

# Millennials' Viewpoints about Sustainable Hotels' Practices in Egypt: Promoting Responsible Consumerism

Jailan Mohamed El Demerdash

**Abstract**—Millennials are a distinctive and dominant consumer group whose behavior, preferences and purchase decisions are broadly explored but not fully understood yet. Making up the largest market segment in the world, and in Egypt, they have the power to reinvent the hospitality industry and contribute to forming prospective demand for green hotels by showing willingness to adopting their environmental-friendly practices. The current study aims to enhance better understanding of Millennials' perception about sustainable initiatives and to increase the prediction power of their intentions regarding green hotel practices in Egypt. In doing so, the study is exploring the relation among different factors; Millennials' environmental awareness, their acceptance of green practices and their willingness to pay more for them. Millennials' profile, their preferences and environmental decision-making process are brought under light to stimulate actions of hospitality decision-makers and hoteliers. Bearing in mind that responsible consumerism is depending on understanding the different influences on consumption. The study questionnaire was composed of four sections and it was distributed to random Egyptian travelers' blogs and Facebook groups, with approximately 8000 members. Analysis of variance test (ANOVA) was used to examine the study variables. The findings indicated that Millennials' environmental awareness will not be a significant factor in their acceptance of hotel green practices, as well as, their willingness to pay more for them. However, Millennials' acceptance of the level of hotel green practices will have an impact on their willingness to pay more. Millennials were found to have a noticeable level of environmental awareness but lack commitment to tolerating hotel green practices and their associated high prices.

**Keywords**—Millennials, environment, awareness, green practices, paying more, Egypt.

## I. INTRODUCTION

THE hospitality industry is depending greatly on environmental and cultural resources to offer resource-based activities that constantly interact with the natural systems. The tourism and hospitality industry has the capacity to initiate significant changes in the physical environment [10]. Sustainability is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [31, p. 16]. Building upon this definition, sustainable hospitality operations can be defined as those that manage the resources in a way that economic, social and environmental benefits are maximized to meet the need of the present generation while protecting opportunities for future generations [2].

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Tourism's image as a predominantly "smokeless" industry makes its negative impacts seem less defined. However, the industry is now facing increasing scrutiny in relation to the negative environmental and social impacts of its key players, including hotels [22]. The Egyptian tourism and hospitality industry is challenged to develop and solicit environmental-friendly initiatives, being basically dependent on its unique heritage, beaches and distinctive natural marine environment [9]. Worldwide, the "greening" of the hospitality industry is not a luxury anymore, in order to eliminate the negative impacts on the environment by reducing their consumption of resources and by changing their practices. People throughout the world seek to alter the current path of rapid environmental degradation; the hotel industry is not exempt from and has certainly participated in this growing trend [21]. However, attention on the relationship between environmental issues and business practices is much more popular in developed countries than in developing ones, either in terms of public concern or government policies. According to [10] and [28], consumers in Egypt, as well as in the wider context of the Arab world, are just at the stage of green awakening. Being through different stages of economic development is likely to be an important factor in influencing environmental initiatives and practices. In Egypt, for example, only 103 are green certified from a total of 352 4-star & 5-star hotels; accounting for just 29% [10].

References [1], [20], [25], and [26], also enlighten that in developing countries, like Egypt, the gap between individuals worried about the Earth and the decision makers is quite large.

It is a fact that customers are the key drivers for the adoption of environmental-friendly practices and often have an influence far beyond any of the other stakeholders. Former studies found that the most common barriers to successful greening attempts were related to customers' knowledge, readiness, preferences and attitudes. Built on that, emerged the need for responsible consumers [9], [16], [21], [23], [24]. In this context, Millennials are expected to reinvent the travel industry with their influential preferences. Research shows that Millennial travelers already make up for over one-third of the world's hotel guests, with predictions that they will reach over 50% by 2020 [3], [5], [14], [19], [23].

Millennials constitutes more than 43% of the Egyptian population [6], which means the leisure and hospitality industry will need to uncover their desires and needs to better attract them. Although, known for being are civic-minded and socially conscious [2], [23], [27], there is still a lack of

relevant literature detailing the relationship of the effects of their environmental awareness on consumption behaviors for green hotels. Thus, the current study aims to fill the gap in this particular field, and provide reliable findings results for academic and corporate perusal.

## II. LITERATURE REVIEW

### A. *Environmental Challenges of the Hospitality Industry*

Research argued that hotels consume a considerable amount of water, energy, and disposable products due to the nature of their services and functional characteristic [8], [15], [16], [23]. F&B operations are also causing high levels of garbage disposal and rapid diminishing of landfill space. Chemical use and intensive landscape fertilizers can cause atmospheric contamination [22]. In addition, consumer behavior in the hotel industry generates negative influences on the environment [15], [33]. Large numbers of tourists are being transported and lodged every single day, putting too much pressure on the physical and human environment of the destination countries. This is a primary cause of the degradation of environmental quality [30], [33], [34]. Tourists' experience will negatively affect the natural setting, so that it can be polluted, degraded or lose its aesthetic [22]. This has challenged the hospitality industry to respond positively to the principles and practices of sustainable development. In response, greening the industry emerged with the trend of ecological and green hotels.

Green hotels, alternatively called as "environmentally responsible" or "environmentally friendly", are those implanting environmental practices that embrace energy efficiency, water conservation, as well as managing solid waste and recycling attempts [10], [13], [15], [26]. Other practices may incorporate socio-economic factors into the definition, while highlighting the hotel's responsibility towards its employees, the local community, the local culture, and the surrounding ecology [17], [25].

Green hotels' practices are beneficial to the operation (e.g., reducing costs of energy and water consumption), they improve the company's image and foster positive public attention. Moreover, [7] and [10] point to economic and indirect benefits including employee morale and health and safety in the facility. In this regard, Hospitality management associations are paying increased attention to providing the industry with best practice examples and guidelines. Examples for that are the International Tourism Partnership and the American National Restaurant Association. The International Hotel & Restaurant Association (IH &RA) recently realized the industry need for more green practices and has developed a set of ecological, business smart solutions [31, p. 20]. On the other hand, becoming a green hotel can be the base for a great marketing strategy that helps the hotel to position itself distinctly in the market place [26]. An increasing number of lodging customers who consider various environmental issues are starting to seek and buy eco-friendly products over alternatives, sometimes even paying more for such products; thus, demands for green establishments have been gradually

increasing [15], [16]. However, greening the industry would be difficult if not appreciated and supported by the market, or if tourists do not have the tendency to value hotel attributes based on environmental and social criteria. Serious environmental degradation and extensive media coverage has raised a collective awakening amongst consumers which has in turn changed priorities in the lives of individuals and in consumption habits [31, p. 116]. Consequentially, the concept of responsible consumerism emerged.

Previous research revealed that most tourists still choose hotels based on price, service quality and physical attractiveness rather than environmental and social attributes [10], [21], [26], [34].

Reference [21] suggests that customers' approach towards green hotels is complex and contingent, in which different levels of buying behaviors for those hotels vary across different customer segments, product attributes, rates and hotel types. As elaborated by [10], [16], [22], and [25], when an individual holds little control over carrying out a certain behavior because of the lack of availability of required resources (e.g., costs or time), his/her behavioral intention will be lower in spite of the fact that he/she has a positive attitude concerning the intended act. Reference [31, p.119] suggests that if an individual considers his contribution to humanity and environmental equilibrium as being effective, the relationship between his or her attitudes and his actions go in parallel. Oppositely, if an individual's ability to control the impact of the environment decreases, his behavior becomes irrational.

In hopes of understanding the customers' approach towards green hotels, many researchers investigated the factors involved in influencing their green consumption behaviors. Demographic variables, family life circles, tourist origin and personality traits were considered influential in their studies [16], [18], [25], [29], [34].

### B. *Millennials: The Key Drivers*

According to [2], [10], [16], [23], and [27], demographics can play a significant role in the consumers' intention to purchase green products; this includes gender, educational level, income level and age range.

Millennials, also known as Next Generation and Generation Y, are born after the 1980s to 2000s. They have been watched closely by sociologists and historians for different behaviors and attitudes from those of other generations; they are known for being civic-minded, socially conscious and experience seekers, particularly in their leisure time. They have environmentally ethical views expressing the moral relationship between humans and their natural environment [23], [27]. Their environmental awareness is meant to value human activities encouraging the protection of the environment [34]. Researchers found that well-developed environmentally ethical concepts are influential in shaping green consumption decisions and tolerating sparing green practices [27], [32]. This generation has been growing in a tough environmental and economic climate and they like to feel they are making a difference in the world, and therefore, millennial consumers prefer brands that are environmentally-

friendly [27].

Similarly, in their decision to choose a hotel, Millennials would prefer eco-friendly practices and sustainable efforts, as sustainability is regarded as their popular trend. Although some studies revealed that they want to bring business to proprietor that reflect their own value systems, they might lack similar devotion in their actual conduct and are not yet ready to willingly sacrifice parts of their current lifestyles [23], [32]. In addition, Millennials show a large amount of spending power, because, unlike prior generations, they prefer spending a greater amount of their income on technology and experiences, such as, traveling and dining out [29]. The interaction of the total visit experience is vastly important to this generation, as well, they are willing to pay higher prices if they can be assured they will have the unforgettable experiences they long for [32]. However, these consumers are also keen to take advantage of the cheaper travel alternatives and accommodation rates, as they are quite sensitive to price [5]. As smart spenders, Millennials are ready to pay more for products from companies with active socially responsible programs [2], [29].

Surveys of the World Youth Student and Educational Travel Confederation (WYSETC) found that Millennials prefer to travel rather than to save money and to spend money on travelling rather than purchasing precious items [2].

Furthermore, they are the generation born with technology at their fingertips, as they post on social media platforms and share experiences with friends while travelling, changing thereby traditional marketing mindsets [11], [18], [23].

References [3], [19] discuss how Millennials' expectations and needs toward service are constantly changing, and thus, urging hotels to continuously create new services with higher customer value while maintaining a competitive advantage. Therefore, it is of great relevance to know if Millennials, who are making up 43% of Egyptian population and thus, being key drivers in reinventing the Egyptian travel industry, are ready to adopt an environmental-friendly style during their hotel accommodation. It is also questionable if their environmental awareness encourages them to tolerate hotel green practices and to pay premium for them. The significance of the current study increases in the light of certain environmental facts in Egypt.

According to the Central Agency for Public Mobilization and Statistics [6], Egypt's ranking in the evidence of environmental performance at the international level declined from 110 to 117 throughout the years from 2008 to 2014, and the individual proportion of carbon dioxide harmful emissions doubled within the last 15 years.

Based on the aforementioned theoretical review, the current study formulated the following hypotheses:

- H1. Being a Millennial is significantly related to environmental awareness.
- H2. Being a Millennial is significantly related to acceptance of hotel green practices.
- H3. Being a Millennial is significantly related to willingness to pay more for hotel green practices.
- H4. Millennials' environmental awareness level will

significantly impact their acceptance of hotel green practices.

- H5. Millennials' environmental awareness level will significantly impact their willingness to pay more.
- H6. Millennials' acceptance of hotel green practices level will significantly impact their willingness to pay more.

### III. METHODOLOGY

#### A. Measures

The questionnaire used in this study was composed of four sections: The first section contained questions for demographic information, including age range, marital status, income and education degree, as well as, previous stay in hotels with green practices. The second section included items assessing the environmental awareness of the respondents; the third section consisted of items assessing respondents' readiness to accept hotel green practices, and the fourth one examined their readiness to pay more for a hotel that engages in green practices. For the second, third and fourth construct a 5-point Likert scale was used, from (1) extremely disagree to (5) extremely agree.

This study adopted existing validated items to assess the study variables, as follows: Items assessing environmental awareness of respondents were derived from [15], [21], [34]; as they referred to the New Ecological Paradigm (NEP) scale. The NEP scale measures the environmental attitudes, beliefs, and values and encompasses 15 question items. The NEP has been considered the most widely used as a generalized measurement of environmental beliefs and concerns that affect human behavior.

Items assessing respondents' readiness to accept hotel green practices were derived from [17], [23], [26], [34]. It included 14 items covering, energy, water and recycling green practices. The (WTP – willing to pay) statements were derived from [17], [21], [26].

In the opening of the questionnaire, instructions of this survey and a thorough explanation of the study idea were given, including the definition of green hotels.

#### B. Data Collection and Sample Profile

The total population for this study was Egyptian hotel guests. A Web-based survey was used to collect data. Questionnaires were sent to random Egyptian travelers' blogs and Facebook groups, with approximately 8000 members. Only responses from guests previously stayed in 4-star and 5-star hotels were included in the study sample, as hotels in lower categories were not implementing organized green or environmentally-friendly practices [10]. A total of 440 usable responses were received from participants.

In the usable sample of 440, approximately 61% of respondents were Millennials, i.e. from 18 to 38 years old and 34% were between 39 and 50 years old. Fifty percent were married and obtained faculty degrees. Their family income ranged from 6000-11000 to 12000-17000, with 50% and 18.2%, respectively. The majority (78.6%) reported that they previously stayed in hotels with green practices.

## IV. RESULTS AND DISCUSSION

Hypothesis 1, hypothesis 2 and hypothesis 3 anticipated that being a millennial is significantly related to environmental awareness, to acceptance of hotel green practices and to willingness to pay more for hotel green practices. Table I shows how ANOVA test was used to compare Millennials' environmental awareness to Non-Millennials. The results indicated that Millennials showed higher means in 12 statements out of 15. However, no significant difference was depicted in this construct between both groups (Sig. = 0.220 and  $F = 1.552$ ). Thus, H1: "Being a Millennial is significantly related to environmental awareness" can be partially supported. These findings are in agreement with the study of

[10] on Egyptian green hotels. In her study, hotel managers saw that customers, regardless of their age range, would rank "concern for the environment" as the least important factor influencing their choice for a hotel, while "quality of service" and "price" came in the first and the second rank, respectively.

The most apparent variations between both groups' responses were depicted in statement (9) "The so-called "ecological crisis" facing humankind has been greatly exaggerated" and statement (11) "Humans were meant to rule over the rest of nature". It was also obvious that Millennials showed a higher level of acceptance of hotel green practices compared to other age groups with a significant difference = 0.047. Thus, H2: "Being a Millennial is significantly related to acceptance of hotel green practices" can be supported.

TABLE I  
COMPARING MILLENNIALS TO OTHER AGE GROUPS USING ANOVA

Research Variables	Millennial		Non-Millennial		F	Sig.
	Mean	S. D	Mean	S. D		
<b>A. Awareness of environmental concerns</b>	<b>3.70</b>	<b>0.46</b>	<b>3.49</b>	<b>0.64</b>	<b>1.552</b>	<b>0.220</b>
1. The Earth cannot support the growing number of people anymore.	3.35	0.96	3.33	1.11	0.004	0.951
2. In order to suit their needs, humans have the right to modify the natural environment.	2.52	1.22	2.59	1.06	0.037	0.847
3. When humans interfere with nature it often results in disastrous consequences.	3.63	0.88	3.53	1.07	0.114	0.737
4. Humans are severely misusing the environment.	4.15	1.06	3.76	1.25	1.183	0.283
5. The Earth has plenty of natural resources if we just learn how to build up on them.	4.41	0.69	4.12	0.99	1.301	0.261
6. Plants, animals and humans have equal rights to exist.	4.44	0.70	4.12	1.22	1.284	0.264
7. The balance of nature is strong enough to tolerate the consequences of modern industrial nations.	2.89	1.37	2.65	1.06	0.385	0.538
8. Despite our special abilities humans are still subject to the forces of nature.	3.93	0.87	3.65	0.93	1.010	0.321
9. The so-called "ecological crisis" facing humans has been greatly inflated.	2.76	1.30	3.30	1.09	1.975	0.167
10. Our Earth is just like a spaceship with limited room and resources.	3.56	1.12	3.47	1.18	0.058	0.811
11. Humans have the right to manipulate the rest of the natural elements.	3.18	0.97	3.78	1.07	3.672	0.062
12. The balance of nature is very fragile and easily upset.	3.76	1.07	3.70	0.97	0.036	0.849
13. At the end, humans will know enough about how nature works to be able to rule it.	3.33	1.04	3.24	1.20	0.082	0.775
14. The consequences of pollution on public health are more severe than we realize.	4.26	0.86	4.18	1.19	0.072	0.790
15. It is expected that we will soon experience a major ecological catastrophe, if things continue on their present course.	4.22	0.75	4.00	1.17	0.590	0.447
<b>B. Acceptance of hotel green practice</b>	<b>4.02</b>	<b>0.59</b>	<b>3.68</b>	<b>0.41</b>	<b>4.197</b>	<b>0.047*</b>
1. I prefer using silverware tableware repeatedly in hotels.	3.74	0.90	3.47	0.94	0.903	0.347
2. I support and participate in waste-recycling ideas in hotels.	4.44	0.75	4.12	0.70	2.086	0.156
3. Guest rooms should include water-saving devices (for example, water-saving shower & water-saving toilets).	4.37	0.93	4.53	0.62	0.388	0.537
4. I support the use of automatic switches when no one is in a guest room.	4.48	0.80	4.53	0.62	0.044	0.835
5. I mind using products made from recyclable materials when I am in a hotel.	2.71	1.48	3.26	1.31	1.584	0.215
6. I prefer the use of shampoo refillable dispensers in hotels than small plastic bottles when I am in a hotel.	4.07	1.04	3.53	0.94	3.088	0.086
7. I support that guest rooms use special low-energy light bulbs.	4.22	0.93	3.71	0.99	3.058	0.088
8. Training hotel employees for a better environmental performance is fundamental.	4.44	0.75	4.35	0.61	0.179	0.675
9. I prefer hotels depending on solar energy rather than electricity.	4.19	0.96	3.59	0.94	4.088	0.049*
10. All hotels should participate in environmental programs and obtain green certifications.	4.33	0.83	4.18	0.64	0.441	0.510
11. I mind exchanging my bed sheets every three days, instead of everyday, when I am in a hotel	2.82	1.32	3.30	1.19	1.438	0.237
12. The water of swimming pools should be used to water hotel landscape and green areas	4.30	0.78	4.18	1.41	3.887	0.515
13. I mind sorting my room waste and putting it in recycling bins when I am in a hotel.	4.04	0.85	3.59	1.28	1.958	0.169
14. I prefer turning off the air conditioner in hotel open-air areas.	3.04	1.40	2.76	1.39	0.396	0.532
<b>C. Willingness to pay</b>	<b>3.44</b>	<b>1.22</b>	<b>2.82</b>	<b>1.01</b>	<b>3.064</b>	<b>0.087</b>
1. It is acceptable for me to pay more for a hotel that engages in green practices.	3.59	1.22	3.00	1.17	2.542	0.118
2. I am willing to pay an extra percentage on my hotel bill to support the hotel's efforts to be environmental-friendly.	3.44	1.22	2.65	0.93	5.301	0.026*

Similarly, [17] revealed that age has a significant moderating role in buying behaviors; younger individuals are likely to be more innovative when adopting a new product or

service, as opposed to older more conservative people. On the other side, [4] assumed as customers get older and become more mature they will be more likely to purchase responsible

products. However, [24] found no significance difference among different age groups (young and old) regarding attitude towards green behaviors.

In detail, the most significant responses of both age groups were depicted in statements (2), (3), (4) and (8). Statement (2) "I support and participate in waste-recycling ideas in hotels" recorded a mean = 4.4 and 4.12, for Millennials and Non-Millennials, respectively. This indicated a high acceptance level of waste recycling ideas; however, their response in statement (13) "I mind sorting my room waste and putting it in recycling bins when I am in a hotel", was contradicting, as it was obvious that both groups would not prefer to put much effort to participating in implementing these ideas. A finding that is in agreement with [10], [12], and [26], who reached the same result: Customers may want to be environmentally responsible but still want to maintain their existing life-style, and they are not ready to sacrifice their convenience.

Statements (3), (4), (8) and (10) recorded the highest means for both groups. Interestingly, these statements showed that both groups encouraged mostly the green practices that would not degrade their convenience and recreation experience. According to [10], Egyptian hotel customers are aware of their environmental challenges, but they do nothing in this regard; they expect the government to improve their standards of living before focusing on going green.

Millennials showed higher means in willingness to pay more for hotel green practices. However, no significant difference was depicted in this construct between both groups (Sig. = 0.087). Thus, H3 can be partially supported. This agrees with [25], their study showed that the majority of respondents showing higher levels of understanding about the importance of preserved natural environment were young

people between 21-30 years old, who were ready to pay premium as well. On the contrary, [4] revealed that the willingness to pay more for the services of an environmentally responsible hotel was greater among older people.

Green hotel customers are usually charged a premium in order for hotels to recover addition costs incurred in the production, marketing and disposal. This includes initial set-up costs of new or alternative more environmentally-conscious production and distribution approaches. According to [10], green hotels need to recover the indirect costs of not achieving economies of scale. In the same context, [4] and [25] argue that pricing for green practices should consider customers' sensitivities to additional costs incurred by implementing green initiatives. Traditionally, promoting environmentally sustainability actions to hotel guests can be a delicate topic. The savings in operational costs may not be reflected in lesser room rates. Consequently, if hospitality operations promote cost savings from environmentally sustainable initiatives, guests may disapprove of the hotels' pricing policy [31, p.108]. This proves to be particularly true if sustainability initiatives reduce the guest level of comfort. In such circumstances, hotel guests look for new service providers.

Spearman correlation was also applied to detect the correlation among research variables. Results depicted a significant correlation between Millennials acceptance of hotel green practices and willingness to pay more for them.  $R = 0.575$  and  $P \text{ value} = 0.002$  as shown in Table II. Meanwhile, no significant correlation was found between Millennials environmental awareness and their acceptance of hotel green practices. Millennials environmental awareness is not significantly related to their willingness to pay more for green hotels, as well.

TABLE II  
SPEARMAN CORRELATION AMONG RESEARCH VARIABLES

		Environmental Awareness	Acceptance of hotel green practices	Willingness to pay more
Environmental awareness	Pearson Correlation		0.187	0.157
	Sig. (2-tailed)	--	0.350	0.435
Acceptance of hotel green practice	Pearson Correlation	--	--	0.575**
	Sig. (2-tailed)	--	--	0.002
Willingness to pay more	Pearson Correlation	--	--	--
	Sig. (2-tailed)	--	--	--

\*\* . Correlation is significant at the 0.01 level (2-tailed).

TABLE III  
ONE-WAY ANOVA FOR IMPACT OF DIFFERENCE IN AWARENESS LEVEL ON ACCEPTANCE OF HOTEL GREEN PRACTICES

Mean of awareness	Mean of Acceptance	Std. Deviation	Std. Error	95% Confidence Interval for Mean		F	Sig.
				Lower Bound	Upper Bound		
3.00	4.4286	0.78680	0.29738	3.7009	5.1562	0.500	0.615
4.00	4.2500	0.75378	0.21760	3.7711	4.7289		
5.00	5.0000	0.00000	0.00000	0.0000	0.0000		
Total	4.3500	0.74516	0.16662	4.0013	4.6987		

H4 anticipated that Millennials' environmental awareness level will significantly impact their acceptance of hotel green practices. One-way ANOVA test was used to investigate the impact of different awareness levels on customers' acceptance of hotel green practices, as shown in Table III. Results of the

test indicated that the difference in awareness level does not influence customers' acceptance of the hotel green practices ( $F = 0.500$ ;  $P \text{ value} = 0.615$ ). Fig. 1 also illustrates the mean plot for the impact of difference in awareness level on acceptance of hotel green practices. Thus, H4:"Millennials'

environmental awareness level will significantly impact their acceptance of hotel green practices" is unsupported.

In [30], German and English tourists saw that the natural environment played a large role in their choice of tourist destination and especially in their choice of accommodation. The findings of [25] confirmed that respondents with more favorable beliefs about the value provided by green hotels were likely to participate in green activities during their stay.

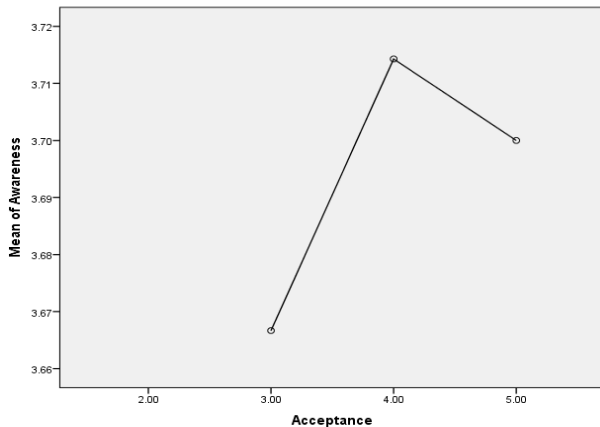


Fig. 1 Mean plot for impact of difference in awareness level on acceptance of hotel green practices

TABLE IV

ONE-WAY ANOVA FOR IMPACT OF DIFFERENCE IN AWARENESS LEVEL ON WILLINGNESS TO PAY MORE

Mean of Awareness	Mean of willingness to pay	Std. Deviation	Std. Error	95% Confidence Interval for Mean		F	Sig.
				Lower Bound	Upper Bound		
2.00	2.0000						
3.00	3.2778	1.39443	0.46481	2.2059	4.3496	0.686	0.569
4.00	3.5667	1.19323	0.30809	2.9059	4.2275		
5.00	4.0000	0.00000	0.00000	4.0000	4.0000		
Total	3.4444	1.21950	0.23469	2.9620	3.9269		

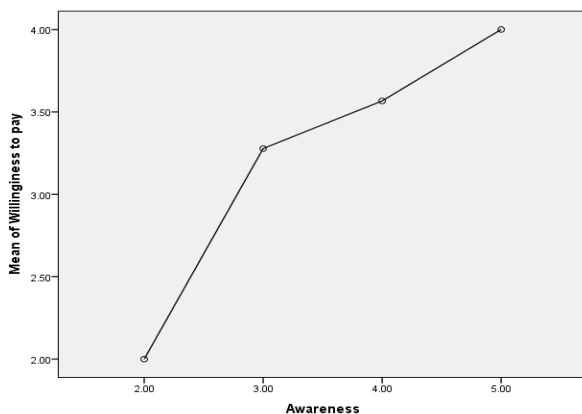


Fig. 2 Mean plot for impact of difference in awareness level on willingness to pay more

In accordance with [28], environmental concerns are a post-material value; a set of attitudes that develop among wealthy people once the more basic needs of food and safety have been

H5 predicted that Millennials' environmental awareness level will significantly impact their willingness to pay more. One-way ANOVA test was also used to investigate the impact of different awareness levels of customers on their willingness to pay more for hotel green practices, as shown in Table IV. Results of the test indicated the difference in awareness level does not influence customers' willingness to pay more ( $F = 0.686$ ;  $P$  value = 0.569). Fig. 2 illustrates the mean plot for impact of difference in awareness level on willingness to pay more for hotel green practices. Thus, H5: "Millennials' environmental awareness level will significantly impact their willingness to pay more" is unsupported. This is contradictory to the study of [21], [34], who found a positive relationship between the level of environmental concern and willingness to pay a premium for hotels' green initiatives. Meanwhile, the study of [17] implied that customers having eco-friendly behaviors are willing to stay at a green hotel, to recommend it and to pay more for it. In the same context, [11] explained that tourist willingness to pay for environmental protection was found from those who were young, had relatively high levels of income and were from English-speaking nations. On the other side, the study of [21] found that although some tourists are supporting environmental sustainability, they believe that the hotel has the responsibility to fund those initiatives and are not willing to pay extra.

met. In [18], [34] environmental concerns are also believed to be increasingly driving customer choice and decisions in Western and Northern Europe, although this is still not the case in Central and Eastern Europe.

References [2], [10] discussed how Egyptian consumers are price sensitive, which can be a barrier especially when the quality is contrasted with non-green hotels. Consumers care about environmental problems when their basic needs have been met in the first place. Interestingly, this ideology can be totally supported in developing countries, where the economic status of individuals is the driving force for their purchasing behaviors.

H6 anticipated that Millennials' acceptance of hotel green practices level will significantly impact their willingness to pay more. One-way ANOVA test indicated that the difference in acceptance level of hotel green practices does influence customers' willingness to pay more ( $F = 4.554$ ;  $P$  value = 0.014), as shown in Table V.

TABLE V  
ONE-WAY ANOVA FOR IMPACT OF DIFFERENCE IN ACCEPTANCE OF HOTEL GREEN PRACTICES ON WILLINGNESS TO PAY MORE

Mean of Acceptance	Mean of willingness to pay	Std. Deviation	Std. Error	95% Confidence Interval for Mean		F	Sig.
				Lower Bound	Upper Bound		
2.00	2.00	.	.	.	.		
3.00	2.50	0.57735	0.28868	1.5813	3.4187	4.554	0.014*
4.00	3.27	1.12114	0.37371	2.4160	4.1396		
5.00	4.30	0.94868	0.30000	3.6214	4.9786		
Total	3.52	1.18394	0.24167	3.0209	4.0208		

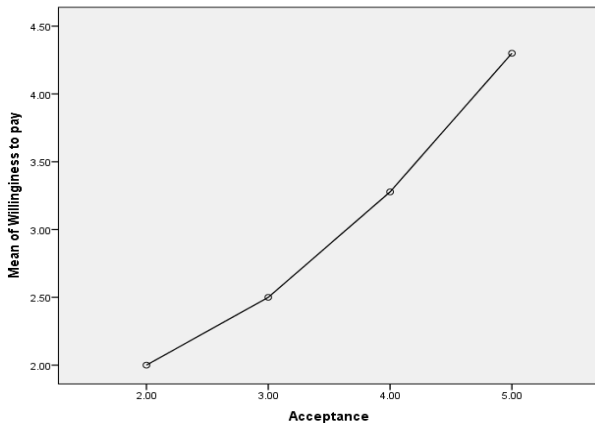


Fig. 3 Mean plot for impact of difference in acceptance of hotel green practices on willingness to pay more

Fig. 3 illustrates the mean plot for the impact of difference in acceptance level of hotel green practices on willingness to pay more for them. Thus, H6: "Millennials' acceptance of hotel green practices level will significantly impact their willingness to pay more" is supported.

According to [2], Egyptian Millennials will expect the services they purchase to be economically, socially and environmentally responsible; a viewpoint that is in agreement with [4], [12], [24].

It is apparent that customers see environmental practices as an obligation that should be funded by the hotel itself and the cost should not be added to hotel prices; they worry about peaceful coexistence with the natural environment, but are also swayed by expectations for the economy and hopes that the natural environment can recover a sense of balance on its own [20], [25], [32]. In addition, [26] found that although hotel customers in India have environmental concerns and prefer hotels that conduct green initiatives, and they are not willing to pay extra for those initiatives. Meanwhile, [3] suggested that Millennials are known to be digital natives and will pay more if they feel they are making a difference in the world.

A business that makes the decision to invest in environmental and social responsibility can gain precious points in terms of image. Equally, a proper and recognized certification or eco-label may enhance a hotel marketing presence [31, p.108]. However, consumers may perceive a certified product as being too expensive. They tend to pay greater attention to labeling and certification schemes for basic items such as food rather than for other luxury products. Add

to this, consumers may find it difficult to personally check whether the standards prescribed within the certification scheme are actually respected. Therefore, trust is a key element in the acceptance and purchasing of green products and services.

At the end, responsible consumerism is a comprehensive approach to understanding influences on consumption. Motivations for responsible consumerism can be personal health, ecology; ethics and lifestyle. Reference [31, p.110] suggests that green purchase decisions are developed depending on the various life stages and the strength of each factor impact over another. It is especially younger individuals that are likely to respond to environmental issues.

## V. CONCLUSION AND IMPLICATIONS

The hospitality industry in Egypt ultimately depends on the support and appreciation of the market to be able to face its environmental challenges. Yet, the Egyptian hotel market is still at the stage where their recognition of green hotels is only an economic behavior; price and quality remain the dominant factors that influence what customers actually demand. Therefore, it would not be wise to neglect the current economic status of Egyptians.

Millennials, constituting more than 43% of the Egyptian society, were found to have a noticeable level of environmental awareness but lack of commitment to tolerating hotel green practices and are not yet ready to willing to sacrifice parts of their current life styles. Furthermore, recognition of green hotels is based on economic matters; and if green hotels are seen as a relatively expensive product, conflicts with cost considerations may occur. Besides, Millennials want to know they are getting their money's worth, as they are willing to pay higher prices if they can be ensured they will have the unforgettable experiences they long for. However, environmental positioning alone is not sufficient to guarantee product success, and might not be influential in some societies. Thus, in societies where governments may not have the means or the priorities to regulate and enforce legislation for environmental protection, comes the role of tourism developers and hoteliers to promote responsible consumerism and attract the market to green lodging properties.

Hotels are recommended to deliver information that shows customers how their behavior changes (e.g., energy conservation, recycling) could contribute to a quantifiable decrease in environment impacts. Marketers in a green hotel should educate customers about why it is healthy and

beneficial to select a green hotel. For instance, marketers can educate current/potential customers about the health environment of a green hotel (e.g., fresh air with a natural scent, non-chemical base amenities, availability of organic food, environmental cleaning for laundry, or cotton towels and linens, etc.) as a customer attraction strategy. Meanwhile, pricing for green hotel services and products should be done carefully to face customers' sensitivity to additional costs.

"Let numbers speak for you"; is a recommended approach for hoteliers. Quantifying the result of water and energy savings and displaying it to guests during their stay would encourage them to put in efforts and help. Some hotels put a sign in its dining outlets declaring "yesterday's food waste" and how it could alternatively feed people in need. Empowering the market by making it feel part of greening initiatives can be of great benefit.

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