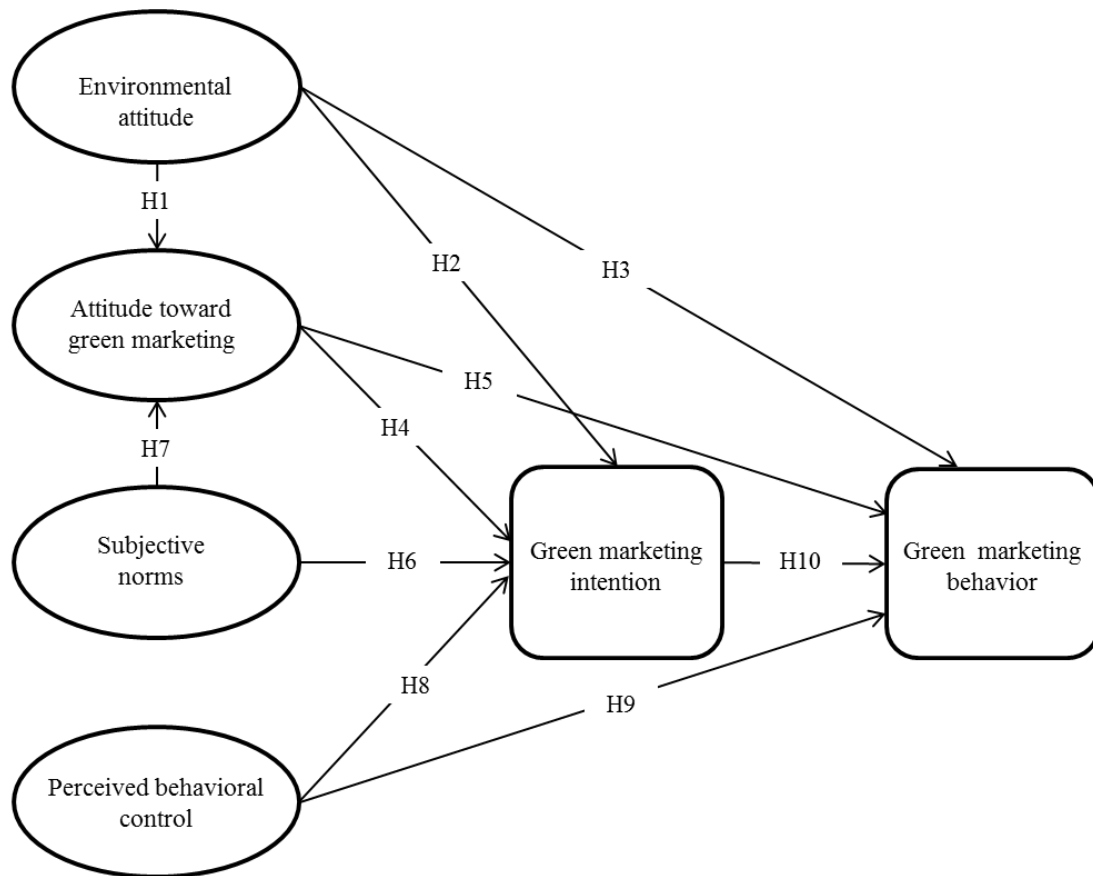


Figure 1. Conceptual Model

## CHAPTER III

### METHODS

This chapter explains the methods used to explore the hypotheses formulated within the literature review. The first section explains the study site; the second section describes the population and the sample; the third section details how the questionnaire was administered to the sample. The fourth section explains the measures and constructs of the study. Finally the last section explains the statistical techniques used in data analysis.

#### **Study Site**

Turkey's geographical location forms a bridge between Europe and Asia; serving as a nexus of East and West culture. The country has four seas with 8333 km of coastline, which are ideal for marine activities, yachting and cruising. Mountains, occupying more than half of Turkey's landmass, offer a range of activities such as trekking, climbing, skiing and winter sports; and rivers running through the valleys offer canoeing and rafting. Turkey, having a diverse flora including lush forests, steps, typical Aegean and Mediterranean vegetation, is also located on one of the major bird migration routes in the region. Approximately 1300 geothermal resources, with temperature varying between 20-100 °C, offer cures and treatment for numerous health problems (TURSAB, n.d.). Furthermore, Turkey has been home to numerous civilizations: Hittites, Phrygians, Lycians, Lydians, Ionians, Romans, Byzantines to the Seljuks and Ottomans. Thousands of archeological sites that date back 12,000 years exist throughout

Turkey. In addition, such sites and museums serve to highlight the rich culture and heritage throughout the country (TURSAB, n.d.).



Figure 2. Map of Turkey (Retrieved on November 16, 2013, from <https://maps.google.com/maps?q=turkey+map&ie=UTF-8&hq=&hnear=0x14b0155c964f2671:0x40d9dbd42a625f2a,Turkey&gl=us&ei=sHOZUvO9AdH7oAS6goKwCQ&sqi=2&ved=0CCwQ8gEwAA>)

Tourism strategies in Turkey are mostly focused on the seaside resorts along the Aegean and Mediterranean Sea coasts. In 2008, 58.5% of incoming tourists to Turkey chose destinations within these two regions for vacation (i.e., sea, sun, and sand tourism), while 11.1% chose to visit their friends or families and 6.4% selected the country for its culture (Okumus, 2012; TURSAB, 2009). Although Turkey is rich in culture resources including famous cuisine, historical architecture, a past marked by different civilizations and religions, traditions, local dresses, handcrafts, festivals etc., “Turkey has been positioned as more a sun, sea, and sand destination than a cultural destination” (Okumus et al., 2012, p.638).

The tourism industry in Turkey has grown enormously since the 1980s. Presently Turkey is among the top 10 tourism destinations worldwide based on tourist arrivals and receipts (UNWTO, 2013). Incoming tourists are mainly from Germany, Russia, United Kingdom, Bulgaria, Georgia, The Netherlands, Iran, France, United States and Syria (Ministry of Culture and Tourism, Boundary Input-Output Statistics, 2012). According to the report of the Association of Turkish travel agencies (TURSAB) (2009), 38% of tourists had a high education level, with 67% placed in a middle income range (TURSAB, 2009).

According to the World Travel & Tourism Council (WTTC) Travel and Tourism and Economic Impact 2014 Report, the direct contribution of travel and tourism to GDP in Turkey in 2013 was TRY71.1bn (4.6% of total GDP) and it is forecasted to rise by 6.1 % in 2014. The vision of Turkish tourism is found in a recent tourism plan by the Ministry of Culture and Tourism stating that, “With the adoption of a sustainable tourism approach, the tourism and travel industry will be brought to a leading position for leveraging rates of employment and regional development and it will help ensure that Turkey becomes a world brand in tourism and a major destination in the list of top five countries receiving the highest number of tourist and highest tourism revenues by 2023” (Ministry of Culture and Tourism, 2007, p. 4).

The metropolitan cities of Istanbul, Ankara and Izmir and main resort destinations such as Antalya, Mugla and Aydin dominate the hotel market. According to the Republic of Turkey Ministry of Culture and Tourism, in 2012, the average number of arrivals to lodging establishments in Turkey was 30,742,614 (17,042,181 foreigners and

13,700,433 citizens) and the average length of stay was 3.3 days. As presented in Table 1, the hotel market in Turkey has been growing gradually, in terms of both demand and supply.

Table 1. Number of beds and accommodation establishments licensed by the Republic of Turkey Ministry of Culture and Tourism (TURSAB, 2012).

<b>Year</b>	<b>Beds</b>	<b>Establishments</b>
1983	65,934	611
1993	235,238	1581
1997	313,298	1933
1998	314,215	1954
2001	364,779	1980
2003	420,697	2240
2004	454,290	2357
2005	483,330	2412
2006	508,632	2475
2007	532,262	2514
2008	567,470	2566
2009	608,765	2625
2010	629,465	2647
2011	666,829	2783
2012	706,019	2870

### **Population and Sample**

This present study examined the green marketing behavior of marketing managers, targeting managers who are responsible from marketing in the hospitality industry throughout Turkey. According to Ferdous (2010), marketing managers play a key role in integrating sustainable marketing within their organizations. In line with the target population described for this research, one-to five-star hotels and boutique hotels registered to Tourism and Culture Ministry were considered the working population or

sampling frame. The list of such lodging establishments (prepared by the Tourism and Culture Ministry) was revised in August 2013 and includes 2535 one-to five-star and boutique hotels throughout Turkey. Since the list does not offer contact information for hotels, emails of those hotels were collected from their websites. Of the total 2535 establishments, 2112 (83%) had emails available on their hotels' webpage.

Based on the list of 2112 hotels, 525 were 5-star hotels, 655 were 4-star hotels, 544 were 3-star hotels, 304 were 2-star hotels, 24 were 1-star hotels and 60 were boutique hotels. The majority of the hotels from the list were located in Antalya, Mugla, and Istanbul, which are some of the most popular tourist destinations in Turkey.

### **Data Collection**

A census was taken of all 2112 hotels using an online survey approach. Qualtrics, the online survey program for which Texas A&M University has purchased user privileges, was used to distribute online questionnaires and store data from completed questionnaires. As the study involved hotel managers in Turkey, the survey instrument was entirely in Turkish. Forward and backward translation of items for each scale occurred to provide for greater accuracy in responses (Hayashi, Suzuki, & Sasaki, 1992). The "tailored design method" involving multiple contacts (per Dillman, Smyth, and Christian, 2009) was undertaken whereby hotel managers were invited to participate in the survey on four separate occasions via personalized emails. To potentially increase the response rate of participation, the researcher offered hotel managers an incentive of planting a tree for every completed questionnaire through TEMA (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural

Habitats). The first email contact was sent during the first week of March of 2014. Reminder emails to those who had not completed the online questionnaire were sent three times during the subsequent weeks of March so as to encourage response. Of the 2112 hotels that were emailed, 181 had emails that were either bad or had bounced back. Overall, 160 hotel managers completed questionnaires (i.e., a response rate of 8.3%).

### **Measures and Constructs**

An 88-item questionnaire was developed to investigate how managers' behavioral intentions toward green marketing were related to determinants within the Theory of Planned Behavior (TPB) (e.g., attitudes, subjective norms, and perceived behavior control) and environmental attitude (which was included as an additional determinant into the TPB). This study also sought to develop an understanding of how green marketing intentions can predict actual green marketing behavior.

The study was designed to extend the previous study by Ferdous (2010), however it included additional determinants to increase the explanatory power of the TPB Model. Thus, the current study attempted to extend the TPB model by including environmental attitudes (AT). Each scale used in the model was measured on a 5-point scale, where 1 = *strongly disagree* and 5 = *strongly agree*. In addition, managers were asked a series of questions regarding their hotel (e.g. "What is the classification of your hotel/resort?", "When did your hotel establish?") as well as their personal life (e.g. "What is your age?", "What is the highest level of education you have completed?") (Appendix A).

### *Environmental Attitude*

The 15-item New Ecological Paradigm (NEP) Scale (Dunlap, 2000) was used to predict managers' environmental attitudes. The NEP has been used widely as a measure for environmental attitudes in a tourism context. The scale measures an individual's ecological concern by asking questions about the individual's beliefs about the balance of nature (e.g. "The balance of nature is strong enough to cope with the impacts of modern industrial nations."), limits to human growth (e.g. "We are approaching the limit of the number of people the earth can support."), anti- anthropocentrism (e.g. "Humans have the right to modify the natural environment to suit their needs."), human exemptionalism (e.g. "Humans will eventually learn enough about how nature works to be able to control it."), and potential eco-crisis (e.g. "The so-called "ecological crisis" facing humankind has been greatly exaggerated."). Dunlap (2000) designed the scale so that even-numbered items were worded in the opposite direction of the odd-numbered items. As a result, the even-numbered questions were reverse-coded for analysis (following Dunlap, 2000) to allow for easier interpretation and allow for composite factor mean calculation.

### *Green Marketing Attitude*

The first determinant of behavioral intention is attitude. An individual's positive attitude toward a certain behavior strengthens his/her intention to perform such behavior (Ajzen et al., 1991). Thus, to see the managers' perceptions of green marketing-related activities and to investigate how it affects their intention to perform green marketing, ten green marketing attitude items were adapted from Chan (2013). The study by Chan

(2013) aimed to investigate the gap between hotel managers and customers' perceptions of the relative importance of green marketing-related activities. Chan (2013) developed 30 green hotel marketing-related items; concerning green products, green distribution, green pricing and green promotion, to use in a survey of hotel managers and customers. According to the result of the study, of the 30 items concerning green hotel marketing, ten were ranked significantly higher by hotel managers than customers (e.g. "Hotel green marketing should begin with green product and service design", "Green hotel products and services may provide an opportunity for product differentiation", "Green hotels can elevate industry members' image and reputation to attract green tourists who demand green accommodation when travelling"). Those 10 items were adapted and used in the current study. The reason a shorter version of the Chan (2013) scale was used was for parsimony purposes and to reduce the burden of time managers needed to complete the survey instrument overall (Babbie, 2011).

### *Subjective Norms*

Subjective norms represent an individual's estimate of the social pressures on him/her to perform or not perform the behavior (Ajzen et al., 1991). People are not only affected by groups to which they belong, but also by reference groups to which they refer in forming opinions (Wang & Ritchie, 2010; Wang & Ritchie, 2012). Social reference groups can have a major influence on individuals' beliefs, attitudes, and choices because people always turn to particular groups for their standards of judgment (Hsu & Huang, 2012). Subjective norms of managers were measured by adapting the eight items from Sandve, Anethe and Øgaard (2013). Their study investigates the

decision-making processes of managers in small- and medium-sized hospitality enterprises toward corporate social responsibility. The eight subjective norms items in this study are: “I believe that *our guests* expect us to practice green marketing”, “I believe that *our employees* expect us to practice green marketing”, “I believe that *our suppliers* expect us to practice green marketing”, “I believe that *our owner/owners* expect us to practice green marketing”, “I believe that the *local businesses* expect us to practice green marketing”, “I believe that *NGOs* expect us to practice green marketing”, “I believe that the *local government* expect us to practice green marketing” and “I believe that the *central government* expect us to practice green marketing”.

#### *Perceived Behavior Control*

To measure perceived behavior control, six items were adapted from the study by Brust, Alfonso & Heyes (2010). The questions includes three financial items measuring whether managers feel constrained by their firm’s financial position (“My hotel has no resources to improve the environment;” “It would be very hard for my hotel to be economically successful and protect the environment at the same time;” “My hotel cannot improve environmental performance on its own initiative because it must remain competitive.”), two items assessing whether individuals feel they have the knowledge and/or the power to influence the environmental decisions of their firm (“I do not have enough knowledge to influence my hotel’s environmental decisions;” and “I do not have enough authority to influence my hotel’s environmental decisions.”), and one item assessing perceived environmental performance of their hotels to make an impact

(“Improvements in my hotel’s environmental performance will not make a difference to improve the environment.”)

### *Green Marketing Intention*

Despite the fact that there is no perfect relationship between intention and actual behavior, intention is still considered the best predictor of behavior (Ajzen et al., 1985, 1991; Lam & Hsu, 2004). Ajzen (1991) also points out that, the stronger intention that an individual has to perform a specific behavior, the more likely the individual will engage in the behavior. To investigate the link between the constructs of the TPB and actual behavior, intention was used as the immediate antecedent to behavior. The three items from Ferdous (2010) were used to measure hotel managers’ intentions to practice green marketing in their hotels. Ferdous (2010) examined the factors that influence the sustainable marketing behavior of senior marketing managers from different industries in Bangladesh using the Theory of Planned Behavior. The three items were: “I intend to help our marketing department make a net positive contribution to society through its marketing activities”, “I am planning to make a net positive contribution to society through our marketing department”, “I will help our marketing department move toward a form of marketing that makes a net positive contribution to society”.

### *Green Marketing Behavior*

To measure green marketing behavior, the 28-item scale created by Leonidou, Leonidou, Fotiadis, and Zeriti (2013) was utilized. They develop a model of drivers and outcomes of green marketing strategies in the Greek hotel sector. As a contrast to the

traditional marketing perspective, to apply green marketing management successfully, pro-environmental ideas should be integrated into all aspects of marketing (Ottman, 1992). In this context, the 28 items comprised aspects of the seven dimensions of the marketing mix: product/service (e.g. “Our hotel uses environmentally friendly supplies and consumable products for our products/services”), price (e.g. “Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices”), distribution (e.g. “Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility”), promotion (e.g. “We highlight our commitment to environmental preservation in our advertisements, sponsorships and/or campaigns”), people (e.g. Our hotel staff “educates” consumers about the harmful environmental impact of human actions through verbal or written”), atmosphere (e.g. “Our hotel applies waste management practices in guestrooms and common areas”), and processes (e.g. “Our hotel encourages collaboration with local communities, governmental agencies, and other hotels in improving environmental standards and practices”). This measure was considered the ultimate dependent variable in the amended TPB model.

### **Data Analysis**

Data analysis was conducted by using the Statistical Package for the Social Sciences (SPSS), version 21. Data analysis was undertaken in a series of steps. Prior to any analysis data screening was carried out to check the accuracy of the data and missing data were imputed using an estimation maximization technique (EM). The second step was to analyze descriptive statistics of different variables. Third, factor analysis and

reliability were conducted. Lastly, to examine each hypothesis, multiple linear regression analysis and simple linear regression analysis were conducted.

### *Data Screening*

According to Tabachnick & Fidell (2007), prior to starting data analysis, data should be checked for errors to maintain accuracy. Therefore, it is important that such errors be kept to a minimum. To ensure the accuracy of the data, all questionnaires were properly examined. Results from the questionnaires were then cross-examined with the SPSS data file to ensure that data entry had been completed without any errors.

### *Estimation Maximization*

In this study, prior to any analysis, the data were screened and missing data were imputed using an estimation maximization technique. The EM algorithm is a common method for finding maximum-likelihood estimates of parameters from incomplete data (Vriens & Melton, 2002). Since EM can generate more than one estimated score for each missing observation, it is a preferred form of imputing missing data (Woosnam, 2012). Furthermore, whereby EM assumes incomplete cases have data missing at random rather than missing completely at random, EM works better than some other methods such as listwise, pairwise data deletion and mean substitution (Allison, 2003; Rubin, 1978).

### *Descriptive Statistics*

Descriptive analysis serves as the basis for data preparation in order to gain a better understanding of the data structure. Descriptive statistics such as means, standard deviations, and percentages were examined to determine information about the

characteristics of represented hotels (e.g. What is the classification of your hotel/resort?; How many rooms are available in your hotel/resort?; Is your hotel/resort chain-affiliated or independent?) and hotel managers (e.g. What is your gender?; What is your age?; What is your current position title at your hotel/resort?).

### *Factor Analysis*

Exploratory factor analyses were conducted on the constructs within the modified TPB model. Factor analysis reduces a large number of variables to a smaller set of factor groupings, while maximizing the amount of information found within each factor. Factor analysis consists of three steps: (1) assessment of the suitability of the data for factor analysis, (2) factor extraction, and (3) factor rotation and interpretation (Pallant, 2001).

*(1) Assessment of the Suitability of the Data for Factor Analysis:* The first step of factor analysis is to assess the suitability and appropriateness of data (Tabachnick & Fidell, 2007; Pallant, 2001). There are different techniques to determine the suitability of data for factor analysis including examining the correlation matrix, Bartlett's test of sphericity, and the Kaiser-Meyer-Olkin measure of sampling adequacy (Nunnally & Bernstein, 1994; Pallant, 2001). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used in this study. KMO is a sophisticated index which helps to measure which variables belong together and are appropriate for factorability (Tabachnick & Fidell, 2007). The index can range from 0 to 1, but a minimum value of 0.6 should be obtained for the data to be considered appropriate for factor analysis (Pallant, 2001).

(2) *Factor Extraction:* Factor extraction refers to “determining the smallest number of factors that can be used to best represents the inter-relations among the set of variables” (Pallant, 2001). Principal component analysis can be used for factor extraction. According to Pallant (2001), the principal component analysis is a useful technique because it is “psychometrically sound, more mathematically simple and it avoids some of the potential problems with ‘factor indeterminacy’ associated with factor analysis”. Pallant (2001) also mentions that there are two techniques can be used to decide how many factors should be retained, Kaiser’s criterion and scree test. With regard to Kaiser’s criterion, only factors with an eigenvalue of 1.0 or above should be retained. This technique may lead to retaining many factors; therefore, it is recommended that the technique be used together with a scree test (Pallant, 2001). Each factor is plotting the eigenvalues in the scree test and the test examines the plot where a curve line changes its direction and becomes horizontal. All factors above the point at which the curve line changes direction should be retained, since these factors contribute to most of the explanation of the variance in the data (Pallant, 2001). In this study, factor analysis using principal component analysis was carried out to determine the number of underlying factors of tourist perception of destination attributes and motivation. All factors with an eigenvalue of 1.0 or above retained.

(3) *Factor Rotation and Interpretation:* The Varimax rotation procedure is the technique used for factor rotation (Pallant, 2001; Tabachnick & Fidell, 2007). This technique is used to minimize the number of variables that have high loadings on each factor. Loadings of 0.50 or greater are considered practically significant (Costello &

Osborne, 2005). Kline (1994) noted that Cronbach's coefficient alpha is commonly used to measure the internal reliability of factors, and the alpha of .60 is commonly used as a minimum threshold recommended. Therefore, this study used the Varimax rotation procedure and only variables with factor loadings greater than 0.5 were retained in each factor grouping. Furthermore, cross loaded items whose value exceeded .32 were also removed (Tabachnick & Fidell, 2007).

To measure the internal reliability of factors, Cronbach's coefficient alpha was employed. The reliability coefficient represents whether the obtained score is a stable measure (Dick & Hagerty, 1971). A bigger number refers higher consistency or stability. However there is no absolute good standard to evaluate the reliability coefficient, general accepted evaluation standards for researchers are as follows: reliability coefficient above 0.9 (excellent); above 0.8 (good); above 0.7 (adequate); above 0.6 (questionable); above 0.5 (poor); and less than 0.5 (unacceptable) (George and Mallery, 2003). According to Robinson, Shaver & Wrightsman (1991), in social psychology research, a reliability coefficient exceeding 0.6 is usually acceptable.

## CHAPTER IV

### RESULTS

This research focuses on investigating how hotel managers' behavioral intentions for green marketing are related to determinants within a modified framework of the Theory of Planned Behavior (TPB). In addition to the existing constructs within the model, environmental attitude (as measured through the NEP Scale) was added as a modification. Ultimately, the framework sought to assess how marketing intentions translates to actual green marketing behavior among hotel managers throughout Turkey. This chapter provides a description of the demographic and statistical characteristics of the sample, data preparation prior to analysis, results of the model testing and a summary of the statistical results found in this study.

#### **Descriptive Analysis**

Descriptive analysis serves as the basis for data preparation in order to gain a better understanding of the data structure. Item means and frequency distribution of variables are reported. These results can be found primarily in Tables 2 and 3.

#### *Characteristics of Represented Hotels*

The majority of the respondent hotels in the survey were 4-star hotels (39.4%). A preponderance (63.5%) of hotels was established after the year 2000. On average, the hotels had 97.92 full-time employees and 29.96 part-time employees, while the average numbers of rooms and beds were 158.85 and 333.67, respectively. A majority of hotels (54.4%) indicated they targeted both leisure and businesses travelers, while the

remaining claimed they targeted either business travelers (28.5%) or leisure travelers (17.1%).

Of the hotels, 45 were chain-affiliated and 113 were independent. Hotel managers were asked to indicate the location of their hotel. Most commonly reported locations were urban (65.6%), coastal (36.9%), forest (5.0%), and rural (4.4%). Hotels represented all seven geographical regions of Turkey, and they were located across 29 different cities in the country. The majority of the hotels were located in Izmir (13.9%), Antalya (12.9%), Istanbul (11.8%) and Mugla (8.6%), some of the most popular tourist destinations in Turkey. Approximately half of the hotels indicated they had a green certificate. From those, 39.0% reported the name of the certificate. The most frequently mentioned green certificate names were: ISO 14001 (Environmental Management), Blue Flag (works towards sustainable development of beaches and marinas by the Foundation for Environmental Education (FEE)), OHSAS 18001 (Occupational Health and Safety Management System), Green Star (by the Tourism Ministry), CED report (by the Ministry of Environment and Urban Planning) and certificates about waste oil collection and disposal.

Table 2. Descriptive Summary of Represented Hotels

Variable	N	%
Classification of hotel (n=160)		
4 star	63	39.4
5 star	56	35.0
3 star	17	10.6
Boutique hotels	14	8.8
2 star	10	6.3
Year hotel established (n=159)		
2001+	101	63.5
1985-1994	30	18.9
1995-2000	13	8.2
1970-1984	9	5.7
Number of full-time employees (n=157, M= 97.92)		
Number of part-time employees (n=126, M=29.96)		
Number of rooms (n=158, M= 158.85)		
Number of beds (n=156, M = 333.67)		
Combination of business and leisure travelers	86	54.4
Business travelers primarily	45	28.5
Leisure travelers primarily	27	17.1
Kind of hotel (n=158)		
Independent	113	71.5
Chain affiliated	45	28.5
Location of hotel (n=105) <sup>a</sup>		
Urban place	105	65.6
Coastal area	59	36.9
Forest	8	5.0
Rural place	7	4.4
City in which hotel located (n=93)		
Others	49	52.8
Izmir	13	13.9
Antalya	12	12.9
Istanbul	11	11.8
Mugla	8	8.6
Hotel possession of green certification? (n=155)		
Yes	82	52.9
No	73	47.1

<sup>a</sup> The location percentages do not sum to 100% given it was a question hotel managers could check more than one response.

### *Characteristics of Represented Hotel Managers*

Table 3 displays a summary of hotel managers within the sample. In terms of gender, the majority of the study participants were male (73.4%). The age of managers ranged from 24 to 74 ( $M=39.53$  years of age). Three out of four managers possessed at least a Bachelor's degree. Since, it was not known whether hotels had a professional marketing manager upon contact, the study targeted all hotel managers responsible for

marketing practices in their hotels. For this reason, participants were asked to indicate their current positions. The majority of respondents were general managers (34.7%), sales and marketing managers (22.8%), and assistant general managers (10.8%). On average, managers had spent 6.42 years in their current positions and 15.62 years in the hospitality industry overall.

Table 3. Descriptive Summary of Represented Hotel Managers

Variable	<i>N</i>	%
Gender ( <i>n</i> =94)		
Male	69	73.4
Female	25	26.6
Age ( <i>M</i> =39.53)		
Education ( <i>n</i> =96, <i>Median</i> =Four-year college)		
Four-year college	63	65.6
Two-year college	12	12.5
Graduate school	9	9.4
High school	10	10.4
Elementary or secondary school	2	2.1
Position title ( <i>n</i> =92)		
General manager	32	34.7
Sales and marketing manager	21	22.8
Others	20	21.7
Assistant general manager	10	10.8
Front office manager	9	9.7
Number of years in current position ( <i>n</i> =88, <i>M</i> =6.42)		
Number of years in hospitality industry ( <i>n</i> =93, <i>M</i> =15.62)		

### Independent Sample t-Tests of Means

The independent sample t-tests of means allow us to see whether the mean of a single variable for subjects in one group differs from the mean of that variable in another group (Wagner, 2012). The independent sample t-tests were used to determine the mean differences in green marketing behavior between female and male; chain-affiliated and independent hotels and hotels with and without a green certificate. In addition, the Levene's test was performed to check for the homogeneity of variance assumption. The

Levene's test for the mean difference in green marketing behavior between female and male showed there was an unequal variance out of nineteen green marketing behaviors (Appendix C). Similarly, the Levene's test for the mean difference in green marketing behavior between chain and independent hotels showed there were two unequal variances out of nineteen green marketing behaviors (Appendix C). Therefore, the separate-variance t-tests for means (the equal variances not assumed) were used for comparing means of these three behaviors.

### **Factor Analysis of Model Constructs**

#### *Environmental Attitude*

The 15-item NEP Scale (Dunlap, 2000) was used to measure managers' environmental attitudes. In the NEP scale, Dunlap (2000) designed the even-numbered questions to be reversed coded. Knowing this, the researcher then reverse-coded such even-numbered questions prior to EFA. At that point, the 15 variables were factor analyzed using PCA with a varimax rotation method (Table 4). As a result, 13 variables were retained and two items ("Plants and animals have as much right as humans to exist." and "Despite our special abilities, humans are still subject to the laws of nature.") were removed because of low loadings. The resulting EFA procedure generated a four-factor underlying structure for the NEP scale. These four factors accounted for 55.5% of the total variance. The value of reliability of the four factors ranged from .41 to .69, which was significantly lower than the 0.82 found by Dunlap (2000).

Table 4. Exploratory Factor Analysis of Environmental Attitude

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Anti-anthropocentrism and rejection of exemptionalism</b>		3.86	3.07		0.69
<sup>b</sup> Humans have the right to modify the natural environment to suit their needs.	0.68	4.40		17.52	
<sup>b</sup> Human ingenuity will ensure that we do NOT make the earth unlivable.	0.53	2.90			
<sup>b</sup> The so-called 'ecological crisis' facing humankind has been greatly exaggerated.	0.68	4.01			
<sup>b</sup> Humans were meant to rule over the rest of nature.	0.63	4.18			
<sup>b</sup> Humans will eventually learn enough about how nature works to be able to control it	0.75	3.82			
<b>Factor 2. The reality of the limits of earth</b>		3.60	1.67	16.53	0.65
We are approaching the limit of the number of people the earth can support.	0.80	3.41			
The earth is like a spaceship with very limited room and resources.	0.57	3.41			
The balance of nature is very delicate and easily upset.	0.67	3.66			
If things continue on their present course, we will soon experience a major ecological catastrophe.	0.65	3.92			
<b>Factor 3. Wealth and strength of nature</b>		2.65	1.35	10.83	0.46
<sup>b</sup> The earth has plenty natural resources if we just learn how to develop them.	0.85	2.29			
<sup>b</sup> The balance of nature is strong enough to cope with the impacts of modern industrial nations.	0.67	3.05			
<b>Factor 4. Humans impact on nature</b>		3.98	1.13	10.64	0.41
When humans interfere with nature, it often produces disastrous consequences.	0.80	3.67			
Humans are severely abusing the environment.	0.71	4.32			
<b>Total variance explained</b>				55.51	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree

<sup>b</sup>Items reverse coded

KMO and Bartlett's test (sig.) =  $p < 0.001$

### *Green Marketing Attitude*

Ten items concerning attitudes about green marketing were factor analyzed following the same extraction and rotation procedure for the NEP Scale. In this instance, only one item ("Hotel customers who are more receptive to environmentally friendly products and services are more willing to pay extra for them.") was removed because of

its low loadings, resulting in three factors. These three factors accounted for 59.9% of the total variance. The value of reliability of the three factors ranged from .39 to .74 (Table 5).

Table 5. Exploratory Factor Analysis of Green Marketing Attitude

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Creating benefits through green practices</b>		4.06	2.52	27.56	0.74
Hotel green marketing should begin with green product and service design.	0.63	4.04			
Green hotel products and services may provide an opportunity for product differentiation.	0.78	4.06			
Green hotels can elevate industry members' image and reputation to attract green tourists who demand green accommodation when travelling.	0.82	4.25			
Some hotels have attempted to develop green certification programs to gain green customer confidence.	0.58	3.92			
The internet is an effective channel for marketing a hotel's green initiatives directly to customers.	0.68	3.98			
<b>Factor 2. Protecting ecosystem and human health</b>		3.30	1.57	17.35	0.57
Hotels are sincere in instituting programs that save water and energy, reduce solid waste, use resources economically and protect the planet's ecosystem.	0.79	3.08			
Hotels provide products and services that do no harm to human health.	0.78	3.50			
<b>Factor 3.Green Pricing</b>		3.38	1.29	14.94	0.39
Green pricing works only when green products and services reduce hotel guests' costs.	0.72	3.19			
Green hotel products and services are almost always priced at a premium relative to conventional offerings.	0.76	3.55			
<b>Total variance explained</b>				59.85	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett's test (sig.) = p<0.001

### *Subjective Norms*

Subjective norms were measured using eight variables. Once more, the same EFA procedure was followed (Table 6). Cross-loading items were considered those whose value exceeded .32 (Tabachnick & Fidell, 2007). As a result, seven variables were retained and one item (“Hotels provide products and services that do no harm to human health.”) was removed because it cross loaded onto multiple factors. The resulting EFA procedure generated two factors, accounting for 75.4% of the total variance. Cronbach’s alphas for all two factors exceeded .80.

Table 6. Exploratory Factor Analysis of Subjective Norms

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Primary Stakeholders</b>		3.28	3.74	40.55	0.87
I believe that our guests expect us to practice green marketing.	0.78	3.58			
I believe that our employees expect us to practice green marketing.	0.89	3.20			
I believe that our suppliers expect us to practice green marketing.	0.85	3.04			
I believe that our owner/owners expect us to practice green marketing.	0.78	3.29			
<b>Factor 2. Secondary Stakeholders</b>		3.48	1.54	34.90	0.87
I believe that NGOs expect us to practice green marketing.	0.82	3.77			
I believe that the local government expects us to practice green marketing.	0.90	3.37			
I believe that the central government expects us to practice green marketing.	0.89	3.30			
<b>Total variance explained</b>				75.44	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett’s test (sig.) = p<0.001

### *Perceived Behavioral Control*

Six perceived behavioral control (PBC) items were factor analyzed following the same extraction and rotation as with previously analyzed scales. One item (“My hotel

has no resources to improve the environment.”) had to be removed because of cross loading on multiple factors. Five remaining items loaded onto two unique factors, which accounted for 68.4% of the variance in the construct (Table 7). Reliabilities for the factors were 0.64 and 0.79, which is within the acceptable range according to Robinson, Shaver & Wrightsman (1991).

Table 7. Exploratory Factor Analysis of Perceived Behavior Control

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Internal PBC</b>		2.42	2.74	39.33	0.64
I do not have enough knowledge to influence my hotel's environmental decisions.	0.75	2.31			
I do not have enough authority to influence my hotel's environmental decisions.	0.86	2.53			
<b>Factor 2. External PBC</b>		2.37	1.36	29.07	0.79
Improvements in my hotel's environmental performance will not make a difference to improve the environment.	0.82	1.97			
It would be very hard for my hotel to be economically successful and protect the environment at the same time	0.73	2.39			
My hotel cannot improve environmental performance on its own initiative because it must remain competitive.	0.62	2.27			
<b>Total variance explained</b>				68.40	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett's test (sig.) = p<0.001

### *Intention*

Three items concerning intention to engage in green marketing behavior were factor analyzed following a similar EFA protocol. All three items were retained, resulting in one factor that accounted for 93.95% of the variance. The Cronbach's alpha was 0.97 (Table 8).

Table 8. Exploratory Factor Analysis of Green Marketing Intention

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Intention</b>		3.85	2.82	93.95	0.97
I intend to help our marketing department make a net positive contribution to society through its marketing activities.	0.96	3.87			
I am planning to make a net positive contribution to society through our marketing department through our marketing department.	0.97	3.84			
I will help our marketing department move toward a form of marketing that makes a net positive contribution to society.	0.98	3.83			
<b>Total variance explained</b>				93.95	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett's test (sig.) = p<0.001

### *Green Marketing Behavior*

Green marketing behavior was measured using 28 items. The 28 items were factor analyzed following the same procedure mentioned above (Table 9). Cross-loading items were considered those that loaded onto multiple factors and had a value of at least .32 on a secondary factor (Tabachnick & Fidell, 2007). As a result, 19 items were retained across four factors; nine items ("Our hotel is careful when choosing supplies and consumable products so that these are environmentally friendly", "We highlight our commitment to environmental preservation in our advertisements, sponsorships and/or

campaigns.”, “Our promotional and communicational efforts highlight and inform our customers about the our environmental efforts.”, “Our hotel communicates its environmental initiatives to all employees.”, “Our hotel provides to employees training on environmental issues.”, “Our hotel encourages employees to actively participate in environmental awareness programs and activities organized for the community.”, “Our hotel tries to mix environmental-friendliness with other philosophies (e.g., quality, low-cost) across the service process.”, “Our hotel encourages collaboration with local communities, governmental agencies, and other hotels in improving environmental standards and practices.”, “Our hotel encourages collaboration with local communities, governmental agencies, and other hotels in improving environmental standards and practices.”) were removed. Reliabilities for the four factors ranged from 0.60 to 0.92. In total, the four factors explained approximately 69% of variance in the construct (Table 9).

Table 9. Exploratory Factor Analysis of Green Marketing Behavior

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 1. Serving green product and including stakeholders into this process</b>		3.68	8.68	27.38	0.92
Our hotel uses environmentally friendly supplies and consumable products for our products/services.	0.78	3.82			
Our hotel gives priority to offering ecological products and services.	0.79	3.78			
Our hotel is geared to design, develop and offer its product/services in an environmentally friendly way.	0.79	3.84			
Our hotel provides its product/services in a way that minimizes its impact on the natural environment.	0.82	3.92			
Our hotel encourages suppliers/vendors and agents/representatives to embrace and reflect environmental responsibility.	0.66	3.47			
Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility.	0.72	3.70			
Our hotel buys supplies in bulk to reduce packaging where possible.	0.55	4.00			
Our hotel rewards employees with the best environmental initiatives.	0.57	3.26			
Our hotel staff “educates” consumers about the harmful environmental impact of human actions through verbal and written.	0.67	3.31			
<b>Factor 2. Energy, water saving and waste management &amp; customer collaboration</b>		3.96	2.16	17.78	0.91
Our hotel applies energy saving practices in guestrooms and common areas.	0.87	4.07			
Our hotel applies water saving practices in guestrooms and common areas.	0.86	3.88			
Our hotel applies waste management practices in guestrooms and common areas.	0.89	3.98			
Our hotel facilitates customer collaboration (e.g., voluntary changing of towels) in environmental protection.	0.77	3.90			
<b>Factor 3. Finance</b>		3.33	1.24	14.59	0.83
Our hotel tends to build environmental compliance costs into the service price.	0.61	3.27			
Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices.	0.77	3.55			
Our hotel takes advantage of the financial success of several environmentally friendly products/services, to reduce its prices.	0.83	3.39			
Our hotel offers competitive prices to our customers as a result of the environmentally friendly practices implemented.	0.69	3.11			

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett's test (sig.) = p<0.001

Table 9. Continued

Factor	Factor Loading	Mean <sup>a</sup>	Eigenvalue	Variance Explained(%)	Cronbach $\alpha$ Reliability
<b>Factor 4. Using renewable sources of energy and promoting hotels through ecological arguments</b>		3.42	1.04	9.33	0.60
Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns.	0.71	2.95			
Our hotel uses renewable sources of energy.	0.78	3.27			
<b>Total variance explained</b>				69.08	

<sup>a</sup>Items were rated on a 5-point scale, where 1= strongly disagree and 5= strongly agree  
KMO and Bartlett's test (sig.) =  $p < 0.001$

### Regression Analysis

Numerous multiple linear regression analyses and simple linear regression analyses were conducted in order to address each hypothesis from the modified TPB model. However, prior to such analysis, composite means for each resulting factor from the EFA was conducted whereby means for each item with a particular factor were added and the sum then divided by the total number of items in said factor. The resulting factor means can be found in Tables 3-8 for corresponding scales. As exhibited in Tables 9-18, nine of the 10 formulated hypothesis were supported given statistically significant ( $p < 0.001$  or  $p < 0.05$ ) results. Model summary statistics, predictor coefficients, and multi-collinearity diagnostics (i.e., tolerance and VIF values) are presented in the tables. Results for each of the ten hypotheses are presented in turn in the following sections.

#### *Relationship between Environmental Attitudes and Green Marketing Attitudes ( $H_1$ )*

To address Hypothesis 1 and determine whether hotel managers' environmental attitudes (as measured by the NEP Scale) significantly predicted their green marketing attitudes (GMA), three multiple regression models were requested. In each model, one

GMA factor served as the dependent variable, predicted by each of the four NEP factors (as the independent variables). As can be seen from Table 10, Model 1 ( $F=5.929$ ,  $p<0.001$ ,  $R^2=0.198$ ) and Model 3 ( $F=3.581$ ,  $p<0.05$ ,  $R^2=0.130$ ) were significant. Multicollinearity was not an issue across NEP factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

In each of the significant models, only one of the NEP factors served as a significant predictor. For Model 1, only the factor—*the reality of the limits of earth* ( $t=3.66$ ,  $p<0.001$ ;  $\beta=0.36$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the NEP factor—*the reality of the limits of earth*, their level of agreement with the green marketing attitudes factor—*creating benefits through green practices* also increased by .36 units. For Model 3, only the factor, *the reality of the limits of earth* ( $t=-3.04$ ,  $p<0.01$ ;  $\beta=-0.32$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the NEP factor—*the reality of the limits of earth*, their level of agreement with the green marketing attitudes factor—*green pricing* decreased by .32 units.

Table 10. Multiple Regression Output for H1

GMA models with Environmental Attitude Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMA Creating benefits (<math>F=5.929, p&lt;0.001, R^2=0.198</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	0.11	0.14	1.48	0.89 <sup>d</sup>	1.13
<i>The reality of the limits of earth</i>	0.25	0.36	3.66***	0.84	1.19
<i>Wealth and strength of nature</i>	-0.07	-0.14	-1.51	0.94	1.06
<i>Humans impact on nature</i>	0.05	0.08	0.81	0.95	1.05
<b>Model 2. GMA Protecting ecosystem and human health (<math>F=1.636, p=0.171, R^2=0.064</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	0.02	0.01	0.12		
<i>The reality of the limits of earth</i>	0.05	0.05	0.43		
<i>Wealth and strength of nature</i>	-0.20	-0.25	-2.45		
<i>Humans impact on nature</i>	0.06	0.06	0.61		
<b>Model 3. GMA Pricing (<math>F=3.581, p&lt;0.05, R^2=0.130</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	-0.13	-0.12	-1.19		
<i>The reality of the limits of earth</i>	-0.31	-0.32	-3.04**		
<i>Wealth and strength of nature</i>	0.03	0.05	0.46		
<i>Humans impact on nature</i>	0.14	0.14	1.46		

<sup>a</sup> Each of the Environmental Attitudes and GMA items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

<sup>d</sup> Same tolerance and VIF across each of the three models given the same four Environmental Attitude factors were considered predictors in each model.

\*\* $p<0.01$

\*\*\* $p<0.001$

### *Relationship between Environmental Attitudes and Green Marketing Intention (H2)*

The relationships between environmental attitude and green marketing intention (GMI) were analyzed using multiple regression analysis. In the model, the GMI factor served as the dependent variable, predicted by each of the four NEP factors (as the independent variables). As can be seen from table 11, Model 1 was statistically significant ( $F=2.551, p<0.05, R^2=0.113$ ) in predicting the managers' intentions to practice green marketing. Multi-collinearity was not an issue across NEP factors as

tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 1, two NEP factors—*the reality of the limits of earth* ( $t=2.40, p<0.05; \beta=0.28$ ) and *wealth and strength of nature* ( $t=-2.36, p<0.05; \beta=-0.25$ ) served as significant predictors. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the NEP factor—*the reality of the limits of earth*, their level of agreement with the GMI factor—*intention* also increased by .28 units, while every unit increase in managers' level of agreement with items comprising the NEP factor—*wealth and strength of nature*, their level of agreement with the GMI factor—*intention* decreased by .25 units. Consequently, Hypotheses 2 was supported.

Table 11. Multiple Regression Output for H2

GMI Models with Environmental Attitude Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMI Intention (<math>F=2.551, p&lt;0.05, R^2=0.113</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	0.01	0.01	0.11	0.89	1.13
<i>The reality of the limits of earth</i>	0.26	0.28	2.40*	0.83	1.21
<i>Wealth and strength of nature</i>	-0.17	-0.25	-2.36*	0.96	1.04
<i>Humans impact on nature</i>	-0.08	-0.09	-0.80	0.93	1.07

<sup>a</sup> Each of the Environmental Attitudes and GMI items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

\* $p<0.05$

### *Relationship between Environmental Attitudes and Green Marketing Behavior (H3)*

To address Hypothesis 3 and determine whether hotel managers' environmental attitudes (as measured by the NEP Scale) significantly predicted their green marketing

behavior (GMB), four multiple regression models were requested. As can be seen from Table 12, all four models, Model 1 ( $F=0.978$ ,  $p=0.424$ ,  $R^2=0.046$ ), Model 2 ( $F=0.775$ ,  $p=0.545$ ,  $R^2=0.037$ ), Model 3 ( $F=0.926$ ,  $p=0.453$ ,  $R^2=0.044$ ) and Model 4 ( $F=1.870$ ,  $p=0.124$ ,  $R^2=0.085$ ) were not significant. Consequently, Hypotheses 3 was not supported.

Table 12. Multiple Regression Output for H3

GMB Models with Environmental Attitude Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMB <i>Serving green product and including stakeholders into this process</i></b> <b>(<math>F=0.978</math>, <math>p=0.424</math>, <math>R^2=0.046</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	-0.13	-0.12	-1.03	0.89 <sup>d</sup>	1.12
<i>The reality of the limits of earth</i>	0.15	0.17	1.39	0.82	1.22
<i>Wealth and strength of nature</i>	-0.04	-0.07	-0.62	0.96	1.04
<i>Humans impact on nature</i>	-0.13	-0.16	-1.39	0.93	1.08
<b>Model 2. GMB <i>Energy, water saving and waste management &amp; customer collaboration</i></b> <b>(<math>F=0.775</math>, <math>p=0.545</math>, <math>R^2=0.037</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	-0.02	0.15	-0.15		
<i>The reality of the limits of earth</i>	0.15	0.13	1.14		
<i>Wealth and strength of nature</i>	-0.12	0.09	-1.32		
<i>Humans impact on nature</i>	-0.12	0.12	-0.98		
<b>Model 3. GMB <i>Finance</i></b> <b>(<math>F=0.926</math>, <math>p=0.453</math>, <math>R^2=0.044</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	-0.07	-0.05	-0.46		
<i>The reality of the limits of earth</i>	0.20	0.19	1.61		
<i>Wealth and strength of nature</i>	0.00	0.00	0.02		
<i>Humans impact on nature</i>	-0.15	-0.16	-1.38		
<b>Model 4. GMB <i>Using renewable sources of energy and promoting hotels through ecological arguments</i></b> <b>(<math>F=1.870</math>, <math>p=0.124</math>, <math>R^2=0.085</math>)</b>					
<i>Anti-anthropocentrism and rejection of exemptionalism</i>	-0.01	-0.01	-0.09		
<i>The reality of the limits of earth</i>	0.24	0.23	2.00		
<i>Wealth and strength of nature</i>	-0.12	-0.16	-1.51		
<i>Humans impact on nature</i>	-0.21	-0.21	-1.91		

<sup>a</sup> Each of the Environmental Attitudes and GMI items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as  $1/\text{tolerance}$ ; and is always greater than 1.

<sup>d</sup> Same tolerance and VIF across each of the three models given the same four Environmental Attitude factors were considered predictors in each model.

*Relationship between Attitudes toward Green Marketing and Green Marketing Intention*  
(H4)

The relationship between attitudes toward green marketing and green marketing intention (GMI) was analyzed using multiple regressions. One multiple regression model was requested. In the model, the GMI factor served as the dependent variable, predicted by each of the three attitudes toward green marketing factors (as the independent variables). As can be seen from table 13, Model 1 was statistically significant ( $F=12.269$ ,  $p<0.001$ ,  $R^2=0.310$ ) in predicting the managers' intentions to practice green marketing. Multi-collinearity was not an issue across attitudes toward green marketing factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 1, only one of the green marketing attitudes factor— *creating benefits through green practices* ( $t=5.38$ ,  $p<0.001$ ;  $\beta=0.50$ ) served as a significant predictor. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the GMA factor— *creating benefits through green practices*, their level of agreement with the GMI factor—*intention* also increased by .50 units. As a result, Hypotheses 4 was supported.

Table 13. Multiple Regression Output for H4

GMI Models with and Green Marketing Attitudes Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMI Intention (<math>F=12.269, p&lt;0.001, R^2=0.310</math>)</b>					
<i>Creating benefits through green practices</i>	0.67	0.50	5.38***	0.98	1.02
<i>Protecting human health and eco-system</i>	0.13	0.16	1.69	1.00	1.00
<i>Green Pricing</i>	-0.11	-0.13	-1.37	0.98	1.02

<sup>a</sup>Each of the Green Marketing Attitudes and GMI items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup>Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup>VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

\*\*\* $p<0.001$

#### *Relationship between Attitudes toward Green Marketing and Green Marketing Behavior (H5)*

To address Hypothesis 5 and determine whether hotel managers' attitudes toward green marketing significantly predicted their green marketing behavior (GMB), four multiple regression models were requested. As can be seen from Table 14, all four models, Model 1 ( $F=5.712, p<0.01, R^2=0.169$ ), Model 2 ( $F=7.537, p<0.001, R^2=0.212$ ), Model 3 ( $F=3.728, p<0.05, R^2=0.117$ ) and Model 4 ( $F=4.475, p<0.01, R^2=0.138$ ) were significant. Multi-collinearity was not an issue across attitudes toward green marketing factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

In each of the significant models, the green marketing attitude factor— *creating benefits through green practices*, served as a significant predictor. The green marketing attitude factor—*protecting ecosystem and human health*, was also significant for the three models (Table 13). For Model 1, the two green marketing factors, *creating benefits through green practices* ( $t=2.31, p<0.05; \beta=0.23$ ) and *protecting ecosystem and human*

*health* ( $t=3.11, p<0.01; \beta=0.31$ ) were significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the GMA factor — *creating benefits through green practices*, their level of agreement with the GMB factor— *serving green product and including stakeholders into this process* also increased by .23 units and, with every unit increase in managers' level of agreement with items comprising the GMA factor — *protecting ecosystem and human health*, their level of agreement with the GMB factor— *serving green product and including stakeholders into this process* also increased by .31 units.

For Model 2, the two green marketing factors—*creating benefits through green practices* ( $t=3.83, p<0.001; \beta=0.37$ ) and *protecting ecosystem and human health* ( $t=2.43, p<0.05; \beta=0.24$ ) were significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the GMA factor — *creating benefits through green practices*, their level of agreement with the GMB factor— *energy, water saving and waste management & customer collaboration* also increased by .37 units and, with every unit increase in managers' level of agreement with items comprising the GMA factor — *protecting ecosystem and human health*, their level of agreement with the GMB factor— *energy, water saving and waste management & customer collaboration* also increased by .24 units.

For Model 3, only one the green marketing factors—*creating benefits through green practices* ( $t=2.88, p<0.01; \beta=0.30$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items

comprising the GMA factor — *creating benefits through green practices*, their level of agreement with the GMB factor—*finance* also increased by .30 units.

For Model 4, the two green marketing factors, *creating benefits through green practices* ( $t=2.46, p<0.05; \beta=0.25$ ) and *protecting ecosystem and human health* ( $t=2.27, p<0.05; \beta=0.23$ ) were significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the GMA factor — *creating benefits through green practices*, their level of agreement with the green marketing behavior factor—*using renewable sources of energy and promoting hotels through ecological arguments* also increased by .25 units and, with every unit increase in managers' level of agreement with items comprising the GMA factor — *protecting ecosystem and human health*, their level of agreement with the green marketing behavior factor—*using renewable sources of energy and promoting hotels through ecological arguments* also increased by .23 units. Consequently, Hypotheses 5 was supported.

Table 14. Multiple Regression Output for H5

GMB Models with Green Marketing Attitude Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMB <i>Serving green product and including stakeholders into this process</i></b>					
<b>(F=5.712, <math>p&lt;0.01</math>, <math>R^2=0.169</math>)</b>					
<i>Creating benefits through green practices</i>	0.29	0.23	2.31*	0.99 <sup>d</sup>	1.01
<i>Protecting ecosystem and human health</i>	0.25	0.31	3.11**	1.00	1.00
<i>Green Pricing</i>	-0.09	-0.10	-1.00	0.99	1.01
<b>Model 2. GMB <i>Energy, water saving and waste management &amp; customer collaboration</i></b>					
<b>(F=7.537, <math>p&lt;0.001</math>, <math>R^2=0.212</math>)</b>					
<i>Creating benefits through green practices</i>	0.58	0.37	3.83***		
<i>Protecting ecosystem and human health</i>	0.24	0.24	2.43*		
<i>Green Pricing</i>	-0.08	-0.07	-0.74		
<b>Model 3. GMB <i>Finance</i></b>					
<b>(F=3.728, <math>p&lt;0.05</math>, <math>R^2=0.117</math>)</b>					
<i>Creating benefits through green practices</i>	0.44	0.30	2.88**		
<i>Protecting ecosystem and human health</i>	0.15	0.16	1.56		
<i>Green Pricing</i>	0.08	0.08	0.75		
<b>Model 4. GMB <i>Using renewable sources of energy and promoting hotels through ecological arguments</i></b>					
<b>(F=4.475, <math>p&lt;0.01</math>, <math>R^2=0.138</math>)</b>					
<i>Creating benefits through green practices</i>	0.37	0.25	2.46*		
<i>Protecting ecosystem and human health</i>	0.22	0.23	2.27*		
<i>Green Pricing</i>	-0.11	-0.11	-1.05		

<sup>a</sup>Each of the Green Marketing Attitudes and GMB items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup>Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup>VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

<sup>d</sup>Same tolerance and VIF across each of the four models given the same four Green Marketing Attitude factors were considered predictors in each model.

\* $p<0.05$

\*\* $p<0.01$

\*\*\* $p<0.001$

### *Relationship between Subjective Norms and Green Marketing Intention (H6)*

The relationship between subjective norms and green marketing intention (GMI) was also analyzed using multiple regressions. One multiple regression model was requested. In the model, the GMI factor served as the dependent variable predicted by each of the two subjective norms factors (as the independent variables). As can be seen

from table 15, Model 1 was statistically significant ( $F=5.910$ ,  $p<0.01$ ,  $R^2=0.125$ ) in predicting the managers' intentions to practice green marketing. Multi-collinearity was not an issue across subjective norms factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 1, only one of the green marketing attitudes factor— *primary stakeholders* ( $t=3.43$ ,  $p<0.01$ ;  $\beta=0.39$ ) served as a significant predictor. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the subjective norms factor— *primary stakeholders*, their level of agreement with the GMI factor—*intention* also increased by .39 units. As a result, Hypotheses 6 was supported.

Table 15. Multiple Regression Output for H6

GMI Models with and Subjective Norms Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMI Intention (<math>F=5.910</math>, <math>p&lt;0.001</math>, <math>R^2=0.125</math>)</b>					
<i>Primary Stakeholders</i>	0.35	0.39	3.43**	0.83	1.20
<i>Secondary Stakeholders</i>	-0.10	-0.14	-1.23	0.83	1.20

<sup>a</sup>Each of the Subjective Norms and GMI items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

\*\* $p<0.01$

#### *Relationship between Subjective Norms and Attitude toward Green Marketing (H7)*

To address Hypothesis 7 and determine whether subjective norms significantly predicted attitude toward green marketing (GMA), three multiple regression models were requested. As can be seen from Table 16, two models, Model 1 ( $F=6.637$ ,  $p<0.001$ ,

$R^2=0.117$ ) and Model 2 ( $F=3.931$ ,  $p<0.05$ ,  $R^2=0.073$ ) were significant. Multi-collinearity was not an issue across subjective norms factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 2, only one of the subjective norms factors— *primary stakeholders* ( $t=2.80$ ,  $p<0.01$ ;  $\beta=0.30$ ) served as a significant predictor. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the subjective norms factor— *primary stakeholders*, their level of agreement with the GMA factor— *protecting ecosystem and human health* also increased by .30 units. As a result, Hypotheses 7 was supported.

Table 16. Multiple Regression Output for H7

GMA Models with Subjective Norms Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMA Creating benefits through green practices (<math>F=6.637</math>, <math>p&lt;0.01</math>, <math>R^2=0.117</math>)</b>					
<i>Primary Stakeholders</i>	0.20	0.29	2.82**	0.83 <sup>d</sup>	1.20
<i>Secondary Stakeholders</i>	0.06	0.10	0.95	0.83	1.20
<b>Model 2. GMA Protecting ecosystem and human health (<math>F=3.931</math>, <math>p&lt;0.01</math>, <math>R^2=0.073</math>)</b>					
<i>Primary Stakeholders</i>	0.32	0.30	2.80**		
<i>Secondary Stakeholders</i>	-0.11	-0.12	-1.12		
<b>Model 3. GMA Green Pricing (<math>F=0.651</math>, <math>p=0.524</math>, <math>R^2=0.013</math>)</b>					
<i>Primary Stakeholders</i>	0.01	0.01	0.06		
<i>Secondary Stakeholders</i>	0.10	0.11	1.01		

<sup>a</sup> Each of the Subjective Norms and GMA items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

<sup>d</sup> Same tolerance and VIF across each of the three models given the same four Subjective Norms factors were considered predictors in each model.

\*\* $p<0.01$

### *Relationship between Perceived Behavior Control and Green Marketing Intentions (H8)*

The relationship between perceived behavior control and green marketing intention (GMI) was also analyzed using multiple regressions. One multiple regression model was requested. In the model, the GMI factor served as the dependent variable predicted by each of the two perceived behavior control (PBC) factors (as the independent variables). As can be seen from table 17, Model 1 was statistically significant ( $F=21.100$ ,  $p<0.001$ ,  $R^2=0.340$ ) in predicting the managers' intentions to practice green marketing. Multi-collinearity was not an issue across subjective norms factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 1, only one of the PBC factors— *external PBC* ( $t=-5.39$ ,  $p<0.001$ ;  $\beta=-0.51$ ) served as a significant predictor. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the PBC factor— *external PBC*, their level of agreement with the GMI factor—*intention* decreased by .51 units. As a result, Hypotheses 8 was supported.

Table 17. Multiple Regression Output for H8

GMI Models with Perceived Behavior Control Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. (<math>F=21.100</math>, <math>p&lt;0.001</math>, <math>R^2=0.340</math>)</b>					
<i>Internal PBC</i>	-0.14	-0.18	-1.86	0.91	1.10
<i>External PBC</i>	-0.44	-0.51	-5.39***	0.91	1.10

<sup>a</sup>Each of the Perceived Behavior Control and GMI items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup>Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup>VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as  $1/\text{tolerance}$ ; and is always greater than 1.

\*\*\* $p<0.001$

*Relationship between Perceived Behavior Control and Green Marketing Behavior (H9)*

To address Hypothesis 9 and determine whether perceived behavior control (PBC) significantly predicted their green marketing behavior (GMB), four multiple regression models were requested. In each model, one GMB factor served as the dependent variable, predicted by each of the two perceived behavior control factors (as the independent variables). As can be seen from Table 18, all four models, Model 1 ( $F=21.86, p<0.001, R^2=0.345$ ), Model 2 ( $F=6.215, p<0.01, R^2=0.130$ ), Model 3 ( $F=7.584, p<0.01, R^2=0.155$ ) and Model 4 ( $F=4.238, p<0.05, R^2=0.093$ ) were significant. Multi-collinearity was not an issue across attitudes toward green marketing factors as tolerance values exceeded the .20 threshold while VIF values were substantially less than the 5.0 critical-value (O'Brien, 2007).

For Model 1, only one of the perceived behavior control factors, *internal PBC* ( $t=-6.22, p<0.001; \beta=-0.58$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the PBC factor — *internal PBC*, their level of agreement with the GMB factor— *serving green product and including stakeholders into this process* decreased by 0.58 units.

For Model 2, both of the two perceived behavior control factors— *internal PBC* ( $t=-2.11, p<0.05; \beta=-22.5$ ) and *external PBC* ( $t=-2.08, p<0.05; \beta=-22.3$ ) were significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the PBC factor — *internal PBC*, their level of agreement with the GMB factor— *energy, water saving and waste management & customer collaboration* decreased by 22.5 units and with every unit increase in

managers' level of agreement with items comprising the PBC factor — *external PBC*, their level of agreement with the GMB factor— *energy, water saving and waste management & customer collaboration* decreased by 22.3 units.

For Model 3, only one of the perceived behavior control factors, *internal PBC* ( $t=-3.86, p<0.001; \beta=-0.41$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the PBC factor — *internal PBC*, their level of agreement with the GMB factor—*finance* decreased by 0.41 units.

For Model 4, only one of the perceived behavior control factors, *internal PBC* ( $t=-2.72, p<0.01; \beta=-0.30$ ) was significant. Based on the regression coefficient, with every unit increase in managers' level of agreement with items comprising the PBC factor — *internal PBC*, their level of agreement with the GMB factor—*using renewable sources of energy and promoting hotels through ecological arguments*, decreased by 0.30 units. As a result, Hypotheses 9 was supported.

Table 18. Multiple Regression Output for H9

GMB Models with Perceived Behavior Control Factors <sup>a</sup>	B	Beta( $\beta$ )	t	tol <sup>b</sup>	VIF <sup>c</sup>
<b>Model 1. GMB Serving green product and including stakeholders into this process</b> ( $F=21.86, p<0.001, R^2=0.345$ )					
Internal PBC	-0.45	-0.58	-6.22***	0.91 <sup>d</sup>	1.10
External PBC	-0.02	-0.03	-0.30	0.91	1.10
<b>Model 2. GMB Energy, water saving and waste management &amp; customer collaboration</b> ( $F=6.215, p<0.01, R^2=0.130$ )					
Internal PBC	-0.22	-0.23	-2.11*		
External PBC	-0.23	-0.22	-2.08*		
<b>Model 3. GMB Finance</b> ( $F=7.584, p<0.01, R^2=0.155$ )					
Internal PBC	-0.37	-0.41	-3.86**		
External PBC	0.07	0.07	0.63		
<b>Model 4. GMB Using renewable sources of energy and promoting hotels through ecological arguments</b> ( $F=4.238, p<0.05, R^2=0.093$ )					
Internal PBC	-0.27	-0.30	-2.72**		
External PBC	-0.02	-0.02	-0.20		

<sup>a</sup> Each of the Perceived Behavior Control and GMB items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

<sup>b</sup> Tolerance is a measure that assesses the degree of multi-collinearity in the model. It is defined as 1 minus the squared multiple correlation of the variable with all other independent variables in the regression equation.

<sup>c</sup> VIF or variance inflation factor is another measure that assesses the degree of multi-collinearity in the model. VIF is defined as 1/tolerance; and is always greater than 1.

<sup>d</sup> Same tolerance and VIF across each of the four models given the same four Perceived Behavior Control factors were considered predictors in each model.

\* $p<0.05$

\*\* $p<0.01$

\*\*\* $p<0.001$

### *Relationship between Green Marketing Intention and Green Marketing Behavior (H10)*

To address Hypothesis 10 and determine whether green marketing intention (GMI) significantly predicted their green marketing behavior (GMB), four simple linear regression models were requested. In each model, one GMB factor served as the dependent variable, predicted by each the GMI factor (as the independent variables). As can be seen from Table 19, all four models, Model 1 ( $F=21.175, p<0.001, R^2=0.201$ ), Model 2 ( $F=27.689, p<0.001, R^2=0.248$ ), Model 3 ( $F=4.714, p<0.05, R^2=0.053$ ) and Model 4 ( $F=13.097, p<0.01, R^2=0.135$ ) were significant. Consequently, Hypotheses 10 was supported.

Table 19. Simple Linear Regression Output for H10

GMB Models with Intention Factor	B	Beta( $\beta$ )	t
<b>Model 1. GMB Serving green product and including stakeholders into this process (<math>F=21.175</math>, <math>p&lt;0.001</math>, <math>R^2=0.201</math>)</b>			
<i>Intention</i>	0.43	0.45	4.60 <sup>***</sup>
<b>Model 2. GMB Energy, water saving and waste management &amp; customer collaboration (<math>F=27.689</math>, <math>p&lt;0.001</math>, <math>R^2=0.248</math>)</b>			
<i>Intention</i>	0.59	0.5	5.26 <sup>***</sup>
<b>Model 3. GMB Finance(<math>F=4.714</math>, <math>p&lt;0.05</math>, <math>R^2=0.053</math>)</b>			
<i>Intention</i>	0.26	0.23	2.17 <sup>*</sup>
<b>Model 4. GMB Using renewable sources of energy and promoting hotels through ecological arguments (<math>F=13.097</math>, <math>p&lt;0.01</math>, <math>R^2=0.135</math>)</b>			
<i>Intention</i>	0.41	0.37	3.62 <sup>**</sup>

<sup>a</sup>Each of the Green Marketing Intention and GMB items were asked on a 5-pt scale where 1=strongly disagree and 5=strongly agree.

\* $p<0.05$

\*\* $p<0.01$

\*\*\* $p<0.001$

## CHAPTER V

### CONCLUSION

The main purpose of this study was to investigate how hotel managers' behavioral intentions for green marketing are related to determinants within a modified framework of the Theory of Planned Behavior (TPB). This chapter begins with a discussion of the findings from the research. Following that, implications and limitations of the study are provided. Finally, suggestions for future research are offered.

#### **Discussion of the Findings**

The current research moves beyond previous studies in several ways. First, it extended the original TPB by integrating a critical construct (environmental attitude) in a green marketing context into the original framework. Meeting Ajzen's (1991) criteria for theory extension/modification, the addition of a new construct into the model contributed to a greater explanation of intention for green marketing within the model. In addition, according to the results of the current study (i.e., nine of the ten hypothesis supported in the model), the TPB is useful explaining managers' green marketing intention and its relationship with existing marketing practices in hotels (Figure 3).

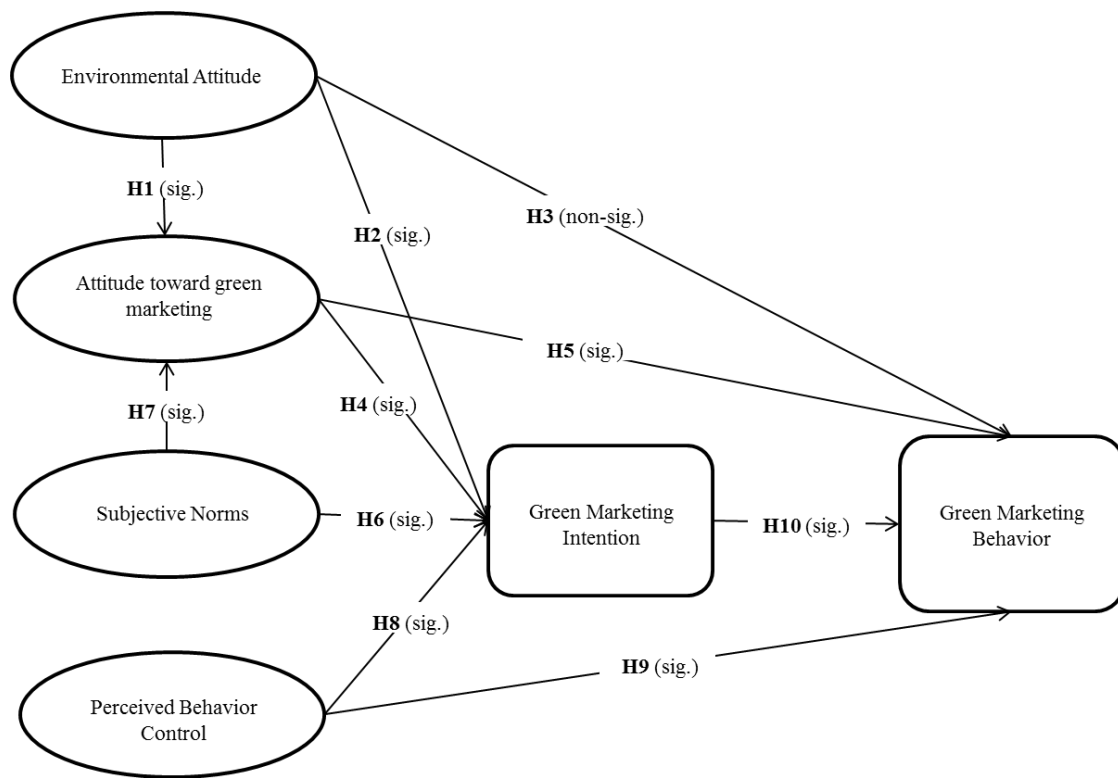


Figure 3. Result of the Tested Hypothesis

Environmental attitudes have been found to often have small impact on environmentally- friendly behavior (Kollmuss & Agyeman, 2002). Many previous studies using the theory of reasoned action and the theory of planned behavior show that a direct relationship between environmental beliefs or attitudes and behavior does not exist (e.g., Pickett-Baker and Ozaki, 2008; Ozaki, 2011). Ozaki (2011) indicated that even green consumers are oftentimes undecided as to whether they adopt green behaviors. Environmentally-responsible behavior is influenced by many factors such as subjective norms, perceived behavior control, past behavior, etc. (Fransson& Gärling, 1999). A low-cost/high-cost model by Diekmann and Preisendoerfer (1998) shows the discrepancy between environmental attitude and environmentally-friendly behavior.

Their model indicated that people perform environmentally-friendly behavior when the behaviors demand low costs. Even though environmental attitudes would not have a direct effect on a specific behavior, it would affect behavioral intention. (Fielding, McDonald & Louis, 2008). Similarly, the result of the current study shows that environmental attitude affects attitude toward green marketing (H1) and green marketing intention (H2) while it does not affect green marketing behavior (H3) directly. Accordingly, it can be inferred from the study that managers who are concerned about environmental issues tend to have a more positive attitude toward green marketing and have a higher intention to apply green marketing in their hotels.

Managers tend to make changes in strategies, products and processes when the changes are compatible with their own values and perceptions (Bansal & Roth, 2000). The results of the current study indicate that a significant relationship between managers' attitudes toward green marketing and their green marketing intention does indeed exist ( $F=12.269$ ,  $p<0.001$ ,  $R^2=0.310$ ) (H4). This result is consistent with previous studies. An individual's positive attitude toward a certain behavior strengthens his/her intention to perform said behavior (Ajzen et al., 1991). In a similar context, Han, Hsu & Sheu (2010) explained the formation of hotel customers' intentions to visit a green hotel. They found that attitude toward a behavior had a greater influence on visit intentions than subjective norms and perceived behavioral control. Similarly, a moderately strong coefficient path value and a significant relationship between the attitudes of senior marketers and intention of engaging in sustainable marketing practices were found in the study by Ferdous (2010).

Greening of hotels' facilities avoids criticism of traditional hotel practices because the green practices would satisfy eco-friendly customers' green needs and fulfill the requirements of government regulations (Kim et al., 2012). Furthermore, green marketing can allow companies access to new markets, in an effort to create competitive advantages and increase profitability. Managers in the study realize this as the item, "Green hotels can elevate industry members' image and reputation to attract green tourists who demand green accommodation when travelling", was the highest rated item ( $M=4.25$ ).

While many organizations implement long-term, proactive environmental strategies, some companies launch environmentally-friendly products which can mislead people with false promises (Davis, 1991). Accordingly, some hotels can be accused of "green washing", which is promoting environmentally-friendly programs while hiding environmentally-unfriendly practices of the hotel (Strick et al., 2013). Thus many companies fear being accused of "green washing" while promoting their green products (Peattie & Crane, 2005). Similarly, in this study, managers neither agreed nor disagreed with the item "Hotels are sincere in instituting programs that save water and energy, reduce solid waste, use resources economically and protect the planet's ecosystem" ( $M=3.08$ ).

However, in 10 of 19 studies examined by Ajzen (1991), subjective norms failed to significantly predict intentions, many studies found a significant relationship between subjective norms and intentions. In a hospitality setting, Han and Kim (2010) found that subjective norms, which are perceived social pressure from customers' significant

referents, had the greatest direct effect on intention to revisit a green hotel among three variables under consideration (i.e., attitude, subjective norms and perceived behavior control). In the study it was indicated that a persons' perceived social pressure from referents to engage in a certain behavior induces his/her positive or negative evaluation of a behavior. Likewise, Ferdous (2010) found a moderately strong coefficient path value and a significant relationship between subjective norms and senior marketing managers' sustainable marketing intentions. In line with previous studies, in the present study, a significant relationship between subjective norms and green marketing intention ( $F=5.910$ ,  $p<0.001$ ,  $R^2=125$ ) was found (H6).

Chang (1998) mentioned that adding a path from subjective norms to attitude was important to increase the strength of the model. Ryu and Jang (2006) found that perceived subjective norm has a positive effect on attitude toward a certain behavior. Han and Kim (2010) also found a direct, positive and significant relationship between subjective norms and attitude. Similarly, this study found a significant relationship between subjective norms and attitude toward green marketing, which confirms Chang's (1998) assertion (H7).

According to this study, NGOs ( $M=3.77$ ) and customers ( $M=3.58$ ) have the highest means while central government has a low mean ( $M=3.30$ ). Such a finding begs the question, are' parameters in place for regulating hoteliers from potentially polluting the environment in Turkey? Since suppliers have the lowest mean ( $M=3.04$ ), it can be inferred from the study that suppliers as a reference group do not have a strong influence on managers to encourage green marketing intentions. Among suppliers of hotels,

international tour operators are important business partners. As Tosun (2000) infers, if the international tour operators are not eager to collaborate with developing countries so as to create sustainable tourism endeavors, the sustainable development of tourism would be nearly impossible in those countries.

Although managers should pay serious attention to environmental issues and act responsibly, they do not always behave accordingly, because their behavior is directed by some constraints (Martin, 2010). Thus it is important to evaluate perceived behavior control to understand the behaviors that cannot be fully controlled by individuals (Corby et al., 1996).

Ferdous (2010) indicated that PBC did not have a significant effect on the behavioral intentions of marketing managers in the Bangladeshi market to engage in sustainable marketing practices. In contrast, Lam & Hsu (2010) found that perceived behavioral control had the greatest impact in determining Chinese travelers' behavioral intention, marked by a negative correlation. This means that the higher degree of perceived travel barriers for travelling to a destination leads to a lower degree of intention of traveling to the destination. Similarly, this study found a significant negative relationship between perceived behavior control and green marketing intention ( $F=21.100$ ,  $p<0.001$ ,  $R^2=0.340$ ) (H8).

Ajzen's (1991) proposed that perceived behavioral control (PBC) influences both intentions and actual behavior. According to Ajzen (1991), one of the reasons for proposing a direct link between perceived behavioral control and behavior is that perceived behavioral control can often be a consistent indicator of actual control.

According to a meta-analysis on TPB, “PBC should (1) facilitate the implementation of behavioral intentions into action, and (2) predict behavior directly.” (Armitage and Conner, 2001, p. 473). Armitage and Conner (2001) showed that the perceived behavioral control (PBC) construct accounted for significant amounts of variance in intention and behavior, independent of the theory of reasoned action variables. Similarly, this study also hypothesized a direct relationship between perceived behavior control and green marketing behavior, which was found to be significant (H9).

“Intentions are assumed to capture the motivational factors that influence a behavior and to indicate how hard people are willing to try or how much effort they would exert to perform the behavior” (Ajzen, 1991, p. 181). Despite the fact that there is no perfect relationship between intention and actual behavior, intention is still considered to be the best predictor of behavior (Ajzen et al., 1985, 1991; Lam & Hsu, 2004). Ajzen (1991) also points out that, the stronger intention that an individual has to perform a specific behavior, the more likely the individual will engage in the behavior. However, gaps between intention and actual behavior have been found in numerous past studies (Ajzen, Brown, & Carvajal, 2004). “The hypothetical bias could be an explanation of the inaccuracy of intentions’ prediction of behavior.” (Hsu & Huang, 2012). Sheppard, Hartwick, and Warshaw’s (1988) indicated that there is a need to take self-predictions into account together with behavioral intentions when predicting actual behavior. Sheppard et al. (1988) also argued that measures of self-predictions were found to have stronger relationships with behaviour (mean  $r = .57$ ) than did behavioural intentions (mean  $r = .49$ ). Similarly, however Hsu et al. (2012) found a significant

relationship between intention and actual behavior, their study revealed low predictive capacity of intention on actual behavior (Behavioral intention explained 5% of the variance in actual behavior using regression analysis). In contrast, the current study found a strong relationship between intention and actual green marketing behavior with a high predictive capacity (H10).

Even though environmental issues have become a concern throughout the world and green marketing has become an inevitable necessity for companies hoping to be sustainable, that is not necessarily the case for developing countries. Green marketing items with low means in the current study indicate that many hotels in Turkey have not necessarily adapted to and implemented green marketing practices.

Companies would most likely prefer to choose green strategies if they could reduce costs (Diekmann & Preisendoerfer, 1998). In this study, managers rated the item “offering competitive prices to our customers as a result of the environmentally friendly practices” very low mean ( $M= 3.11$ ). From this, it might be inferred that green practices do not yield enough financial benefit to offer competitive prices. The item “using renewable sources of energy” was also rated low ( $M=3.27$ ). The reason for this may be due to the fact that green technologies have very high initial costs when first implemented. Once more, managers rated the items “Rewarding employees with the best environmental initiatives” ( $M= 3.26$ ) and “Educating customers” ( $M=3.31$ ) low. In order to achieve more environmentally responsible behavior in the hotel sector, it is necessary to be in collaboration with employees and customers (Bohdanowicz, 2005).

While many organizations implement long-term, proactive environmental strategies, some companies launch environmentally-friendly products which can mislead people with false promises (Davis, 1991). Accordingly, some hotels can be accused of “green washing”, which is promoting environmentally-friendly programs while hiding environmentally-unfriendly practices of the hotel (Strick et al., 2013). Thus many companies fear being accused of “green washing” while promoting their green products (Peattie & Crane, 2005). The item “Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns” was the lowest rated item in the green marketing behavior scale ( $M=2.95$ ). The reason for this may be due to the fact that managers do not want to be accused of “green washing”.

### **Practical Implications**

This study contributes to the organizational greening and green marketing literature by increasing the understanding of how managers’ attitudes and intentions toward green marketing are associated with green marketing practices at hotels in a developing country. Financial aid seems to be especially important in developing countries. Governments should support hospitality sector by providing economic incentives for the industry to adopt environmentally sound practices. This may include creating environmental requirements in the hotel environmental standardization procedures and monitoring the process throughout time. Local governments along with the central government should pay close attention to find innovative solutions to reduce environmental impacts of hospitality and tourism industry.

The results of the study show that customers have put significant pressure on managers' decision making processes as in previous studies ( Ayuso, 2006; Azorin et al., 2009, Curtin and Busby, 1999 ). Change within the hospitality sector to become more green will largely depend on customers' demands for sustainability (Tsaur, 2006). Wide-reaching environmental education campaigns are needed to initiate a change in social attitudes (Holden & Sparrowhawk, 2002). Furthermore, green hotels should include customers in their greening process (Bohdanowicz et al., 2005). Written or visual educational tools can be used (e.g. brochures, exhibitions) that facilitate the customer decision-making process.

The hotel industry in Turkey would be best served by considering findings from this study and others like it. Collaboration with stakeholders in regards to green marketing will only aid in alleviating problems with the hospitality tourism sector (Bohdanowicz et al., 2005; Tosun et al, 2000). According to the results of this study, hotel managers do not place enough importance on educating and collaborating with employees regarding green practices. Hotels should not only educate their customers but also collect feedback from employees on how successful the hotel implements its green activities and should encourage empowerment and reward systems at all levels of the organization. By doing so, the hotels can achieve green outcomes and may even increase employees' voluntary commitment to such practice (Ayuso et al., 2006).

Green certification of hotels is a valuable tool that may help to increase customer confidence in green products or services (Millar & Baloglu, 2011). Hoteliers should promote their well-known green awards (e.g. ISO 14001) and keep their stakeholders

informed about environmental achievements throughout time (Chan et al., 2006). The internet is one of the most effective green marketing promotional tools since most customers search for hotels online (Chan et al., 2013). Hoteliers can promote their green practices through social media such as Twitter and Facebook (Kaplan & Haenlein, 2010). It goes without saying that hotels need to embrace green practices and once they do, they can better market themselves as green establishments. Ultimately, this will help foster awareness about sustainability and promote green practices.

### **Limitations and Future Research**

This research has its limitation. The first limitation is related to the use of an online survey method. The online survey technique may not be the best way to reach a general population. Unfortunately, oftentimes it results in low response rates (e.g., Han et al., 2010; Han et al., 2009; Kim and Ok, 2009; Kim et al., 2009; Yang and Peterson, 2004). The current study with its low response rate calls into question the ability to generalize findings to Turkish hotel managers responsible for marketing overall. The low response rate may have minimized variability in responses and the results of the study could be affected by non-response bias (Sivo & others, 2006). It is possible that those that did not respond were fundamentally unique to the group that did respond therefore resulted in a sample not generalizable or representative of the population of Turkish hotel managers (Han et al., 2010). However, according to Krosnick (1999) and Dillman (1991), low response rates do not necessarily cause bias when respondents' characteristics represent the characteristics of non-respondents. To estimate nonresponse bias, some studies compare early respondents with individuals who respond later in the

administration period (Hutchinson, Tollefson & Wigington, 1987; Johnson, Beaton, Murphy & Pike, 2000; Stinchcombe, Jones & Sheatsley, 1981). However, this method still may not represent the true extent of nonresponse bias in the data (Sax, Gilmartin, & Bryant, 2003).

Low response rates also may cause some problems for analyzing data. It is widely proposed that larger samples while conducting factor analysis tend to provide more accurate estimates of population loadings (i.e., the loadings would have smaller standard errors). There are different recommendations about sample size regarding factor analysis. According to Gorsuch (1983) and Kline (1979) sample size should be at least 100. Guilford (1954) claimed that it should be at least 200. Comrey and Lee (1992) proposed that sample sizes in factor analysis: 100 = *poor*, 200 = *fair*, 300 = *good*, 500 = *very good*, 1,000 or more = *excellent*. Barrett and Kline (1981) investigated the sample size issue by drawing subsamples of various sizes from two empirical data sets. The first set included 461 individuals on the 16 scales of Cattell's Sixteen Personality Factor Questionnaire (16 PF; Cattell, Eber, & Tatsuoka, 1970). The second one included 1,198 individuals on the 90 items of the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1975). For the first data, good recovery was obtained from a subsample of  $N = 48$ . For the second data, good recovery was obtained from a subsample of  $N = 112$ . Similarly, Arrindell and van der Ende (1985) draw subsamples and conducted factor analysis. For a 76-item questionnaire, they found that  $N = 100$  sufficient and for a 20-item questionnaire, they found a subsample of  $N = 78$  sufficient to achieve an adequate match to the full-sample solution. MacCallum and others (1999) also indicated that “The

necessary  $N$  is in fact highly dependent on several specific aspects of a given study. Under some conditions, relatively small samples may be entirely adequate, whereas under other conditions, very large samples may be inadequate.”

The study also has a low reliability problem for some factors of the mentioned constructs. In general, Cronbach’s alpha reliability coefficient ranges between 0 and 1. Although, there is no actual lower limit for the coefficient, the closer Cronbach’s alpha coefficient to 1.0 has the greater the internal consistency of the items in the scale (Gliem, 2003). George and Mallery (2003) provide the following rules of thumb: “ $\alpha > .9$  – Excellent,  $\alpha > .8$  – Good,  $\alpha > .7$  – Acceptable,  $\alpha > .6$  – Questionable,  $\alpha > .5$  – Poor, and  $\alpha < .5$  – Unacceptable” (p. 231)

The value of reliability of the four factors for NEP scale ranged from .41 to .69, which was significantly lower than the 0.82 found by Dunlap (2000). The internal consistency of the New Ecological/Environmental Paradigm scales varies across cultures (Bostrom, 2006). Thus, it can be implied that the reliability of NEP scale may also differ in its application in Turkish culture. In examining the reliability and validity of NEP among 1295 Turkish university students, Erdogan (2009) found that the coefficient alpha for the 15 items ranged between .47 and .53. Similarly, other studies in Turkey found relatively low reliabilities for NEP scale: Taskin (2009) found the Cronbach’s alpha was 0.46 for a particular factor and Sam (2010) found the Cronbach’s alpha was 0.53 for another factor.

Submitting questionnaires to representatives of organization such as the Chief Executive Officer (CEO) and managing director may lead to lower response rates

compared to general populations of individuals, because managers have a variety of reasons for not responding or declining surveys (e.g. too busy, not considered relevant, unavailable to return questionnaire, and cases when it was company policy not to complete surveys) (Baruch, 1999). Another reason for low response rate may be due to the fact that the researcher sent the e-mails (and embedded survey instrument link) from a country outside of Turkey, so potential respondents may have questioned the intentions of such research. Confidentiality of the participants in the survey might be a problem too. E-mail surveys don't give respondents the choice of being anonymous completely because they disclose the sender's identity (Ilieva, Baron & Healey, 2002). Furthermore, concerns about possible breakdowns in security and viruses might be a cause for a low response rate (Sivo et al., 2006). Finally, lack of personalization in the current study might be a cause for low response rate. Dillman (1991) indicated "personalization", addressing a specific individual, leads a good response rate. Personalization shows the respondent's importance and by creating an impact of topic salience, it shows that there is a positive relationship between researcher and respondent (Martin, 1994).

The appropriate number of factors to retain after factor extraction is an important decision and has been discussed by many authors (e.g., Fabrigar, Wegener, MacCallum, & Strahan, 1999; Hayton, Allen, & Scarpello, 2004). This study used the Varimax rotation procedure and only variables with factor loadings greater than 0.5 were retained in each factor grouping because loadings of 0.50 or greater are considered practically significant (Costello & Osborne, 2005). Furthermore, cross-loaded items whose value exceeded .32 were also removed (Tabachnick & Fidell, 2007). This procedure led the

researcher to drop many items in some scales during the factor extraction stage. Unfortunately, according to Ledesma and Mora (2007), “Mistakes at this stage, such as extracting too few or too many factors, may lead to erroneous conclusions in the analysis”.

As mentioned above, modifying the TPB model by changing paths and adding different constructs in a specific context often provides better understanding of the theoretical mechanism of the model and increases the prediction power for individuals’ intention/behavior (Ajzen, 1991). While this study did just this by adding environmental attitude to the model, much room for expansion exists. Future studies can consider including other variables (such as organizational identity, the leadership style of managers, past behavior of managers, motivation, etc.) to expand the theory of planned behavior more broadly. “For-profit firms are generally run on behalf of their owners, non-profit organizations on behalf of their customers, and local government agencies on behalf of customers and perhaps additional segments of the community” (Ben-Ner & Ren, 2010, p. 612). Since this study also surveyed international chain hotels, it was almost impossible to reach the owners of those hotels. But future studies working with local profit companies may consider owners as their population.

Because of time constraints, this study did not apply a pilot study. Pilot studies help researchers test their hypotheses that leads to testing more precise hypotheses in the main study and it usually provides new ideas, approaches, and clues that might not been assumed before conducting the pilot study (Meriwether, 2001). Future studies might consider conducting a pilot study to help contribute to clearer findings in the overall

study. Also, researcher recommends that future research should adapt on-site data collection rather than e-mail survey to increase response rate (Sivo et al., 2006). Future research can investigate employees' intentions to engage in green marketing process (Ferdous, 2010). Future studies might also consider other developing countries to see whether their managers reflect similar behavioral patterns while engaging in green marketing. Finally, since the current research investigated hospitality industry as a service industry, the researchers also recommend that further research examine manufacturing industries.

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## APPENDIX A

### QUESTIONNAIRE IN ENGLISH

#### Green Marketing Practices Survey

Hello and thank for agreeing to participate in our study focusing on green (sustainable) marketing within Turkish hotels. This questionnaire should take approximately 10 minutes to complete. Your responses will be very helpful to understand the hotel managers' attitudes toward green marketing and developing suggestions for green marketing practices.

#### SECTION 1: Information about hotel

1. What is the classification of your hotel/resort? (Please check one)

- ☐ 1-star
- ☐ 2-star
- ☐ 3-star
- ☐ 4-star
- ☐ 5-star
- ☐ Boutique hotel

2. When did your hotel establish?

\_\_\_\_\_

3. How many full-time employees does your hotel have?

\_\_\_\_\_ (Please write in number)

4. How many part-time employees does your hotel have?

\_\_\_\_\_ (Please write in number)

5. How many rooms are available in your hotel/resort?

\_\_\_\_\_ (Please write in number)

6. How many beds are available in your hotel/resort?

\_\_\_\_\_ (Please write in number)

7. Which of the following group of travelers does your hotel/resort primarily target? (Please check one)

- ☐ Business travelers primarily
- ☐ Leisure travelers primarily
- ☐ An even combination of business and leisure travelers

8. Is your hotel/resort chain-affiliated or independent? (Please check one)

- ☐ Chain-affiliated  
☐ Independent

9. Where is your hotel located? (Check all that apply)

- ☐ Urban place  
☐ Rural place  
☐ Coastal area  
☐ Forest

10. Does your hotel/resort have any green (environmental) certification? (Please check one)

- ☐ No (if no, please skip to question 12)  
☐ Yes

11. What is the name of the green certification your hotel/resort possesses?

\_\_\_\_\_ (Please write in name)

## SECTION 2: Environmental Attitudes

12. How much do you agree with the following statements regarding your attitude about the environment? The scale ranges from 1-5, where 1 = *strongly disagree* and 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
We are approaching the limit of the number of people the earth can support.	1	2	3	4	5
Humans have the right to modify the natural environment to suit their needs.	1	2	3	4	5
When humans interfere with nature, it often produces disastrous consequences.	1	2	3	4	5
Human ingenuity will insure that we do NOT make the earth unlivable.	1	2	3	4	5
Humans are severely abusing the environment.	1	2	3	4	5
The earth has plenty of natural resources if we just learn how to develop them.	1	2	3	4	5
Plants and animals have as much right as humans to exist.	1	2	3	4	5
The balance of nature is strong enough to cope with the impacts of modern industrial nations.	1	2	3	4	5
Despite our special abilities, humans are still subject to the laws of nature.	1	2	3	4	5

The so-called “ecological crisis” facing humankind has been greatly exaggerated.	1	2	3	4	5
The earth is like a spaceship with very limited room and resources.	1	2	3	4	5
Humans were meant to rule over the rest of nature.	1	2	3	4	5
The balance of nature is very delicate and easily upset.	1	2	3	4	5
Humans will eventually learn enough about how nature works to be able to control it.	1	2	3	4	5
If things continue on their present course, we will soon experience a major ecological catastrophe	1	2	3	4	5

### SECTION 3: Attitudes about Green Marketing

13. How much do you agree with the following statements regarding your attitude about green marketing? The scale ranges from 1 = *strongly disagree* to 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
Hotel green marketing should begin with green product and service design.	1	2	3	4	5
Green hotel products and services may provide an opportunity for product differentiation.	1	2	3	4	5
Green hotels can elevate industry members’ image and reputation to attract green tourists who demand green accommodation when travelling.	1	2	3	4	5
Hotels are sincere in instituting programs that save water and energy, reduce solid waste, use resources economically and protect the planet’s ecosystem.	1	2	3	4	5
Hotels provide products and services that do no harm to human health.	1	2	3	4	5
Green pricing works only when green products and services reduce hotel guests’ costs.	1	2	3	4	5
Hotel customers who are more receptive to environmentally friendly products and services are more willing to pay extra for them.	1	2	3	4	5
Green hotel products and services are almost always priced at a premium relative to conventional offerings.	1	2	3	4	5
Some hotels have attempted to develop green certification programmes to gain green customer confidence.	1	2	3	4	5
The internet is an effective channel for marketing a hotel’s green initiatives directly to customers.	1	2	3	4	5

#### SECTION 4: Others Expectations of Your Green Marketing (subjective norms)

14. How much do you agree with the following statements regarding the effects of your stakeholders on the marketing decisions of your hotel? The scale ranges from 1 = *strongly disagree* to 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I believe that <u>our guests</u> expect us to practice green marketing.	1	2	3	4	5
I believe that <u>our employees</u> expect us to practice green marketing.	1	2	3	4	5
I believe that <u>our suppliers</u> expect us to practice green marketing.	1	2	3	4	5
I believe that <u>our owner/owners</u> expect us to practice green marketing.	1	2	3	4	5
I believe that the <u>local businesses</u> expect us to practice green marketing.	1	2	3	4	5
I believe that <u>NGOs</u> expect us to practice green marketing.	1	2	3	4	5
I believe that the <u>local government</u> expects us to practice green marketing.	1	2	3	4	5
I believe that the <u>central government</u> expects us to practice green marketing.	1	2	3	4	5

#### SECTION 5: Control You have in Adopting Green Practices (Perceived behavioral control)

15. How much do you agree with the following statements regarding your control on environmental decisions? The scale ranges from 1 = *strongly disagree* to 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I do not have enough knowledge to influence my hotel's environmental decisions.	1	2	3	4	5
I do not have enough authority to influence my hotel's environmental decisions.	1	2	3	4	5
Improvements in my hotel's environmental performance will not	1	2	3	4	5

make a difference to improve the environment.					
My hotel has no resources to improve the environment.	1	2	3	4	5
It would be very hard for my hotel to be economically successful and protect the environment at the same time.	1	2	3	4	5
My hotel cannot improve environmental performance on its own initiative because it must remain competitive.	1	2	3	4	5

## SECTION 6: Green Marketing Intention

16. How much do you agree with the following statements regarding your intention to engage in green marketing for your hotel/resort? The scale ranges from 1 = *strongly disagree* to 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I intend to help our marketing department make a net positive contribution to society through its marketing activities	1	2	3	4	5
I am planning to make a net positive contribution to society through our marketing department	1	2	3	4	5
I will help our marketing department move toward a form of marketing that makes a net positive contribution to society	1	2	3	4	5

## SECTION 7: Green Marketing Behavior of your Hotel/Resort

17. How much do you agree with the following statements regarding your hotel's green marketing initiatives? The scale ranges from 1 = *strongly disagree* to 5 = *strongly agree*. (Please circle one number per statement).

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
Our hotel uses environmentally friendly supplies and consumable products for our products/services	1	2	3	4	5
Our hotel gives priority to offering ecological products and services	1	2	3	4	5
Our hotel is geared to design, develop and offer its product/services in an environmentally friendly way	1	2	3	4	5
Our hotel provides its product/services in a way that minimizes	1	2	3	4	5

its impact on the natural environment

Our hotel tends to build environmental compliance costs into the service price	1	2	3	4	5
Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices	1	2	3	4	5
Our hotel takes advantage of the financial success of several environmentally friendly products/services, to reduce its prices	1	2	3	4	5
Our hotel offers competitive prices to our customers as a result of the environmentally friendly practices implemented	1	2	3	4	5
Our hotel encourages suppliers/vendors and agents/representatives to embrace and reflect environmental responsibility	1	2	3	4	5
Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility	1	2	3	4	5
Our hotel is careful when choosing supplies and consumable products so that these are environmentally friendly	1	2	3	4	5
Our hotel buys supplies in bulk to reduce packaging where possible	1	2	3	4	5
We highlight our commitment to environmental preservation in our advertisements, sponsorships and/or campaigns	1	2	3	4	5
Our promotional and communicational efforts highlight and inform our customers about the our environmental efforts	1	2	3	4	5
Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns	1	2	3	4	5
Our hotel communicates its environmental initiatives to all employees	1	2	3	4	5
Our hotel provides to employees training on environmental issues	1	2	3	4	5
Our hotel rewards employees with the best environmental initiatives	1	2	3	4	5
Our hotel staff “educates” consumers about the harmful environmental impact of human actions through verbal or written	1	2	3	4	5
Our hotel encourages employees to actively participate in environmental awareness programs and activities organized for the community	1	2	3	4	5
Our hotel applies energy saving practices in guestrooms and common areas	1	2	3	4	5
Our hotel applies water saving practices in guestrooms and common areas	1	2	3	4	5
Our hotel applies waste management practices in guestrooms and common areas	1	2	3	4	5
Our hotel uses renewable sources of energy	1	2	3	4	5
Our hotel facilitates customer collaboration (e.g., voluntary changing of towels) in environmental protection	1	2	3	4	5
Our hotel tries to mix environmental-friendliness with other philosophies (e.g., quality, low-cost) across the service process	1	2	3	4	5

Our hotel encourages collaboration with local communities, governmental agencies, and other hotels in improving environmental standards and practices	1	2	3	4	5
Our hotel tries to offer a fully sustainable and ecologically-friendly experience to our customers	1	2	3	4	5

**SECTION 8: Background information: This information is completely confidential and will be used to determine if we have satisfactorily represented Hotel Managers throughout Turkey.**

18. What is your gender? (Please check one)

- ☐ Female  
☐ Male

19. What is your age?

\_\_\_\_\_ (Please write in number)

20. What is the highest level of education you have completed? (Please check one)

- ☐ Elementary and secondary school (they are combined in Turkish education system)  
☐ High school  
☐ Two-year college  
☐ Four-year college  
☐ Graduate school

21. What is your current position title at your hotel/resort?

\_\_\_\_\_ (Please write in)

22. How many years have you been in your current position?

\_\_\_\_\_ (Please write in number)

23. How many years have you worked in the hospitality industry overall?

\_\_\_\_\_ (Please write in number)

24. In what city is your hotel/resort located?

\_\_\_\_\_ (Please write in city name)

**Thank you for completing the questionnaire. We appreciate your time and willingness to share your opinion.**

## APPENDIX B

### QUESTIONNAIRE IN TURKISH

#### Yeşil (Sürdürülebilir) Pazarlama Uygulamaları Anketi

Merhaba, Türkiye'deki otellerin yeşil (sürdürülebilir) pazarlama uygulamaları ile ilgili olan çalışmamıza katılmayı kabul ettiğiniz için teşekkür ederiz. Bu anketi tamamlamak yaklaşık 10 dakikanızı alacaktır. Cevaplarınız Türkiye'deki otel yöneticilerinin yeşil pazarlamaya karşı tutumlarını anlamak ve Türkiye'deki otellere yeşil pazarlama önerileri geliştirmek adına önem taşımaktadır.

#### Bölüm 1: Otel Hakkında Bilgi

1. Otelinizin türünü belirtiniz. (Lütfen birini işaretleyiniz)

- ☐ 1 yıldızlı
- ☐ 2 yıldızlı
- ☐ 3 yıldızlı
- ☐ 4 yıldızlı
- ☐ 5 yıldızlı
- ☐ Butik otel

2. Oteliniz kaç yılında kurulmuştur?

\_\_\_\_\_

3. Otelinizde tam zamanlı kaç kişi çalışmaktadır?

\_\_\_\_\_ (Lütfen rakamla yazınız)

4. Otelinizde yarı zamanlı kaç kişi çalışmaktadır?

\_\_\_\_\_ (Lütfen rakamla yazınız)

5. Otelinizde kaç oda mevcuttur?

\_\_\_\_\_ (Lütfen rakamla yazınız)

6. Otelinizde kaç yataklıdır?

\_\_\_\_\_ (Lütfen rakamla yazınız)

7. Otelinizin hedef müşteri kitlesini hangi grup oluşturmaktadır? (Lütfen birini işaretleyiniz)

- ☐ İş amaçlı seyahat edenler
- ☐ Eğlence amaçlı seyahat edenler
- ☐ Her iki grup ta müşteri kitemizi oluşturmaktadır

8. Otelinizi hangi seçenek tanımlamaktadır? (Lütfen birini işaretleyiniz)

- ☐ Zincir otel
- ☐ Bağımsız otel

9. Otelinizin bulunduğu konumu hangisi tanımlamaktadır? (Birden fazla seçenek işaretleyebilirsiniz)

- ☐ Kent merkezi
- ☐ Kırsal alan
- ☐ Kıyı şeridi
- ☐ Orman

10. Oteliniz çevreye duyarlılığıyla alakalı herhangi bir sertifikaya sahip midir? (Lütfen birini işaretleyiniz)

- ☐ Hayır (eğer hayırsa, lütfen 12. soruya geçiniz)
- ☐ Evet

11. Otelinizin sahip olduğu çevreci sertifikalarının adını yazınız.

\_\_\_\_\_ (Lütfen yazınız)

## Bölüm 2: Çevresel Tutum

12. Çevreye karşı olan tutumunuzla ilgili olarak aşağıdaki ifadelere ne derece katılıyorsunuz? ( Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum) )  
(Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
Dünya'nın taşıyabileceği insan sayısı sınırına yaklaşmaktayız.	1	2	3	4	5
İnsanlar kendi istek ve arzuları doğrultusunda doğayı değiştirme hakkına sahiptirler.	1	2	3	4	5
İnsanoğlunun doğaya müdahalesi genellikle felaketlerle sonuçlanır.	1	2	3	4	5
İnsanoğlu aklı ve yaratıcılığı sayesinde, her durumda dünyayı yaşanabilir kılacaktır.	1	2	3	4	5
İnsanlar doğayı ve doğal kaynakları aşırı kullanmakta ve	1	2	3	4	5

tüketmektedirler.					
Aslında doğru kullanmayı ve geliştirmeyi bildiğimiz takdirde dünyadaki doğal kaynaklar sınırsızdır.	1	2	3	4	5
Hayvanlar ve bitkilerde en az insanlar kadar yasama hakkına sahiptirler.	1	2	3	4	5
Doğanın modern endüstrileşmiş toplumların tüm negatif etkilerini bertaraf edecek kadar güçlü bir dengesi vardır.	1	2	3	4	5
İnsanoğlu zeka gibi çok özel yeteneklere sahip olsa da yine de doğa kanunlarına tabiidir.	1	2	3	4	5
Ekolojik kriz denilen olay çok fazla abartılmaktadır.	1	2	3	4	5
Dünya sınırlı yeri ve kaynağı olan bir uzay gemisine benzemektedir.	1	2	3	4	5
İnsanoğlu doğaya hükmetme hakkına sahiptir.	1	2	3	4	5
Doğanın çok çabuk bozulabilecek kadar çok hassas bir dengesi vardır.	1	2	3	4	5
İnsan düşünce gücü ve zekası sayesinde doğanın tüm inceliklerini öğrenecek ve onu istediği gibi kontrol altına alacaktır.	1	2	3	4	5
Eğer herşey bugünkü seyrinde devam ederse, yakında çok büyük bir çevre felaketi yaşayacağız.	1	2	3	4	5

### Bölüm 3: Yeşil (Sürdürülebilir) Pazarlama Algısı ve Tutumu

13. Yeşil pazarlamaya karşı tutumunuzla ve algınızla ilgili olarak aşağıdaki ifadelere ne derece katılıyorsunuz? (Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum) )  
(Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
Otel yeşil pazarlaması öncelikle yeşil ürün ve hizmet geliştirilmesiyle başlamalıdır.	1	2	3	4	5
Otellerde yeşil ürün ve hizmetler, ürün farklılaştırması için fırsat sağlayabilir.	1	2	3	4	5
Yeşil oteller, çevreye önem veren turistleri çekerek, otel endüstrisinin imaj ve itibarını yükseltebilir.	1	2	3	4	5
Oteller su ve enerji tasarrufu, kaynakların ekonomik kullanılması ve dünya eko-sistemin korunmasıyla ilgili oluşturdukları programlarda dürüsttürler.	1	2	3	4	5
Oteller insan sağlığına zarar vermeyen ürün ve hizmetler sunarlar.	1	2	3	4	5
Sürdürülebilir fiyatlandırma, sadece yeşil ürün ve hizmetler maliyetleri düşürdüğü zaman işe yarar.	1	2	3	4	5
Çevre dostu ürün ve hizmetlere önem veren otel müşterileri, bu ürün ve hizmetler için daha fazla ödeme yapmaya razıdırlar.	1	2	3	4	5
Yeşil otel ürün ve hizmetleri, genellikle, geleneksel otel hizmetlerine	1	2	3	4	5

göre daha pahalı sunulmaktadır.

Bazı oteller, müşterilerinin yeşil hizmetle alakalı güvenliğini kazanabilmek için, yeşil sertifika programlarına başvurumaktadırlar.	1	2	3	4	5
Otelin yeşil girişimlerini doğrudan müşteriye pazarlayabilmek için internet etkili bir kanaldır.	1	2	3	4	5

#### Bölüm 4: Diğer Kişi ve Kurumların Yeşil Pazarlama Uygulamalarına Etkisi (Öznel Normlar)

14. Paydaşlarınızın, otelinizin aldığı kararlar üzerindeki etkisiyle ilgili olarak aşağıdaki ifadelere ne derece katılıyorsunuz? (Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum) )

(Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
İnanıyorum ki <u>müşterilerimiz</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>çalışanlarımız</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>tedarikçilerimiz</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>patronlarımız</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>yerel işletmeler</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>sivil toplum örgütleri</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>yerel yönetimler</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5
İnanıyorum ki <u>merkezi yönetim (devlet kurumları)</u> bizden yeşil pazarlama uygulamaları beklemektedir.	1	2	3	4	5

#### Bölüm 5: Otelinizin Çevreyle İlgili Kararları Üzerindeki Kontrolünüz

15. Aşağıdaki ifadelere ne derece katılıyorsunuz? (Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum) )

(Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
Otelimizin çevreyle ilgili kararlarını etkileyecek <u>bilgiye</u> sahip değilim.	1	2	3	4	5
Otelimizin çevreyle ilgili kararlarını etkileyecek <u>otoriteye</u> sahip değilim.	1	2	3	4	5
Otelimizin çevre yanlısı davranması doğayı korumaya ve geliştirmeye katkı sağlamayacaktır.	1	2	3	4	5
Otelimiz doğayı korumak ve geliştirmek için bir kaynağa sahip değildir.	1	2	3	4	5
Aynı anda hem karlılığı sağlayıp hem de çevreyi korumak otelimiz için çok güçtür.	1	2	3	4	5
Otelimiz çevreci performansını geliştiremez çünkü rekabetçi kalmak zorundadır.	1	2	3	4	5

## Bölüm 6: Yeşil Pazarlama Uygulamalarına Karşı Niyetiniz

16. Aşağıdaki ifadelere ne derece katılıyorsunuz? ( Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum) ) (Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
Pazarlama aktiviteleri aracılığıyla topluma net pozitif katkıda bulunabilmek için pazarlama departmanımıza yardım etme <u>niyetindeyim.</u>	1	2	3	4	5
Pazarlama departmanımız aracılığıyla topluma net pozitif katkıda bulunmayı <u>planlıyorum.</u>	1	2	3	4	5
Pazarlama aktiviteleri aracılığıyla topluma net pozitif katkıda bulunabilmek için pazarlama departmanımıza <u>yardım edeceğim.</u>	1	2	3	4	5

## Bölüm 7: Otelinizin Yeşil Pazarlama Uygulamaları

17. Otelinizin şuanki pazarlama uygulamalarıyla ilgili olarak aşağıdaki ifadelere ne derece katılıyorsunuz? (Ölçek 1 ve 5 arasında değişmektedir, 5 (tamamen katılıyorum) - 1 (kesinlikle katılmıyorum)) (Lütfen her ifade için sadece bir rakam işaretleyiniz)

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
Otelimiz, sunacağı ürün ve hizmetler için çevre dostu malzemele kullanmaktadır.	1	2	3	4	5
Otelimiz, ekolojik ürün ve hizmet sağlamaya önem vermektedir.	1	2	3	4	5
Otelimiz, servis ve ürünlerini çevre dostu bir şekilde dizayn etmek, geliştirmek ve sunmak için çaba sarfetmektedir.	1	2	3	4	5
Otelimiz, servis ve ürünlerini çevreye olan negatif etkisini en aza indirmeye çalışarak sunmaktadır.	1	2	3	4	5
Otelimiz, hizmet fiyatları içerisinde çevre uyum maliyetlerini de dahil etme eğilimindedir.	1	2	3	4	5
Otelimiz, çevre dostu uygulamalarından kaynaklanan hertürlü maliyet tasarrufundan, müşterilerimize daha uygun fiyatlar sunabilmek için faydalanmaktadır.	1	2	3	4	5
Otelimiz, fiyatlarını düşürmek için, çevre dostu ürün ve hizmetlerimizin finansal başarısından yararlanmaktadır.	1	2	3	4	5
Otelimiz, çevre dostu uygulamalarından dolayı, rakiplerine kıyasla daha uygun fiyatlar sunabilmektedir.	1	2	3	4	5
Otelimiz, tedarikçilerimizi (acentalar, temsilciler, vs.) çevresel sorumluluk taşımaları için desteklemektedir.	1	2	3	4	5
Otelimiz çevresel sorumluluk taşıyan tedarikçilerle çalışmayı tercih etmektedir.	1	2	3	4	5
Otelimiz çevreye karşı duyarlı tüketim ürün ve malzemeleri seçerken çok dikkatlidir.	1	2	3	4	5
Otelimiz, toptan malzeme satın alarak, paketleme sarfiyatını azaltmaya katkı sağlamaktadır.	1	2	3	4	5
Reklamlarımızda ve kampanyalarımızda çevreyi korumaya olan taahhüttümüzü belirgin bir şekilde göstermekteyiz.	1	2	3	4	5
Müşterilerimizi, promosyonlarımız ve kişisel iletişim çabalarımızla çevreye karşı duyarlı olduğumuz konusunda bilgilendiririz.	1	2	3	4	5
Otelimiz, ekolojik tartışma ve savunmaları reklamlarında ve promosyon araçlarında kullanmaktadır.	1	2	3	4	5
Otelimiz, çevresel konular hakkındaki girişimlerini, tüm çalışanlarına bildirmektedir.	1	2	3	4	5
Otelimiz çevresel konular hakkında çalışanlarını eğitmektedir.	1	2	3	4	5

Otelimiz çevreye karşı duyarlı çalışanlarını ödüllendirmektedir.	1	2	3	4	5
Otelimiz, müşterilerini, insanların doğaya karşı zararlı hareketleri konusunda yazılı ve sözlü eğitmektedir.	1	2	3	4	5
Otelimiz, çalışanlarına, çevresel farkındalık programlarına ve toplum için organize edilen aktivitelere aktif bir şekilde katılmaları için destek vermektedir.	1	2	3	4	5
Otelimizin müşteri odalarında ve ortak kullanım alanlarında enerji tasarrufu uygulamaları mevcuttur.	1	2	3	4	5
Otelimizin müşteri odalarında ve ortak kullanım alanlarında su tasarrufu uygulamaları mevcuttur.	1	2	3	4	5
Otelimiz, müşteri odalarında ve ortak kullanım alanlarında tasarruf yönetimi uygulamaktadır.	1	2	3	4	5
Otelimiz yenilenebilir enerji kaynağı kullanmaktadır.	1	2	3	4	5
Otelimiz, çevreyi korumak adına müşterileriyle işbirliği içindedir (ör: isteğe bağlı havlu değişimi)	1	2	3	4	5
Otelimiz, çevre dostu uygulamalarını kalite ve düşük maliyet anlayışıyla harmonize ederek sürdürmektedir.	1	2	3	4	5
Otelimiz, yerel halkla, devlet kurumlarıyla ve diğer otellerle, çevre standart ve uygulamalarını geliştirebilmek için iş birliği yapmaktadır.	1	2	3	4	5
Otelimiz, müşterilerine, tamamen sürdürülebilir ve çevre dostu bir deneyim sunabilmeye çalışmaktadır.	1	2	3	4	5

**Bölüm 8: Özgeçmiş Bilgisi: Bu bölümdeki bilgiler, yaptığımız çalışmada, Türkiye’deki otel yöneticilerini doğru temsil edilip edilmediğini saptamak için kullanılacak olup tamamen gizli tutulacaktır.**

18. Cinsiyetiniz (Lütfen birini işaretleyiniz)

- ☐ Kadın  
☐ Erkek

19. Yaşınız

\_\_\_\_\_ (Lütfen rakamla yazınız)

20. Öğrenim düzeyiniz (Lütfen birini işaretleyiniz)

- ☐ İlk öğretim  
☐ Lise  
☐ Meslek yüksek okulu  
☐ Lisans  
☐ Yüksek lisans

21. Oteldeki řuanki pozisyonunuzu yazınız.

\_\_\_\_\_

22. řuanki pozisyonunuzda kaç senedir bulunmaktasınız? (Lütfen rakamla yazınız)

23. Otel sektöründe kaç senedir çalışmaktasınız? (Lütfen rakamla yazınız)  
\_\_\_\_\_ (Lütfen rakamla yazınız)

24. Oteliniz hangi şehir ve ilçede bulunmaktadır?

\_\_\_\_\_

**Anketi tamamladığınız için çok teşekkür ederiz. Zaman ayırdığınız ve görüşlerinizi bizle paylaştığınız için minnettarız.**

## APPENDIX C

### INDEPENDENT SAMPLE T- TESTS OF MEANS TABLES

Green Marketing Behavior Differences by Genders			
Green Marketing Behaviors	Female	Male	<i>t</i>
Our hotel uses environmentally friendly supplies and consumable products for our products/services <sup>a</sup>	3.59	3.91	-1.57
Our hotel gives priority to offering ecological products and services	3.55	3.86	-1.54
Our hotel is geared to design, develop and offer its product/services in an environmentally friendly way	3.68	3.91	-1.15
Our hotel provides its product/services in a way that minimizes its impact on the natural environment	3.7	4.02	-1.65
Our hotel tends to build environmental compliance costs into the service price	3.41	3.25	0.63
Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices	3.45	3.62	-0.76
Our hotel takes advantage of the financial success of several environmentally friendly products/services, to reduce its prices	3.00	3.56	-2.45*
Our hotel offers competitive prices to our customers as a result of the environmentally friendly practices implemented	2.87	3.20	-1.34
Our hotel encourages suppliers/vendors and agents/representatives to embrace and reflect environmental responsibility	3.37	3.51	-0.59
Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility	3.47	3.78	-1.51
Our hotel buys supplies in bulk to reduce packaging where possible	3.87	4.05	-1.03
Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns	2.91	2.97	-0.22
Our hotel rewards employees with the best environmental initiatives	2.92	3.37	-1.75
Our hotel staff “educates” consumers about the harmful environmental impact of human actions through verbal or written	3.21	3.35	-0.60
Our hotel applies energy saving practices in guestrooms and common areas	3.83	4.15	-1.51
Our hotel applies water saving practices in guestrooms and common areas	3.72	3.97	-1.00
Our hotel applies waste management practices in guestrooms and common areas	3.96	3.99	-0.15
Our hotel uses renewable sources of energy	2.87	3.42	-1.85
Our hotel facilitates customer collaboration (e.g., voluntary changing of towels) in environmental protection	3.97	3.93	0.18

\*Correlation is significant at the 0.05 level (2-tailed)

<sup>a</sup> equal variances are not assumed for these t-tests

Green Marketing Behavior Differences between Chain-affiliated and Independent Hotels

Green Marketing Behavior	Chain-affiliated	Independent	<i>t</i>
Our hotel uses environmentally friendly supplies and consumable products for our products/services <sup>a</sup>	3.64	3.90	-1.31
Our hotel gives priority to offering ecological products and services	3.68	3.82	-0.71
Our hotel is geared to design, develop and offer its product/services in an environmentally friendly way	3.68	3.92	-1.27
Our hotel provides its product/services in a way that minimizes its impact on the natural environment	3.77	4.00	-1.21
Our hotel tends to build environmental compliance costs into the service price	3.44	3.23	0.87
Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices	3.44	3.64	-0.92
Our hotel takes advantage of the financial success of several environmentally friendly products/services, to reduce its prices	3.40	3.42	-0.09
Our hotel offers competitive prices to our customers as a result of the environmentally friendly practices implemented	3.08	3.13	-0.21
Our hotel encourages suppliers/vendors and agents/representatives to embrace and reflect environmental responsibility	3.64	3.41	1.05
Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility	3.68	3.71	-0.14
Our hotel buys supplies in bulk to reduce packaging where possible	4.02	4.00	0.09
Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns	2.96	2.95	0.02
Our hotel rewards employees with the best environmental initiatives	3.08	3.33	-0.98
Our hotel staff “educates” consumers about the harmful environmental impact of human actions through verbal or written	3.36	3.30	0.29
Our hotel applies energy saving practices in guestrooms and common areas	3.92	4.13	-1.03
Our hotel applies water saving practices in guestrooms and common areas <sup>a</sup>	3.72	3.98	-1.00
Our hotel applies waste management practices in guestrooms and common areas	3.86	4.03	-0.82
Our hotel uses renewable sources of energy	3.20	3.31	-0.38
Our hotel facilitates customer collaboration (e.g., voluntary changing of towels) in environmental protection	3.92	3.94	-0.10

<sup>a</sup> equal variances are not assumed for these t-tests

Green Marketing Behavior Differences between the Hotels with Certificate and No-Certificate

Green Marketing Behavior	Certificate	No-certificate	<i>t</i>
Our hotel uses environmentally friendly supplies and consumable products for our products/services	3.93	3.72	-1.27
Our hotel gives priority to offering ecological products and services	3.93	3.63	-1.65
Our hotel is geared to design, develop and offer its product/services in an environmentally friendly way	4.05	3.65	-2.34*
Our hotel provides its product/services in a way that minimizes its impact on the natural environment	4.13	3.74	-2.26*
Our hotel tends to build environmental compliance costs into the service price	3.29	3.33	0.15
Our hotel takes advantage of any cost savings derived from using environmentally friendly practices, to offer better prices	3.72	3.44	-1.41
Our hotel takes advantage of the financial success of several environmentally friendly products/services, to reduce its prices	3.63	3.21	-2.04*
Our hotel offers competitive prices to our customers as a result of the environmentally friendly practices implemented	3.29	2.93	-1.64
Our hotel encourages suppliers/vendors and agents/representatives to embrace and reflect environmental responsibility	3.56	3.38	-0.89
Our hotel shows preference to suppliers and strategic partners that embrace environmental responsibility	3.85	3.54	-1.73
Our hotel buys supplies in bulk to reduce packaging where possible	4.06	3.93	-0.79
Our hotel uses ecological arguments in our advertisements, promotional material and/or marketing campaigns	3.20	2.68	-2.35*
Our hotel rewards employees with the best environmental initiatives	3.43	3.10	-1.39
Our hotel staff "educates" consumers about the harmful environmental impact of human actions through verbal or written	3.56	3.09	-2.32*
Our hotel applies energy saving practices in guestrooms and common areas	4.07	4.05	-0.09
Our hotel applies water saving practices in guestrooms and common areas	3.98	3.81	-0.76
Our hotel applies waste management practices in guestrooms and common areas	4.01	3.93	-0.40
Our hotel uses renewable sources of energy	3.77	2.77	-4.12***
Our hotel facilitates customer collaboration (e.g., voluntary changing of towels) in environmental protection	3.96	3.89	-0.29

\*Correlation is significant at the 0.05 level (2-tailed)

\*\*\*Correlation is significant at the 0.001 level (2-tailed)