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Determination of Managers' Attitudes Towards Eco-Labeling Applied in the Context of Sustainable Tourism and Evaluation of the Effects of Eco-Labeling on Accommodation Enterprises

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Received: 24 August 2019; Accepted: 12 September 2019; Published: 17 September 2019



Abstract: The attitudes of departmental managers towards eco-labels are extremely important for the realization of sustainable tourism practices in accommodation enterprises. Research focused on determining the attitudes of hotel managers towards eco-labels is very limited. Therefore, the first aim of this study was to determine the attitude of departmental managers towards eco-labels applied in the context of sustainable tourism. The second purpose of this study was to determine whether the sustainable tourism and management activities of accommodation enterprises that did and did not have an eco-label were differentiated. To this end, this study was designed and conducted with a sample of 408 hotel managers in 83 different accommodation enterprise. Data were collected through questionnaires using convenience sampling, which is a non-probability sampling method. As a result of this research, it was determined that the attitudes of managers towards eco-labels differed according to their personal and professional characteristics. Another important finding of this study was that the sustainable management and operation activities of the hotels differed significantly according to whether or not they were eco-labeled certified. Overall, it is obvious that eco-labels have a significant impact on the implementation of environmentally friendly, responsible, and sustainable tourism practices in the accommodation sector.

Keywords: eco-label; sustainable tourism; management; accommodation businesses; managers; attitude

1. Introduction

Humankind now understands that the future of the world is hanging by a thread as a result of climate change, global warming, and the impairment of biological diversity. For this reason, studies have been initiated in line with taking countermeasures to remove environmental hazards. Tourism is also included in human activities that threaten the environment. Tourism activities, in general, have significant environmental effects in relation to beaches, protected areas, and natural resources [1–6]. The damage done by humankind to the environment in terms of tourism has now been recognized, and, in this time and context, new concepts such as sustainable tourism have emerged.

Sustainable tourism is defined as an approach that aims to protect the environment and culture of the communities that host the tourists, as well as to meet the needs of tourists and to sustain the growth of the tourism industry. [7]. Sustainable tourism is becoming increasingly linked to eco-labels

that aim to quantify based on a set of criteria developed and verified by a third party [8]. In this respect eco-label certificates are given to encourage sustainable tourism within the scope of environmental and social responsibility activities in the world and Turkey. Eco-labeling is an ever-growing practice in Turkey and other countries [9]. It is a significant way to provide transparency in order to show consistency in environmental practices and generate confidence in the consumer [10].

Eco-labels are one of the most important label types in the world. Eco-labels indicate the environmental impact of the product or service [11]. Eco-labels are tools used by countries or organizations to raise awareness about the higher ecological quality of certain products and services compared to non-labeled products and services [12]. Eco-labels are a kind of reward for products or services that do not harm the environment [13]. Lupu et al. [14] regard eco-labels as a program which encourages establishments to sell products and provide services that are non-harmful to the environment. At the same time eco-labels are a tool that helps customers easily recognize products or services that do not harm the environment.

Eco-labeling informs the consumer about the ecological process of a product's production or service delivery at every step [13]. In general, the damage done by a product or service to the environment starting from its production cannot be observed by consumers. Eco-labels are the only way for the consumers to learn about the harmful consequences of a product's or service's development by consumers [12]. Eco-labels, when consumers are choosing which products and services to buy, are used then to provide an assessment of a product or a service in terms of environmental factors, in addition to the other factors, which may influence a consumer's preference. Here, the main purpose is to have the customers make an informed choice based on correct and provable information of the environmental effects of the product or the service [15]. Eco-labels are preferred by establishments for assessing sustainability performances in addition to informing consumers and influencing the buying behaviour of potential consumers [16].

Consumer perceptions that a hotel is both environmentally consciousness and friendly influences consumers' decisions on making a reservation as well as the duration of their stay at that establishments. Consumers prefer products and services that are non-harmful to the environment, which forces establishments to develop strategies that cater to their preference. There are tens of million of tourists who define themselves as environmentalists and prefer environmentally friendly establishments, and who volunteer to pay more for environmentally friendly services. The results of TripAdvisor study [17], showed that 71% of American tourists plan more eco-friendly holidays than the previous year, and half tend to spend more money on eco-friendly accommodation. Half of the participants stated that they were inclined to pay more for environmentally friendly accommodation. According to *Forbes* (2013) [18], nearly two-thirds of travelers reported that they often or always consider the environment when choosing hotels, transportation, and meals. The results of a study on consumer behavior in relation to green applications in accommodation establishments in India showed that consumers were interested in green applications; however, they were not willing to pay more for the services in question [19]. Chain hotel groups such as Shangri-La Hotels and Resorts, Ibis Hotels, Choice Hotels, and Starwood Hotels and Resorts have declared that are implementing programs in order to conform to internationally acknowledged ISO 14001 standards in an attempt to draw the attention of environmentally conscious customers to their establishments [20].

A primary purpose of an establishment is to ensure their continued existence. As competition increases day by day, it becomes very difficult for establishments to realize this goal. At the same time, tourism has adverse effects on the environment, which is the tourism industry's primary resource. For this reason, it is of vital importance for establishments in the tourism industry to adopt sustainable practices and to protect the resources to which they owe their success [21]. On the other hand, there are no well accepted regulations for tourist establishments to communicate that they have adopted sustainable practices and that they are environmentally friendly [22]. In spite of the lack of regulations, there are various eco-labels that indicate that a tourism establishment or a tourism destination is sustainable and environmentally friendly. Eco-labelling, in the tourism industry, is a

system where establishments that conform with environmental standards defined by an independent institution are certified [11]. Eco-labels are regarded as mechanisms that can influence the choices of domestic and international tourists. Eco-labels are used for various purposes by different institutions and establishments in the tourism industry. Tour operators use eco-labels for marketing purposes, while accommodation businesses use eco-labels for marketing, reducing costs and obtaining necessary permits. In addition, at the country level, governments use eco-labels to promote their national interests, while eco-tourism associations use eco-labels for training, lobbying, for generating an income, and issuing eco-labels [8].

Designing a business model that include green marketing strategies is under the authority of senior executives. In developing marketing strategies, it is very important to understand the needs and requests of customers, which are significant external factors. When applying green marketing, it is believed that managers need to adopt a defensive approach [20]. Therefore, the attitudes and behaviors of managers in the context of ensuring the continued existence of the establishment and their ways of managing have vital importance. The most significant feature of leadership and management is decision making. The efficiency and decision-making process of the manager is related to his/her's perception and attitude on the subject at hand. From this point of view, the success and effectiveness of the business depends on the correctness of the decisions taken by the senior management and these correct decisions should be transferred to the managers and employees in the middle and lower levels at the right time, in the right way. In this context, the attitudes of department leaders towards eco-labels in the implementation of sustainable tourism applications in accommodation establishments are of vital importance. The participation of department leaders in the application and maintenance of environmental management systems in accommodation establishments is very significant. When senior management does not participate in environmental management practices, it is difficult for these managers to be credible in the eyes of the employees who directly influence the success of the environmental management practices [23]. There is much research in the literature on the influence of environmental management in accommodation establishments concerning the performance of the establishment [24–28]. However, it is observed that the research on defining the attitudes of the hotel managers towards eco-labels, which is an important tool for sustainable tourism, is very limited. The success of a hotel in adopting green practices is directly related to the attitude of managers and employees [29,30]. In this context, the determination of the attitudes of department managers towards eco-labels at accommodation establishments constituted the first aim of this study. There has been little focus on the perceptions and views of hotel managers towards environmental certifications and eco-labelling [31]. Determination of senior managers' attitudes toward eco-labels is regarded as very significant for sustainable tourism and management of the environment. Tzschentke et al. [32] draws attention to the point that personal values and beliefs play an important role in the participation of establishment managers in environmental activities. In this context, the first aim of this paper was to explore the perceptions of hotel managers towards eco-labeling.

Studies on the impact of eco-labelling have focused on several directions: the advantages of eco-labelling for tourism companies, the tourism industry, and tourists, the difficulties that companies face when trying to obtain such a certification, and the impact of holding an eco-label on consumers' decisions. There are also less investigated aspects, such as those regarding the real advantages that an ecolabel brings to tourism businesses, although the theoretical advantages are listed in several works [33]. The second aim of this paper, in this context, was to reveal the impact of eco-labelling activities on accommodation establishments.

2. Literature Review

2.1. Eco-Label

Nowadays, many companies are under pressure to conduct their activities in an environmentally friendly and sensitive manner, and to accept these activities as variables which provide competitive superiority. For this reason, establishments place emphasis on providing competitive superiority by showing that they are environmentally friendly and sensitive, considerate to the environmental concerns of customers, and that they minimize the impact of their activities on the environment [34]. At this point, establishments use eco-labels to inform customers about how their products are less harmful for the environment [35]. Eco-labeling, which is also known as green labeling, is a method of certifying the green features of products or services provided by an accommodation establishment to its customers [36]. Eco-labeling is assessed as a market-based, participatory economic tool which provides reliable information on the environmental record of a related product or service; it is voluntary [37]. Eco-labels are defined as approval marks or seals that provide information on the environmental features of a product or a service to customers [38]. Eco-labels are rewards that indicate, when compared to other products, that a product is less harmful to the environment [13,36,39].

Eco-labeling is a system that informs the consumer about the external impacts of the products during production and consumption [40,41]. The basic aim of the abovementioned system can be expressed as providing simple, easy-to-understand information for customers to purchase environmentally sensitive products [42]. Eco-labels provide information about products to convince consumers to prefer acceptable environmentally sensitive products. In this respect, eco-labels are an important tool used to increase the reliance of consumers on environmentally friendly products and services as well as transparency regarding the negative external impacts on the environment of products and services [43]. On the other hand, eco-labels are developed to increase the sensitivity of consumers towards the environment and wellness issues, and to convince them to use products which are not harmful [13,36]. According to Gallastegui [40], eco-labels have two basic purposes. The first purpose is to inform consumers about the environmental effects of consumption and to encourage consumers to make a change towards consumption models which are environmentally friendly. The second one is to encourage governments, producers, and other suppliers to produce services and products in accordance with environmental standards.

A literature search shows that eco-labels are associated with environment. Eco-labels aim to protect the environment, to encourage environmentalist ideas, and to raise awareness about environmental problems [44]. Although the objectives of eco-labels are often associated with the environment, when it is taken into consideration from the point of view of businesses, it is seen that eco-labels are used by businesses to generate profits in the long term. In addition to making profits in the long term, businesses also prefer eco-labels in order to differentiate in competition and demonstrate their social responsibility [10]. Another characteristic feature of the eco-label is that it is used by establishments to overcome green trade barriers applied by various countries [45].

When environmental standards defined by international or local institutions are provided, eco-labels are issued to a product, service or an establishment [46]. Eco-labels must be informative, easy to understand, reliable, consistent, and must have features that meet legal obligations [47]. The features that an eco-label must bear are listed as the following according to the Global Ecolabelling Network [44]: must include voluntarily participation and must oblige by the laws, must be conformable with the purpose and have a scientific basis, criteria must include distinctive features of the category of the product, the labels must be transparent and accountable, and the criteria must be reliable, measurable, accessible, provable, and unbiased.

2.2. Eco-Labels in Tourism and Its Historical Development

After the increase in sensitivity to environmental issues in the 1970s, demand for environmentally friendly products increased. The first state-sanctioned eco-labeling system was the “Blue Angel” (Blauer Engel) system in Germany in 1977–1978 [38,48]. Following the first eco-labeling system in Germany, many eco-labeling systems have emerged in northern European countries and in Japan. With the emergence of the abovementioned eco-labeling systems, interest in the system has increased in the United States of America and in the other European countries [39]. According to the European Commission, as of 2017, there are 54,115 products in which 2130 different eco-labeling products are used in the member states of the European Union. The eco-labeling mentioned above has been categorized into 29 different groups from cleaning products to garden supplies, clothing and paper products to tourism accommodation services [49].

Recognizing eco-labels in the tourism industry has taken some time with respect to industrial establishments, as the tourism industry is focused on services [50]. The environmental concerns of tourists and their eagerness to choose the greenest product, have made the environment one of the most significant tools for establishment's to acquire a competitive advantage. For this reason, environment emerges as a common factor for departmentalization of tourism for targeting and positioning strategies [51]. In due course, because of the demands of tourists and increasing competition in the tourism sector, establishments have focused on tourist management and, in this context, various principles have emerged in line with environmental activities [37]. These principles have been standardized and changed into labels and used in field of tourism. Eco-labels in tourism emerged in the 1980s and expanded in the 1990s (for example, Blue Flag) [51,52]. The idea of eco-labeling in tourism, parallel to emergence of sustainability on the world's agenda, came into prominence when it was accepted in Agenda 21 by 182 countries during the United Nations World Summit organized in 1992. As of 2014, 50 eco-labeling systems were observed operating throughout the world in different fields of tourism (hotels, beaches, protected areas, restaurants, etc.). Forty of the systems were used to certify accommodation establishments [10]. Today there are almost 60 eco-labeling systems in the tourism industry based on features such as geographical regions, sub-sectors, restrictions, subjects of tourism, management system, etc. [53]. Green Globe, Green Key, Green Seal, Green Leaf, Green Suitcase, Ecotel, and Blue Flag are the well-known eco-labeling systems. Other than the eco-labeling systems used in the tourism sector, many eco-labeling systems, such as EU Label, LEED (Leadership in Energy and Environmental Design), BREEAM (Building Research Establishment Environmental Assessment Method), EMAS (Eco-Management and Audit Scheme), and ISO 14001, which can be included in the tourism sector, are also used [10,54]. According to the European Union (EU) Commission, there are 786 different eco-labeling systems related to tourism and accommodation establishments in EU countries. These eco-labeling systems include both products used in tourism and accommodation establishments [50]. When the eco-labeling systems used in Turkey were studied, the first eco-label, Environmentally Friendly Establishment Certificate, issued since 1993 by the Ministry of Culture and Tourism to promote and increase environmental sensitivity, was researched. The above mentioned certificate was replaced by Green Star based on a new regulation made in 2008. Other eco-labels issued for the tourism sector in Turkey are the White Star given by TUROFED and The Greening hotels systems given by TUROB [9,54].

2.3. Purpose of Eco-Labels in Tourism

In order to minimize the negative effects of tourism on the environment and to provide competitive advantages, eco-labels are used for management of the environment and as marketing tools [55]. Currently, there is no central organization in the tourism industry to classify establishments as sustainable, green, environmentally friendly, etc. [22]. For this reason, there are various eco-labeling systems that work with the tourism industry. In spite of the differences observed in their contents, the eco-labeling systems used in the tourism industry have common features. Eco-labeling in tourism is a process to certify that a product, service or organization is conformable with certain environmental

standards and to ensure that conformity with these standards will be maintained. In the tourism sector, eco-labels are used as a means of monitoring and improving the negative aspects of the activities carried out by a tourism businesses. In tourism, eco-labels have the potential to reduce the negative environmental and social impacts of tourism and to provide marketing advantage to businesses that ensure the tourism sector's accountability to stakeholders and labeling standards [56]. The purpose of eco-labeling is to approve the environmentally friendly products, services, and practices of an establishment. While doing this, eco-labeling provides numerous positive advantages for establishments, tourists, and for society as a whole [52]. Over time, eco-labels turned into products themselves for tourists to compare tourism-related products prior to purchase [8].

Presently, eco-labeling systems such as environmental certificates, environmental awards, and environmental assessment systems have been used to protect the natural environment [57]. On the other hand, eco-labels in the tourism industry are labels which affect an establishment from an environmental, economic, and socio-cultural point of view—the three conditions of sustainability [55]. Eco-labels are useful for accommodation establishments to develop an image, increase competitive power and product quality, and to positively inform tourists about the establishment [52].

3. Materials and Method

In the scope of international tourism, the regions most visited by large numbers of tourists are southern Europe and the Mediterranean basin. For this reason, international projects supported by the United Nations and the European Investment Bank are conducted in these regions to provide sustainable development in tourist destinations, and papers and reports are prepared on the results of these projects. Alanya is included in these projects as a tourist destination where mass tourism is observed based on sea, sand, and sun (3S) [58].

Most of the accommodation businesses in Turkey are located in the Antalya region. In Turkey, 47.14% ($n = 321$) of five-star hotels with Ministry of Tourism Business Certificate are located in Antalya. When the figures are studied for Alanya, it is observed that Alanya's share of five-star hotels in the Antalya region is 24.61% ($n = 79$) and, for the rest of Turkey, it is 11.60%. Based on these figures, it is possible to say that Antalya and Alanya are the most significant regions for five-star hotels with establishment certificates. The same can be said for four-star hotels with establishment certificates in Antalya and Alanya [59]. There are 171 tourist-certified apartment hotels throughout Turkey. There are a total of 67 apartment hotel businesses in the Mediterranean region. The share of apartment hotels located in the in the Mediterranean region in Turkey constitutes of 39.18 % [60]. It is possible to say that, in the Mediterranean region, the supply of beds is concentrated in five-star, four-star hotels, and in other hotels with Establishment Certification from the Ministry of Tourism and these are significant figures for Antalya and for Turkey.

3.1. Data Collection

The fact that Alanya is a destinations for mass tourism in the Mediterranean Basin and in Turkey has been the main driver for conducting this research. Data for was collected by convenience sampling, which is a non-probability sampling method. The sampling included department managers from 3-, 4-, and 5-star hotels and other hotels. In the convenience sampling method, data are collected from the easiest and most accessible participants until reaching the sampling amount required. In this context, senior managers in environment and quality control departments from 100 hotels in Alanya were contacted and informed of the purpose of this study. After the initial meetings, 17 managers informed us that did not want to participate in the study because it was high season. The remaining managers, who accepted to join as participants, were interviewed and informed on how to fill out the questionnaires. Finally, the public survey forms were handed out to the department managers and one week later the forms were returned. Four hundred and fifty forms were handed out in 83 accommodation establishments and 422 of these were returned. Fourteen forms were observed to be incomplete or filled wrong. Four hundred and eight department managers participated in this study.

3.2. Measurement Instrument

Data were collected through questionnaire forms. The questionnaire forms were composed of three sections. In the first section, there were six questions asking for the professional qualifications of the participant. In the second part of the questionnaire, there are thirty questions to determine the attitudes of the managers towards the eco labels applied in accommodation establishments. In order to acquire the attitudes of the managers towards eco-labels and to determine the items from which the factors would be formed, findings from previous studies were used [23,24,29,31,61] to create different item pools for each factor. The third section of the questionnaire was composed of twenty-six questions aimed at revealing the impact of management policies on the accommodation establishment, whether or not it was eco-labelled certified. These questions were prepared by studying related research papers [19,24,25,62–64]. Factor structures of these draft scales and the propositions constituting the factors were first presented to the evaluation of two academicians who are experts in their fields. Factor structures of the scales were rearranged within the framework of feedback received from academicians. Within the framework of the feedback received from the academicians who are experts in their fields, the re-scales were presented to the general managers of five-star hotels and the managers responsible for quality management. The sentence structures of several propositions have been changed within the framework of feedback received from managers. The pilot implementation of the scales, whose content became clearer with the opinions of academicians and sector professionals, was carried out on a total of twenty-two department managers working in five different hotels. The attitudes of the department managers towards eco-labels and environmental concerns were measured on a 5 point scale, where 1 = strongly disagree and 5 = strongly agree. The question in the third part of the survey were also measured on a 5 point scale, where 1 = Never; 2 = Rarely; 3 = Sometimes, 4 = Often; and 5 = Always.

3.3. Data Analysis

In the findings of this research, the personal and professional features of the managers were indicated by a cross-table analysis based on the type of hotel they worked for. In order to measure the internal consistency of the scales used, coefficients of internal consistency were calculated (Cronbach's Alpha). Explanatory factor analysis (EFA) was used to determine the validity of the scales. In determining the attitudes of the managers on eco-labels and their concerns on environment, two-step cluster analysis was conducted. CHAID analysis was made use of to determine the attitudes of the managers towards eco-labels and to determine their concerns on environmental issues based on their personal and professional features. Using *t*-test analysis, the impact of management policies on accommodation establishments with or without eco-labels was tested.

4. Findings

4.1. Respondent Characteristics

When the gender distribution of the department managers was studied (Table 1), it was observed that the majority of the managers were male (74%). This distribution differed when the type of hotel was included; when the size and class of the hotel elevated, the number of male managers became dominant. Female managers were widespread in the management of three-star hotels and other hotels. The majority of the department managers were between 34 and 40 years old (59%). The age distribution of the managers with respect to the types of hotels were similar.

When the department managers are studied in respect to their education levels, it was observed that the majority of the managers were college and high school graduates. According to the results given in Table 1, their level of education varied with respect to the hotels for which they worked. While 74% of the college graduates worked at five-star hotels, it drops to 16% for managers working at three-star hotels and other hotels. The distribution of the departments of the managers included in the study showed variations based on the types of hotels participants work in. In five-star hotels, the managers participating in the study were general managers, managers in sales and marketing

departments, and managers of the front desk department. Participants from the other hotels were from the food and beverage department, the housekeeping department, and the kitchen department. For more than half of the hotels, the department managers were only actively employed for the summer season. On the other hand, the activity periods of the hotels differed by type. Fifty percent of the five-star hotels, 40% of the four-star hotels, 90% of the three-star hotels, and 73% of the other hotels were seasonal hotels. In term of eco-labelling, 52.5% of department managers expressed that there was no eco-labeling in their establishment, while 47.5% of them answered positively. Having an eco-label or not varied based on the types of hotel the managers worked for; while 88% of the managers working for five-star hotels expressed that their hotels had eco-labels, 98% of the managers of the three-star establishments indicated that their hotels did not have eco-labels. As a result, it can be said that, as the size and quality of the hotel increased, the rate of having an eco-label increased as well.

Table 1. Characteristics of the sample.

Classification of Hotel					
Gender	5 Star (<i>n</i> = 166)	4 Star (<i>n</i> = 44)	3 Star (<i>n</i> = 88)	Other Hotel (<i>n</i> = 110)	Total
Female	15.7%	25.0%	34.1%	34.5%	25.7%
Male	84.3%	75.0%	65.9%	65.5%	74.3%
Age	5 Star	4 Star	3 Star	Other Hotel	Total
27–33 Years	13.9%	15.9%	14.8%	10.0%	13.2%
34–40 years	60.8%	52.3%	55.7%	61.8%	59.1%
41–47 years	22.3%	29.5%	28.4%	26.4%	25.5%
48 years and older	3.0%	2.3%	1.1%	1.8%	2.2%
Education	5 Star	4 Star	3 Star	Other Hotel	Total
Primary education	1.8%	15.9%	23.9%	25.5%	14.5%
High school	24.1%	40.9%	60.2%	43.6%	39.0%
Bachelor	74.1%	43.2%	15.9%	30.9%	46.6%
Department	5 Star	4 Star	3 Star	Other Hotel	Total
Sales and Marketing manager	17.5%	6.8%	1.1%	8.2%	10.3%
Front office manager	29.5%	13.6%	6.8%	13.6%	18.6%
General manager	15.7%	6.8%	2.3%	1.8%	8.1%
Human resources Manager	12.7%	18.2%	6.8%	10.9%	11.5%
Housekeeping manager	4.8%	15.9%	35.2%	26.4%	18.4%
Food and beverage manager	12.0%	22.7%	30.7%	23.6%	20.3%
Kitchen manager	7.8%	15.9%	17.0%	15.5%	12.7%
Type of hotel activity	5 Star	4 Star	3 Star	Other Hotel	Total
Seasonal	50.0%	79.5%	89.8%	72.7%	67.9%
All year	50.0%	20.5%	10.2%	27.3%	32.1%
Eco-label ownership status of the hotel	5 Star	4 Star	3 Star	Other Hotel	Total
Yes	88.0%	38.6%	2.3%	26.4%	47.5%
No	12.0%	61.4%	97.7%	73.6%	52.5%

4.2. Results of Exploratory Factor Analysis

In order to measure the internal consistency of the scales, coefficients of the internal consistency of the scales (Cronbach's Alpha) were calculated. In order to determine the validity of the scales, on the other hand, explanatory factor analysis (EFA) was applied. For each factor determined after the

factor analysis, reliability coefficients were calculated, and results are given in Table 2. The Cronbach's alpha value of the attitudes of managers towards eco-labels were calculated as $\alpha = 0.840$. Since the abovementioned calculated coefficient fell between 0.50 and 0.90, which can be accepted as a reliability criterion, it is possible to say that the scale was reliable [65]. According to the results given in Table 2, the Kaiser–Meyer–Olkin (KMO) value was calculated as 0.921 as a result of the factor analysis. The KMO value obtained shows that the sampling sufficiency was at a perfect level and that the items were conformable with the explanatory factor analysis. Based on the Bartlett test of sphericity, it was observed that meaningful high-level relationships among the variables existed ($\chi^2(435) = 17,396.518$ $p = 0.00$) and the dataset was suitable for factor analysis. As a result of the factor analysis, eight factors with eigen values more than 1 were found. The factor load values of the questions taking place under the factors were observed to be more than 0.50. A total of eight factors can explain 77.254% of the variance. Reliability values of the factors located under each scale (Cronbach's alpha) were higher than $\alpha = 0.70$, which shows that the sub-dimensions were reliable.

The first factor was defined as *application cost and difficulty*. This factor reveals that applying eco labels in accommodation establishments is costly and leads to laborious processes. It was determined that the managers generally have an attitude that eco label applications are not costly and laborious. The second factor was defined as *employee engagement and environmental awareness*. This factor measured whether or not the eco-labels boosted the environmental awareness of the employees as well as their satisfaction. This factor also measures whether or not the eco-labels encouraged the managers to contribute towards the development of an environmentally friendly policy. During the study, the managers stated that eco-labels raised the awareness of employees about the environment and the managers contributed to policies for the protection of the environment, as well as increased the satisfaction and loyalty of the employees.

The third factor was named *benefit of profitability and competitive advantage*. This factor measured the attitude of the managers and tried to determine whether they thought eco-labels were useful for increasing profitability and competitive advantage. According to the results obtained, it was made clear that department managers thought that eco-labels were useful in providing profitability and competitive advantage. The fourth factor which was defined as *reduction of operating costs*. This function aimed to reveal the attitudes of the department managers towards whether or not eco-labels provided cost advantages to accommodation establishments. The results indicated that department managers have an attitude that eco labels reduce operating costs. The fifth factor was *contribution to business reputation*. The department managers stated that eco-labels help, even if only partly, imparting a social reputation of the establishment, and that tour operators and suppliers preferred establishments with eco-labels; even unemployed people wanted to work for establishments with eco-labels.

The sixth factor was *ensuring sustainable management awareness*. The sixth factor aimed to reveal that eco-labels contribute to the institutionalization of enterprises, provide the basis for sustainable management and reduce the environmental damage of enterprises. It can be said that the most important attitudes and perceptions held by the managers were collected by this factor. The seventh factor was named *customer satisfaction impact*. This factor measured the attitude of the managers toward whether eco-labels contributed to customer satisfaction and loyalty. According to the results of the factor analysis, managers have an attitude that eco-labels do not have a significant effect on customer satisfaction and loyalty. The last factor, *the necessity of dissemination of eco-labels* shows whether or not the managers supported eco-labels. The managers expressed that the eco-labels must be used in accommodation establishments and stated that incentives in line with their popularity are needed.

Table 2. Exploratory factor analysis of attitude scale for eco-labelling.

	Mean	Factor Loadings	Eigenvalues	The Ratio of Variance	Cronbach's Alpha
<i>Application Dost and Difficulty</i>	2.56		5331	15.733	0.901
Getting the eco-label system is costly	2.38	−0.906			
Service offerings of hotels with an eco-label system are more costly than hotels without an eco-label system	2.91	−0.875			
Getting the eco-label system is laborious	2.34	−0.872			
Performing eco-label procedures are exhausting	2.40	−0.870			
It is very difficult for the hotel to ensure both profitability and protect the environment at the same time	2.79	−0.842			
Eco-labeling in hotels can only be fully implemented when operating costs are reduced	2.73	−0.830			
<i>Employee Engagement and Environmental Awareness</i>	3.61		3991	11.778	0.898
Eco-labeling provides environmental awareness to employees	3.95	0.879			
Eco-labeling increases employee satisfaction	3.39	0.869			
Eco-labeling increases employee loyalty to the company	3.31	0.861			
Eco-labeling enables managers to display environmentally sensitive management	3.64	0.765			
Eco-labeling increases the sensitivity of managers to the environment	3.77	0.702			
<i>Benefit of Profitability and Competitive Advantage</i>	3.58		3839	11.330	0.937
Eco-labeling increases business profitability	3.84	0.869			
Eco-labeling increases occupancy rates	3.49	0.841			
Eco-labeling provides competitive advantage	3.58	0.832			
Eco-labeling gives to hotels bargaining power against tour operators	3.42	0.781			
<i>Reduction of Operating Costs</i>	3.54		3516	10.376	0.877
Eco-label applications reduce costs	3.61	0.851			
Eco-label applications increase operating costs	2.58	−0.841			
Eco-label applications reduce energy costs	3.58	0.807			
Eco-label applications reduce water costs	3.57	0.801			
<i>Contribution to Business Reputation</i>	3.43		3097	9.140	0.891
Eco-labeling increases the social reputation of hotels	3.53	0.878			
Hotels with an eco-label are the businesses that employees want to work in as a priority	3.44	0.860			
Hotels with eco-label are the businesses that tour operators want to work primarily	3.86	0.801			
Hotels with eco-label are priority preference of suppliers	2.88	0.766			
<i>Ensuring Sustainable Management Awareness</i>	3.95		2601	7.676	0.899
Eco-labeling significantly contributes to the sustainable management of hotels	4.00	0.864			
Eco-label systems severely reduce the negative effects of hotels on the environment	4.00	0.861			
Eco-label systems contribute significantly to the institutionalization of hotels	3.84	0.0743			
<i>Customer Satisfaction Impact</i>	3.25		1988	5.867	0.851
Eco-labelling increases customer satisfaction	3.24	0.801			
Eco-labelling increases customer loyalty	3.25	0.711			
<i>The necessity of dissemination of eco-labels</i>	3.79		1814	5.354	0.737
Eco-labels should be mandatory at all hotels	3.85	0.891			
The government should support the dissemination of eco-label systems in hotels	4.24	0.556			
Kaiser–Meyer–Olkin Measure of Sampling Adequacy			0.921		
Bartlett's Test of Sphericity			17,396.518 (df: 435) $p = 0.00$		
The Ratio of Total Variance			77.254%		
Overall Cronbach's Alpha			0.840		

4.3. Clustering Analysis Results

In order to review the attitudes of the department managers related with eco-labels, clustering analysis was applied, and the results are given in Table 3. A two-step clustering method was preferred to classify the attitudes of the managers. Two-step clustering is a hybrid clustering technique formed

by combining a k-means clustering technique from the non-hierarchical clustering techniques group and the minimum variance technique from the hierarchical clustering techniques group from Ward. When compared to classical clustering algorithms, two-step clustering provides categories with attributes. In two-step clustering analysis, on the other hand, clustering numbers are automatically determined as the most suitable cluster number. In this analysis, the relative contribution of the variables (contribution level) is calculated. Significance values are graded between 0–1. 0 is the least significant variable in determining clusters and 1 is the most important variable [66].

Table 3. Clustering analysis.

		Clusters			SD		
		1 <i>n</i> = 78 (%19)	2 <i>n</i> = 117 (%29)	3 <i>n</i> = 213 (%52)	1	2	3
Application Cost and Difficulty	Mean	3.87	3.24	1.77	0.19	0.15	0.22
Employee Engagement and Environmental Awareness	Mean	2.17	3.19	4.38	0.25	0.15	0.16
Benefit of Profitability and Competitive Advantage	Mean	2.36	3.27	4.20	0.51	0.26	0.30
Reduction of Operating Costs	Mean	2.37	3.24	4.14	0.42	0.19	0.27
Contribution to Business Reputation	Mean	2.30	3.07	4.04	0.20	0.17	0.22
Ensuring Sustainable Management Awareness	Mean	2.44	3.57	4.70	0.56	0.38	0.28
Customer Satisfaction Impact	Mean	1.87	3.07	3.85	0.30	0.22	0.36
The necessity of dissemination of Eco-Labels	Mean	3.34	3.19	4.77	0.31	0.29	0.38

According to the results of the two-step clustering analysis given in Table 3, the attitudes of the department managers towards eco-labels were grouped under three clusters. The first cluster was composed of 78 department managers who have common features and constituted 19% of the participants in total. The first cluster was the class where the least participation was provided. Attitudes of department managers towards eco-labels in the first cluster was negative.

The managers under the first cluster state that the implementation of eco labels is costly and laborious, and argue that the service offerings of hotels with eco labels system are more costly than those of hotels without eco labels system. Managers under the first cluster have an attitude that eco-labels do not have an impact on employee loyalty and job satisfaction and do not contribute to managers about environmentally responsible management. At the same time, it can be stated that the managers in the first cluster have an attitude that eco-labels do not decrease establishment costs, do not contribute to providing competitive advantages for the establishment, do not contribute to building a positive reputation, do not have an effect on raising awareness about sustainable and sensitive environmental management, and do not have any impact on customer satisfaction. Even though the department managers in the first group had negative attitudes towards eco-labels, they had a moderate attitude towards the dissemination of eco-labels.

The second cluster was composed of 117 department managers and constituted 29% of the participants. The attitudes of the managers towards eco-labeling in this group were partially positive. The managers under the second cluster had a view that eco-label application was a costly and difficult process although not as much as the managers in the first cluster. The most powerful positive attitudes of the department managers in this group for eco-labels were that eco-labels were useful in providing an environmentally sensitive and sustainable management system for establishments. The managers in the second cluster had partly positive attitudes regarding eco-labels, such as decreasing establishment costs, providing competitive advantages, raising environmental awareness, helping an establishment build a better reputation, raising environmental sensitivity and awareness, contributing to the employee loyalty and work satisfaction, and increasing customer satisfaction.

The third cluster was composed of 213 department managers. This cluster constituted 52% of the total participants. The third cluster had the maximum number of participants. The managers collected under this group had strong, positive attitudes toward eco-labels. The most powerful attitudes of managers toward eco-labels are as follows: eco-labels help to develop environmentally sensitive sustainable management awareness and popularize eco-label applications. The managers in the third cluster had partially positive attitudes toward eco-labels, such as decreasing establishment costs, providing competitive advantages, raising environmental awareness, helping the establishment build a better reputation, raising environmental sensitivity and awareness, contributing to employee loyalty and work satisfaction, and increasing customer satisfaction.

4.4. CHAID Analysis Results

The personal and professional variables that have impact on the attitudes of the department managers on eco-labels have been studied using CHAID (Chi-squared automatic interaction) analysis which is a decision trees technique (classification tree, decision tree; CT&T). A CHAID analysis was applied to classify the effects of predicted variables as a whole by unpredicted variables. CHAID analysis is used to determine the relationships among one predicted variable. In CHAID analysis, all predictive variables are compared, and the best explained predicted variable is picked and then a set of data is categorized into sub-groups in line with this predictive variable. These sub-groups create new sub-groups for all significant predictive variables. Chi-squared automatic interaction analysis is a powerful statistical technique that analyzes data obtained via interval, ratio, and nominal scales at the same time and shows the relationships among predictive variables in all details covering all possible hierarchies [67]. Briefly, CHAID analysis creates sub-sets through categorizing factors affecting dependent variables according to their significance levels [68]. The relationships among the related predictive variables after the application of CHAID analysis were classified as knots and the diagrams obtained are shown in Figures 1–3. First of all, the effect of personal features of the department managers on attitudes related to eco-labels was tested.

In CHAID analysis, in the model where the attitudes of the department managers towards eco-labeling are dependent variables, the personal features of the managers were modeled as dependent variables, as shown in Figure 1. In CHAID analysis, the results of the stepwise regression analysis are taken into consideration. According to the results of this analysis, the variable with the highest Chi-square value among the predicted variables which impacted on the dependent variable is first in place in the CHAID diagram. In the CHAID analysis, the sub-clusters which define the dependent variable best are observed. According to Figure 1, it is observed that the education level variable ($\chi^2(4) = 232,184$ $p = 0.000$), is first in place among the independent variables, which are statistically significant concerning the attitudes of the department managers towards eco-labels. Ninety percent of the department managers holding college degrees were grouped in the third cluster. It was also observed that the number of college graduates was very low (4–6%) in the first and second clusters, who tended to be high school and primary school graduates. As a result of this analysis, holding a college degree had a definitive effect on their attitudes towards eco-labels. According to the results of the CHAID analysis, it was observed that the variable affecting attitudes towards eco-labels among the high school and primary school graduates was the gender variable ($\chi^2(2) = 52,016$ $p = 0.000$), is first in place). While 40% of the male high school and primary school graduates were grouped in the third cluster, this rate was only 15% among the female managers. According to this result, it was concluded that the department managers with a negative attitude towards eco-labels are particularly male, high school and primary school graduates.

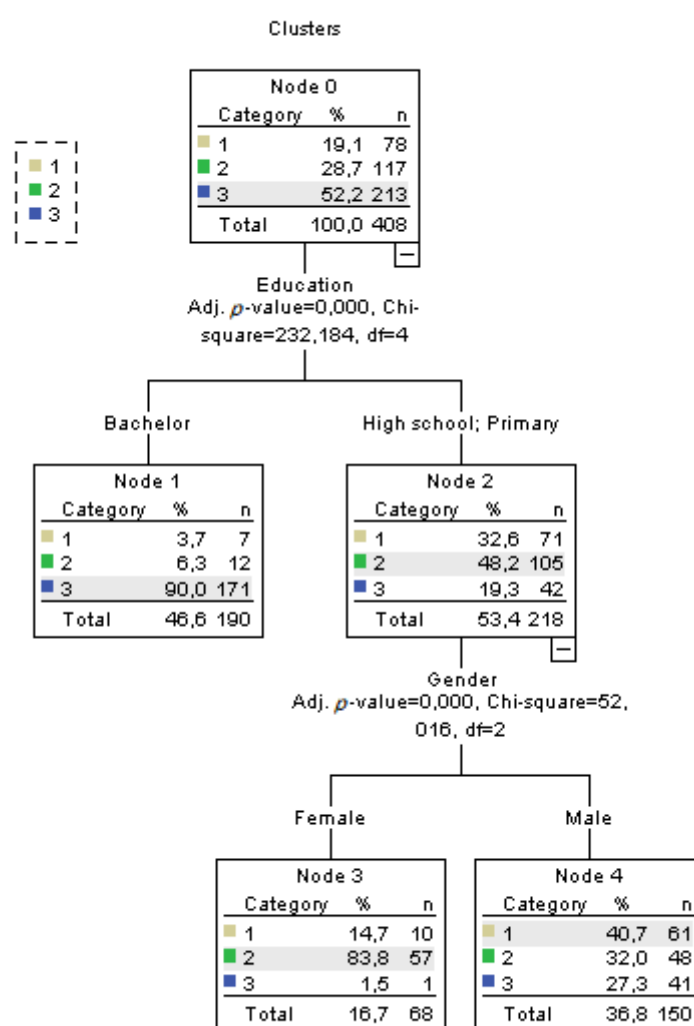


Figure 1. The effects of managers' personal characteristics on their attitudes towards eco-labels.

In order to determine the effects of the professional features of the department managers towards eco-labels a CHAID analysis was conducted. According to the results, shown in Figure 2, the department variable ($\chi^2(6) = 293,868$ $p = 0.000$) holds first place among the predictable variables that were affected the attitudes of the department managers towards eco-labels. General managers and all of the sales and marketing managers were grouped in the third cluster, which had positive attitudes towards eco-labels. There were no managers from the housekeeping department in the third cluster, and 83.3% of housekeeping department managers were grouped in the second cluster. Also, the CHAID analysis indicated that the majority of department managers who had negative attitudes towards eco-labeling were comprised of food and beverage and kitchen managers. Eighty-two percent of front desk and human resources department managers were in the third cluster. The type of hotel worked for ($\chi^2(2) = 20,830$ $p = 0.000$) held first place among the predictive variables that affected the attitudes of the department managers towards eco-labels. All front desk and human resources department managers at five-star hotels regarded eco-labels as positive. Front desk and human resources department managers working for hotels other than five-star hotels had slightly negative opinions towards eco-labels.

The existence or non-existence of eco-labels in hotels where the department managers were working had an effect on the attitudes of the managers towards eco-labeling. According to the results of the CHAID analysis given in Figure 3, the existence or non-existence of eco-labels in the hotel the managers are working in ($\chi^2(2) = 290,087$ $p = 0.000$) held first place among the predictable variables that affected the attitudes of the department managers towards eco-labels. Thirty-six percent of the

managers had a negative opinion of the eco-labeling system, while 12% of the managers regarded it as useful. Based on these results, it can be said that eco-labeling applications had a great effect on the attitude of the managers towards eco-labeling.

According to the CHIAD analysis results given in Figure 3, the most significant variable that had an effect on the attitudes of the eco-labels for the managers working for a hotel with or without eco-labels is department variable ($\chi^2(1) = 17,896$ $p = 0.000$; $\chi^2(2) = 45,250$ $p = 0.000$). While 59% of the food and beverage and kitchen department managers working for a hotel where there was no eco-label regarded eco-labels as negative, the rate dropped to 15% for managers from other departments (i.e., general managers, sales and marketing, front desk, housekeeping, human resources). All of the managers who worked for hotels with eco-labels developed a positive attitude towards eco-labels. This positive attitude varied among departments in the same hotel. While the majority of the managers in the food and beverage and kitchen departments who worked in hotels with no eco-labels had a negative attitude towards eco-labeling, if the establishment had eco-labels, the whole situation changed in favor of eco-labels. Based on this finding, existence or non-existence of eco-labels in hotels had a definitive effect on the food and beverage managers' and kitchen managers' development of a positive attitude towards eco-labeling.

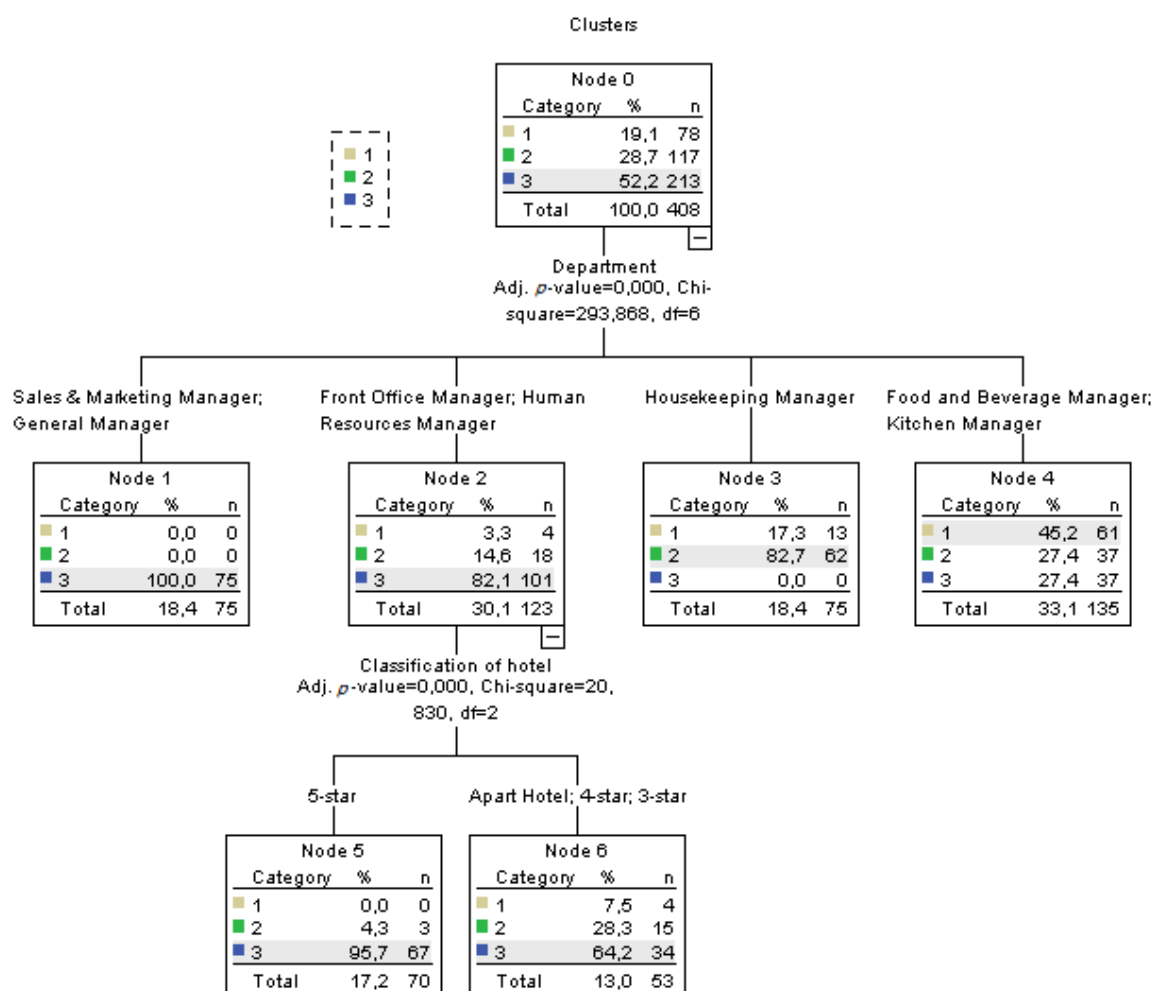


Figure 2. The effects of managers' professional characteristics on their attitudes towards eco-labels.

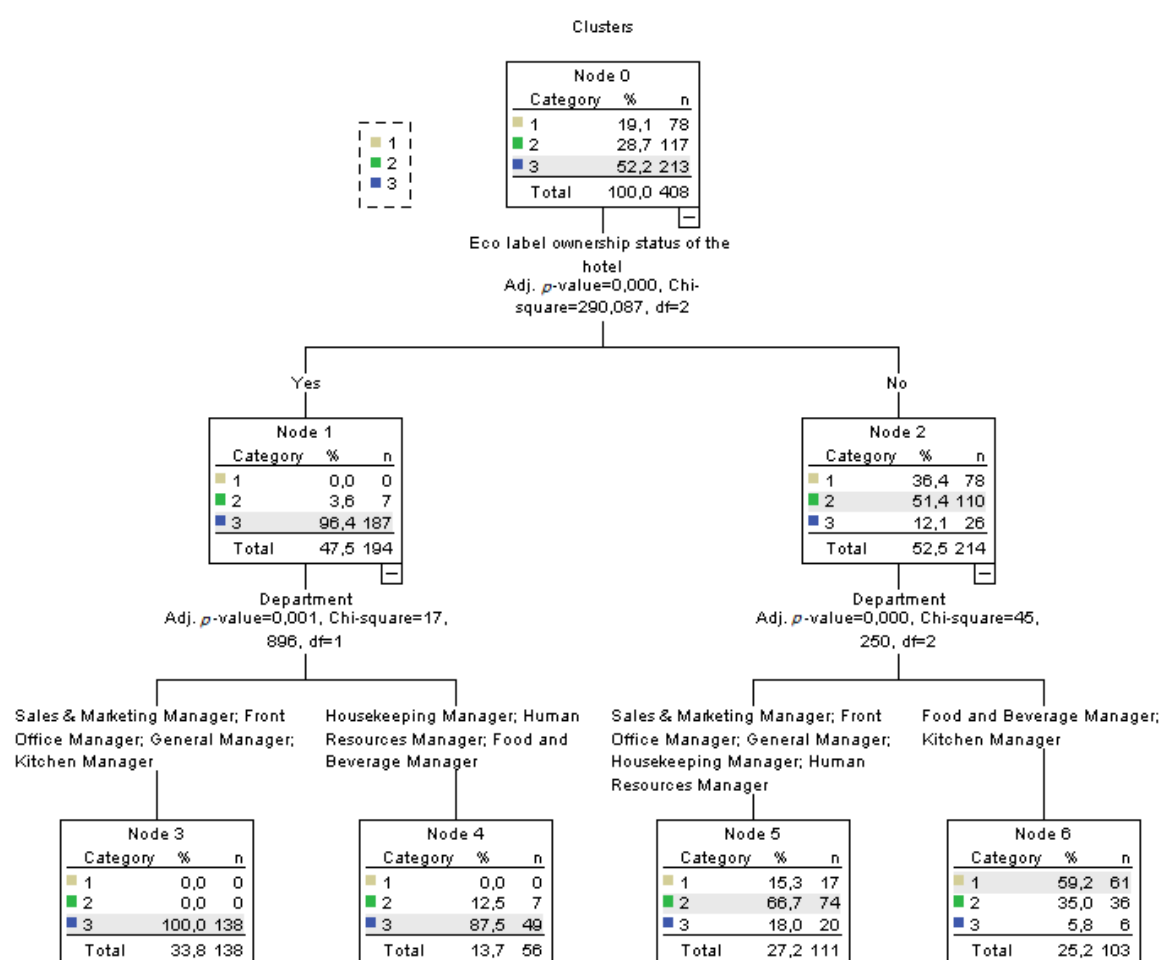


Figure 3. The effects of managers' professional characteristics on their attitudes towards eco-labels.

4.5. Results of Eco-Labeling Activities on Accommodation Businesses

Eco-labels are very important for sustainable tourism management. In this framework, t -test analysis has been used to determine whether the eco-labels effect and cause variations in sustainable tourism managements systems. According to the results shown in Table 4, it is observed that management and establishment activities show variations in hotels having and not having eco-labels. In hotels where there were no eco-labels, the following policies did not exist: decreasing the negative effects of the establishment's activities on the environment, supporting the local economy, and protecting local cultures and traditions. These policies, on the other hand, did exist in the hotels where eco-labels were present: activities for employees on raising awareness about and providing information on the environment, disciplinary applications, orientation activities, collection of complaints and suggestions by employees, rewarding environmentally friendly employees, categorizing waste materials, recording the amount of daily waste, informing customers about local cultures and peoples, informing customers that the establishment is sensitive to the environment, informing employees about new construction projections, asking for the opinions of local population about new investments, etc. In the hotels where eco-labels did exist, all of the above items were applied, except for awarding employees sensitive to environment and asking for the opinions of local people about new investments. In light of these findings, at hotels where eco-labels were non-existent, it was concluded that only the activities that were compulsory by law (occupational health and safety policies, occupational health and safety trainings, overtime payment) and activities related to decreasing costs (power economy policies in consumers' rooms and in common areas of the hotel, informing consumers about power and water economy, water economy in consumers' rooms and in common areas of the hotel, recording monthly

water and energy consumption) were applied in the context of sustainable tourism and management. In accommodation establishments where eco-labels did exist, sustainable tourism and management practices were applied.

Table 4. Sustainable tourism practices of accommodation enterprises.

Sustainable Management Policies	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
1. Policies to reduce negative impacts on your business environment	3.73	2.31	26.539	0.000 *
2. Policies to support the local economy	3.76	1.96	38.09	0.000 *
3. Policies to protect local culture and traditions	3.81	1.80	38.762	0.000 *
4. Occupational health and safety policies	4.40	3.54	17.241	0.000 *
Training and Information Activities	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
5. Training employees on environmental issues	4.54	1.95	59.29	0.000 *
6. Occupational health and safety trainings	4.64	2.97	29.211	0.000 *
7. Informing all employees of the hotel's initiatives on environmental issues	3.26	1.87	27.227	0.000 *
Energy and Water Saving Management	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
8. Energy saving applications in customer rooms and common areas of hotel	4.89	4.28	14.071	0.000 *
9. Recording all energy consumption in monthly form	4.95	4.93	0.594	0.553
10. Informing customers about energy savings	4.70	3.92	16.392	0.000 *
11. Water saving applications in customer rooms and common areas of hotel	4.74	4.21	12.849	0.000 *
12. Recording all water consumption in monthly form	4.97	4.92	2.128	0.034 *
13. Informing customers about water savings	4.69	4.00	16.931	0.000 *
Environmental Waste Management	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
14. Collection of wastes by category	4.52	2.05	42.194	0.000 *
15. Recording the amount of waste food on a daily basis	4.35	1.53	51.592	0.000 *
Employees Oriented Applications	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
16. Payment of overtime fees	4.94	4.83	3.57	0.000 *
17. Implementation of the personnel discipline regulation	4.00	1.56	41.565	0.000 *
18. Giving orientation training before starting work	4.12	1.73	39.068	0.000 *
19. Applications of employee suggestion and complaint	3.43	1.79	25.989	0.000 *
20. Rewarding of environmentally friendly employees	2.23	1.03	35.926	0.000 *
Informing Customers	Yes	No	<i>t</i>	<i>p</i>
	<i>n</i> = 194	<i>n</i> = 214		
21. No negative impact on local community access to resources	4.53	4.52	0.152	0.879
22. Informing customers about local people and local culture	3.15	2.06	15.507	0.000 *
23. Consideration of the opinions of the local community and the employees on the construction of new investments	1.59	1.58	0.273	0.785
24. Introducing our sustainability programs to customers	4.58	1.28	70.607	0.000 *
25. Informing our customers that we are environmentally friendly	4.88	1.96	52.917	0.000 *
26. Giving information about local traditions, culture, dress, natural and cultural heritage to customers	4.21	2.51	36.008	0.000 *

* Significant at the 0.05 probability level.

5. Discussions

Hotels are key components in the travel and tourism industries and hold a special place in environmental protection in respect to these industries. Nowadays, the hotel industry has come under pressure to take proper care of environmental problems. Some managers have learned that long-term economic sustainability and growth are interrelated with environmental policies. A clean environment is a key component of quality service and is therefore important for the development of the travel, tourism and hotel industries. In order for tourism to be sustainable, it requires hotel businesses to be involved in all stages of environmental protection components [69]. In line with this, in order to promote and encourage sustainable tourism in context of activities related to environmental social responsibility, eco-labels are issued.

In the tourism and hospitality industry, it can be argued that environmental certifications have three objectives. Firstly, certification schemes promote the voluntary implementation of sustainability practices amongst hospitality providers. Secondly, the schemes, and the related implementation of sustainability practices, have the potential to enhance the profitability of certified member hotels. Thirdly, the schemes provide potential guests with more accurate information about the environmental performance of hotels during the booking process [31]. Research undertaken by the Steigenberger Reservation Service [23] in 1994 also found that 20% of the surveyed hotels had initiated green measures because of financial considerations, 20% were motivated by guest concerns, and 30% by municipal regulations. There are various reasons for hotels to take environmental initiatives. For instance, hoteliers may respond to pressure from society or to legislative changes. They may implement environmental measures aimed at reducing the consumption of energy, water, and materials, thus reducing operating costs. At the same time, they believe that doing so could enhance customer loyalty and the company's public image [23].

The results of research on eco-labels in accommodation establishments show that, eco-labels are attained due to the following reasons: to provide competitive advantages; to decrease the costs of the establishment; to attain a more positive reputation; to make use of state incentives; to draw the attention of environmentally sensitive customers; to develop relationships with individuals, institutions, and investors who are sensitive to environmental issues; legal sanctions; and pressure from stakeholders and customers [17,19,23,29,64,70–82]. According to various studies [75,81–83], the primary reason establishment's implement sustainability practices are due to the financial incentives, such as the reduction in the establishment's costs and the gain of competitive advantages.

Accommodation establishments have significantly economized power consumption [76]. Greert [31] indicated, after a study conducted on a hotel in London, that managers gained a significant amount of cost advantages through sustainability applications practiced in their hotels. Gil [84] research indicated that there was a positive relationship between environmental practices and the financial performances of hotels. Mercan [85] expressed that the most widespread application of environmental management has been through the use of automatic sensors. This is simply because the installation of sensors does not require high costs and the installed system provides significant cost advantages for the hotel. Kung and Lee [86] evaluated the development of environmental measures by managers of international tourist hotels in Taiwan. The researchers revealed that environmental measures have primarily been limited to energy and water conservation in most of the major hotels in Taiwan.

Eco-labels predict international standards in providing sustainable management and to protect the environment for establishments. When used as a marketing tool, besides increasing awareness of the product and services that are sold, local environmental improvements, as demanded by consumers, increases an establishment's competitive advantages [15]. Manaktola and Jauhari [19] indicate that environmentally friendly applications can increase the competitive power of a hotel. A TURÇEV official, responsible for issuing and inspecting Green Key certificates in Turkey, stated that the hotels receiving the certificate are mostly among the hotels in the coastal area and these hotels are sensitive

to the environment and they also take the certification as a part of institutionalization and also as a marketing tool [87].

Akova et al. [88], in their research on hotels in İstanbul, indicated that hotels with Green Star certificates adopted a competitive management style and the main purpose of these hotels to implement environmentally applications was to expand their market and to increase their competitive power. Bozkurt and Dücan [15] remarked that the number of beaches with blue flags and the number of tourists visiting were cointegrated, which means these two tend to move together in time. Bozkurt and Dücan [15] suggest that, as the number of eco-labels in a destination increases, the number of tourists who visit that destination will also increase.

Kirk [75] remarked, after a study conducted on the hotels in Edinburgh, that environmental management practices are very useful for public relations and customer satisfaction. In another study, Kirk [61] aimed to reveal the attitude of general managers of hotels in Edinburgh towards environmental management. The general managers remarked that environmental management applications were useful in improving relations with the public and in establishing better relationships with local people. At the same time, they indicated that environmental management applications increased customer satisfaction, provided competitive power, and increased productivity. Environmental management applications are related to establishing good relations with stakeholders and can prevent disputes. Good relationships with stakeholders are a key component contributing to an establishment's success. In this context, it can be said that investments toward environmental management have positive effects on competitive power and performance [24].

Research has shown that environmental responsibility is at the center of institutional reputation and competitive success of an establishment [89]. Yılmaz and Yumuk [90] showed that managers of hotels with Green Star certificates, an eco-labeling system active in Turkey, found eco-labels to be supportive of the image of the hotel and regarded them as tools to disambiguate their activities in the context of social responsibility. These managers also indicated that, unless environmentally friendly applications were adopted by large numbers of consumers and the establishment itself, they would only be used as a short-term tools to increase their competitiveness. At the same time, the hotel managers believed that, after receiving the Green Star, the bonds between management, customers, and intermediate institutions (such as tour operators and travel agencies) were stronger. Ünlüönen et al. [9] revealed that the management in hotels in Ankara regarded eco-labels as a tool for boosting their reputation and image and was a positive factor for increasing sales.

Eco-labels are found to have positive effects on employees' and customers' satisfaction. A general manager in Hong Kong indicated that the motivation of employees increased after initiation of environmentally friendly applications in his hotel [23]. Robinot and Giannelloni [91] concluded that use of renewable energy among green hotel applications positively affected the satisfaction of customers. Goodman [92] pointed out the positive effect of sustainability strategies on the loyalty and satisfaction of customers at a chain hotel in northern Europe. Berezan et al. [62] also indicated the positive effect of environmentally sensitive applications on customers. Slevitch et al. [93] showed that there was a positive relationship between green applications in hotels and the satisfaction of customers. In a study on hotels with Blue Flag certifications, Kindan [51] concluded that the Blue Flag increased the competitive power of hotels as well as the interest of the consumers. Atay and Dilek [94] remarked that applications related to the environment increased the competitive power of accommodation establishments and contributed to institutional reputation and preferability in customer perceptions.

Eco-label applications are effective in influencing the choices and preferences of consumers. Manaktola and Jauhari [19] aimed to define the factors affecting the attitudes of managers in the hotel industry in India, and concluded that environmentally friendly applications significantly affected the choices of hotels in India. The researchers also stated that customers were aware of environmentally friendly applications; however, they tended to prefer such hotels that did not have any extra cost.

Kim et al. [18], who conducted a study based on the comments of customers posted on TripAdvisor, argued that the relationship between the intensity of the green applications in accommodation

establishments and customers' satisfaction was realized by the quality of service. Customer satisfaction increases with the intensity of green applications in hotels as these applications decrease cognitive dissonance. A study supporting this result was conducted by Peiro-Signes et al. [95] in Spain. Researchers studied the comments of customers for approximately 6850 hotels in Spain via Booking.com for accommodations which did and did not have environmental certificates; they concluded that the 350 certified hotels received higher customer points over non-certified. It was shown that the total positive effect of hotels with green applications was an indirect result of the effect of the relative quality of service perceived by the customers.

Molina-Azorin et al. [24] pointed the quality management and environmental management applications in accommodation establishments resulted in competition from costs and differentiation points of view. Besides, hotel which apply quality management programs were more successful in environmental management applications. When a hotel develops quality management applications, they can easily develop environmental management applications because environmental management applications require similar management techniques. At the same time, since employees of these hotel are familiar with quality management applications and are bonded to these applications, it would be easy for them to adapt to environmental management applications.

There are some obstacles in applying green applications in accommodation establishments. Especially, owners of the local hotels think that the most significant obstacle in developing green applications is capital [29]. In addition, it is believed that it will bring an additional workload for the hotel employees. Chan [96] pointed out that the most significant obstacles for hotels in Hong Kong in establishing an environmental management system are lack of knowledge and skills, lack of resources, lack of professional advice, and uncertainty of outcome.

Barbulescu et al. [33] showed that hotel managers in Romania implemented environmental management applications to save power and water and to minimize waste. The hotel managers who participated in their study stated that environmental management applications provided competitive advantage. Even though the managers said that environmental management applications had positive effects on the establishment, they also indicated that they were not considering applying for an eco-label certification. The most widespread reason indicated for this decision was lack of information about eco-labeling, difficulty in applying eco-label criteria. Mercan [85] identified significant differences between the significance assigned to the environment by accommodation establishments and the realization of environmental applications. Although employees attached importance to environmental issues, it was observed that this importance could not be reflected by the applications of the establishments. Therefore, such applications that cannot be realized in real life practices lose their meaning and cannot bring the success and benefits expected.

6. Conclusions

Alanya is one of the most significant tourist destinations in Turkey. Competition of 3S (i.e., sun, sea, and sand) tourist destinations can only be possible if they can maintain their natural attractions [97–99]. In destinations where tourists are attracted to visit by sea, sand, and sun—unless the core natural resources are significantly corrupted—it will remain a tourist hotspot [98,100]. On a global scale, tourism and the environment are inversely proportioned; while the natural environment is a pre-condition for the development of tourism, if this development cannot be stopped at a certain point, the environment is easily corrupted [101]. Hardy and Beeton [102] argue that the continuation of tourism attractiveness does not mean sustainable tourism unless a proactive and integrated point of view is provided.

The product of tourism is obtained by the integration of different pieces. In decreasing the negative and increasing the positive effects of tourism, each institution that constitutes the tourism product has individual responsibilities. In this context, in the realization of sustainable tourism applications in accommodation establishments, the attitudes of department managers towards eco-labels are extremely important. In the successful application and maintenance of environmental management systems in

accommodation establishments, the participation of department managers plays a significant role. Unless senior managers participate in environmental management applications, legitimacy of the project will not be gained in the eyes of the employees, which directly affects the success of the environmental management applications [23]. The success of a hotel in adopting green applications is dependent on the attitudes of managers and employees as well as the positive attitude of the company in regard to environmental problems [29,30]. In this context, determination of the attitudes of department managers of hotels in the Alanya region towards eco-labels applied in the course of sustainable tourism was the first target of the research.

As a result of the factor analysis, it was observed that the attitudes of the department managers towards the eco-labels were composed of eight dimensions. As a result of the two-step clustering analysis applied to these eight dimensions, the attitudes of the department managers towards eco-labels were grouped into three clusters, two of them being positive and one being negative. Department managers with negative attitudes towards eco-labels constituted 19% of the participants, while the managers with neutral attitudes constituted 29% of the participants. Managers having strong, positive attitudes constituted 52% of the participants.

There were also opinions expressing that environmental management applications had the ability to decrease an establishment's competitive power and performance. According to this approach, realization of environmental management applications resulted in higher costs that decreased the competitive power of the establishment [24]. According to another study, it was observed that establishments still have restricted approaches about the necessity of eco-labels [103]. Our research showed that 19% of department managers had a negative attitude towards eco-labels. These managers stated that eco-label applications were costly and difficult to perform, and they were not convinced that eco-labels were useful for decreasing establishment costs or increasing profitability and competitive advantage.

The effect of personal and professional features on the attitudes of the department managers towards eco-labeling was also tested by CHAID analysis. The results showed that, among the most effective personal features of the departmental managers, was level of education. Ninety percent of the managers who had a bachelor degree had strong, positive attitudes towards eco-labels. The majority of managers who had negative and moderately positive attitudes toward eco-labels were dominantly high school and primary school graduates. The results of the obtained CHAID analysis show that bachelor's degree education has a highly decisive effect on managers' attitudes towards to eco-labelling. It was determined that gender had a decisive effect on the attitudes of high school and primary school graduate managers towards eco-labels. It was observed that the managers who had negative attitudes towards eco-labels were consisted mainly of male with high school and primary school graduates.

It was determined that among the professional characteristics of department managers, department was found to be the most effective independent variable on the attitudes towards eco-labels. According to this result, general manager and all sales and marketing managers were grouped in the cluster favoring eco-labels. Housekeeping managers were not included in the group which disfavored eco-labels, instead 83.3% of these managers were found in the cluster who had moderate to positive attitudes towards eco-labels. The CHAID analysis showed that the majority of the department managers who had negative attitudes towards eco-labels were managers in food and beverage and kitchen departments. In addition, 82% of managers from the front desk and human resources departments had positive attitudes towards eco-labels. According to the results of the CHAID analysis, another significant variable that affected the attitude of the managers of the front desk and human resources departments was the type of the hotel. Front desk managers and human resources managers working at five-star hotels regard eco-labels positively. The front desk managers and human resources managers working at hotels with four or less stars had moderate to negative attitudes towards eco-labels. Furthermore, existence or non-existence of eco-labels in the hotel where the managers worked was also tested. All of the managers working at institutions where eco-labels existed had positive attitudes towards eco-labels. The majority of the managers in food and beverage departments working at hotels with no

eco-labels developed negative attitudes towards eco-labels. On the other hand, if the accommodation establishment had an eco-label, the whole situation changed in favor of eco-labels. According to our findings, existence or non-existence of an eco-label in an accommodation establishment has a significant and definitive effect on attitudes towards eco-labels of managers in food and beverage departments.

Managers of establishments play a significant role in the protection of the environment. Environmentally sensitive management of establishments is closely related with the awareness levels of the managers. Raising the awareness of managers and employees positively changes their attitude [104]. In this context, the managers who did not have environmental awareness remained insensitive to environmental issues. According to the literature, raising the awareness level of individuals on environmental issues is one of the key obstacle to overcoming environmental problems. In this context, it is highly important to raise the awareness of the departmental managers on environmental issues; this is expected to develop positive attitudes and behaviors towards environmental problems [105].

Tsai et al. [83] conducted research to determine the attitudes of travel agencies and hotel managers on green hotel management. The results showed that the hotel managers had higher attitudes in respect to the managers of travel agencies. Female managers and less experienced managers were observed to have higher attitudes towards green hotel management. The attitude of large-scale hotels towards green hotel management was found to be better than that of small-scale hotel managers and that of travel agencies. Küçük [106] interviewed the managers of international hotels in Ankara, which showed that most of these hotels did not have an environmental management department and a written environmental policy. Erdoğan and Barış [69] indicated that hotel management in Ankara did not have sufficient environmental sensitivity and that managers were not interested in applications to protect the environment.

Erdoğan and Barış [69] revealed that hotel managers in Ankara did not have the necessary environmental knowledge and interest. Chan et al. [107] found that hotel employees' knowledge and sensitivity about the environment affected their environmental behaviors in a positive manner. Chou [30] argues that the success of green applications in the tourism sector is highly related with the applications and ideas of employees on environmental issues.

Geert [31] conducted a study on hotel managers in London and concluded that hotels have different approaches in their sustainability applications, and that their hotels have been greatly affected by their hotel managers and their approaches. El Dief and Font [89] conducted a study on marketing managers of hotels in Red Sea region of Egypt and showed that organizational and personal features of such managers had significant effects on green marketing applications. Managers' age, education level, sex, etc. had definitive effects on green marketing applications in an international hotel aimed at Western consumers.

Chan and Hawkins [108] conducted a sample case study on the attitudes of hotel employees on environmental management systems in an international hotel. The employees in the hotel were divided into three groups: senior management, intermediate management, and lower level management. One of the findings was the existence of positive and negative effects of the environmental management system on the employees of the hotel. During the planning stage, intensive participation of the lower level management was ignored and this resulted in a lack of motivation and job satisfaction. On the other hand, during the application stage, as long as the purpose of green applications was transferred correctly, the participation of lower level management was easily provided. Another finding was the different meanings ascribed to green applications by upper and lower management groups. While upper level managers explained the motivation for green applications of the hotel as sensitivity to the environment and being good citizens, intermediate managers explained purpose as obtaining a share from the green market. Lower level employees pointed out that the purpose of reducing costs.

Mbasera et al. [64] revealed through research on three- and five-star hotels in Zimbabwe and South Africa, that participating hotels did not have green management policies, but some green application were applied. However, when the applications were studied, it was observed that these applications were only on energy conservation, use of solar power, and minimizing the use of paper. In Zimbabwe

and South Africa, the reasons for the green management initiatives were resource conservation, decreasing costs, and competition advantage. The researchers indicated that these initiatives were not applied systematically but randomly.

Rahman et al. [28] in their research on North American hotels, they found that chain hotels applied green practices more than independent hotels. Bohdanowicz [109] studied the attitude of hotels related to the environment and indicated that chain hotel management teams were interested in green applications more than non-chain hotels. Kirk [61] found associations between characteristics of the hotel size and attitudes towards environmental management of hotel managers, and indicated that chain hotels and large hotels favor environmental management applications more than small hotels.

The second purpose of this study was to reveal the effect of the eco-labeling activities on accommodation establishments. In this framework, we observe whether accommodation establishments which did or did not have eco-labels had different sustainable tourism and management activities. As a result of the *t*-test analysis, it was found that accommodation establishments with eco-labels focused on activities to decrease costs, such as energy and water conservation and waste management. On the other hand, policies on preservation of local cultures, informing the customers on this subject, training employees on environmental issues, minimizing the negative effects of the establishment on the environment, supporting the local economy, protecting local cultures and traditions were also developed. It was determined that the hotels with eco-labels were weak in environmental protection issues that included asking for the opinions of local people about new investments. The hotels without eco-labels were observed to apply activities because they legally required in context of sustainable tourism and management, as well as those which were useful in reducing costs. The hotels which did not have eco-labels did not realize applications related with sustainable tourism applications and environmental management systems. In the context of these findings, it can be said that eco-labels are a significant catalysts in the realization of environmentally sensitive, responsible, and sustainable tourism applications for accommodation establishments.

Potoski and Aseem [110] indicated that establishments certified with ISO 14001 had much lower emissions compared to establishments without ISO 14001. Caro and Garcia [111] showed that ISO certification helped customers develop perceptions of quality, satisfaction, and an institutional image, and the companies with certifications had a competitive advantage over other companies with no certification.

Eren and Yılmaz [112] conducted a research on applications to promote environmental sensitivity in the Nevşehir region. The results of this research showed that environmental sensitivity level in the hotels were not at sufficient levels and some of the hotels did not have environmental certificates. However, these hotels were successful in energy and water conservation and in management of waste materials and in informing customers about environmental protection and, therefore, directing them to display green behaviors. Giritlioğlu and Güzel [113] conducted a study on hotels located in Gaziantep and Hatay. They noticed that 70% of the hotels did not have internationally accepted environmental certificates and that the hotels did not attach importance to environmental management systems. On the other hand, the hotels realized some applications to minimize costs, such as power and water conservation, etc.

In this research, it was determined that department managers had the opinion that eco labels should be disseminated. At the same time, department managers have stated that there should be government support in expanding eco label systems in accommodation businesses. In the event of government incentives for adoption of certification, it would be easier and encourage accommodation establishments to obtain eco-labels. Governments can help eco-labels become common practice via tax advantages for accommodation establishments.

An environmentally conscious management system of enterprises is closely related to the level of environmental awareness of their managers. In this study, it was found that the most effective personal characteristics of the department managers' attitudes towards eco-labels was the level of education. Raising awareness levels of business managers towards environmental problems is very important for

developing positive attitudes and behaviors towards the environment. In the context of research results, it can be stated that trainings given to the managers on environmental issues will increase managers' sensitivity towards the environment in a positive way. The adoption and implementation of eco labels by tourism enterprises is closely related to consumer support [103]. In this context, consumers need to be informed to generalize the use of eco-labels by tourism establishments, stakeholders, and media. According to the literature, there are tens of million tourists who define themselves as environmentalist and prefer environmentally friendly establishments, and who volunteer to pay more for environmentally friendly services. Given the obtained results, a future research direction would be to investigate the effect of eco-label certificates on customer selection and purchase behaviors in the context of customers' psychographic characteristics. This research was limited to departmental managers working in accommodation companies operating in the Alanya (Turkey) region.

Author Contributions: The contributions of the authors are as follows: questionnaire design and data collection—E.U., Y.Y. and Y.Y.K., methodology—E.U. and Y.Y., modeling and validation—E.U. and Y.Y., formal analysis—Y.Y., E.U. and Y.Y.K., investigation—E.U. and Y.Y., writing—original draft preparation, Y.Y., E.U. and Y.Y.K.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Gössling, S.; Peeters, P. Assessing tourism's global environmental impact 1900–2050. *J. Sustain. Tour.* **2015**, *23*, 639–659. [\[CrossRef\]](#)
2. Gössling, S. Global environmental consequences of tourism. *Glob. Environ. Chang.* **2002**, *12*, 283–302. [\[CrossRef\]](#)
3. Ruddy, M.; Gössling, S.; Scott, D.; Hall, C.M. The global effects and impacts of tourism: An overview. In *Handbook of Tourism and Sustainability*; Hall, C.M., Scott, D., Gössling, S., Eds.; Routledge: London, UK, 2015; pp. 36–63.
4. Gössling, S.; Hall, C.M. An Introduction to Tourism and Global Environmental Change. In *Tourism and Global Environmental Change*; Gössling, S., Hall, C.M., Eds.; Routledge: London, UK, 2006; pp. 1–34.
5. Gössling, S.; Scott, D.; Hall, C.M.; Ceron, J.P.; Dubois, G. Consumer behaviour and demand response of tourists to climate change. *Ann. Tour. Res.* **2012**, *39*, 36–58. [\[CrossRef\]](#)
6. Scott, D. Climate Change and Sustainable Tourism in the 21st Century. In *Tourism Research: Policy, Planning, and Prospects*; Cukier, J., Ed.; Department of Geography Publication Series; University of Waterloo: Waterloo, ON, Canada, 2006; pp. 175–248.
7. Dinan, C.; Sargeant, A. Social Marketing and Sustainable Tourism: Is There a Match? *Int. J. Tour. Res.* **2000**, *2*, 1–14.
8. Buckley, R. Tourism Ecolabels. *Ann. Tour. Res.* **2002**, *29*, 183–208. [\[CrossRef\]](#)
9. Ünlüöner, K.; Kızanlık, M.M.; Arslan, E. *Otel İşletmelerindeki Eko-Etiket ve Sistem Yönetim Belgelerinin Belirlenmesine Yönelik Bir Araştırma*, 12; Ulusal Turizm Kongresi Bildiriler Kitabı: Düzc, Türkiye, 2011.
10. Ban, O.I.; Iacobaş, P.; Nedelea, A.M. Marketing Research Regarding Tourism Business Readiness For Eco-Label Achievement (Case Study: Natura 2000 Crişul Repede Gorge-Padurea Craiului Pass Site, Romania). *Ecoforum J.* **2016**, *5*, 224–234.
11. Buckley, R. Tourism Ecocertification in the International Year of Ecotourism. *J. Ecotourism* **2002**, *1*, 197–203. [\[CrossRef\]](#)
12. Brecard, D.; Hlaimi, B.; Lucas, S.; Perraudau, Y.; Salladarre, F. Determinants of Demand for Green Products: An Application to Eco-Label Demand for Fish in Europe. *Ecol. Econ.* **2009**, *69*, 115–125. [\[CrossRef\]](#)
13. Alagöz, S.B. Yeşil Pazarlama ve Eko Etiketleme. *Akad. Bakış* **2007**, *11*, 1–13.
14. Lupu, N.; Tanase, M.O.; Remus-Alexandru, T. A Straightforward X-ray on Applying the Ecolabel to The Hotel Business Area. *Amfiteatru Econ.* **2013**, *15*, 634–644.
15. Bozkurt, A.; Dücan, E. Eko-Etiketlerin Turizme ve Yerel Ekonomiye Etkileri. *Uluslararası Ticaret Ve Ekon. Araştırmaları* **2018**, *2*, 68–85.

16. Burgin, S.; Hardiman, N. Ecoaccreditation: Win-Win for The Environment and Small Business? *Int. J. Bus. Stud.* **2010**, *18*, 23–38.
17. Ertaş, M.; Yeşilyurt, H.; Kırlar-Can, B.; Koçak, N. Evaluation of Environmental Sensitivity of Hospitality Industry within the scope of Green Star Applications. *J. Travel Hosp. Manag.* **2018**, *15*, 102–119.
18. Kim, J.-Y.; Hlee, S.; Joun, Y. Green practices of the hotel industry: Analysis through the windows of smart tourism system. *Int. J. Inform. Manag.* **2016**, *36*, 1340–1349. [[CrossRef](#)]
19. Manaktola, K.; Jauhari, V. Exploring Consumer Attitude and Behaviour towards Green Practices in The Lodging Industry in India. *Int. J. Contemp. Hosp. Manag.* **2007**, *19*, 364–377. [[CrossRef](#)]
20. Memiş, S. Weighting Green Management Applications in Accommodation Business by Entropy Method: A Case of Giresun Province. *J. Bus. Res. Turk.* **2019**, *11*, 653–665. [[CrossRef](#)]
21. Karlsson, L.; Dolnicar, S. Does Eco Certification Sell Tourism Services? Evidence from a Quasi-experimental Observation Study in Iceland. *J. Sustain. Tour.* **2015**, *24*, 694–714. [[CrossRef](#)]
22. Font, X. Environmental Certification in Tourism and Hospitality: Progress, Process and Prospects. *Tour. Manag.* **2002**, *23*, 197–205. [[CrossRef](#)]
23. Chan, E.S.; Wong, S.C. Motivations for ISO 14001 in the hotel industry. *Tour. Manag.* **2006**, *27*, 481–492. [[CrossRef](#)]
24. Molina-Azorín, J.F.; Tari, J.J.; Pereira-Moliner, J.; López-Gamero, M.D.; Pertusa-Ortega, E.M. The effects of quality and environmental management on competitive advantage: A mixed methods study in the hotel industry. *Tour. Manag.* **2015**, *50*, 41–54. [[CrossRef](#)]
25. Tari, J.J.; Claver-Cortés, E.; Pereira-Moliner, J.; Molina-Azorín, J.F. Levels of quality and environmental management in the hotel industry: Their joint influence on firm performance. *Int. J. Hosp. Manag.* **2010**, *29*, 500–510. [[CrossRef](#)]
26. López-Gamero, M.D.; Claver-Cortés, E.; Molina-Azorín, J.F. Environmental perception, management, and competitive opportunity in Spanish hotels. *Cornell Hosp. Q.* **2011**, *52*, 480–500. [[CrossRef](#)]
27. Leonidou, L.C.; Leonidou, C.N.; Fotiadis, T.A.; Zeriti, A. Resources and capabilities as drivers of hotel environmental marketing strategy: Implications for competitive advantage and performance. *Tour. Manag.* **2013**, *35*, 94–110. [[CrossRef](#)]
28. Rahman, I.; Reynolds, D.; Svarena, S. How “Green” are North American hotels? An exploration of low-cost adoption practices. *Int. J. Hosp. Manag.* **2012**, *31*, 720–727. [[CrossRef](#)]
29. Chan, E.S.W. Managing green marketing: Hong Kong hotel managers’ perspective. *Int. J. Hosp. Manag.* **2013**, *34*, 442–461. [[CrossRef](#)]
30. Chou, C.J. Hotels’ environmental policies and employee personal environmental beliefs: Interactions and outcomes. *Tour. Manag.* **2014**, *40*, 436–446. [[CrossRef](#)]
31. Geerts, W. Environmental certification schemes: Hotel managers’ views and perceptions. *Int. J. Hosp. Manag.* **2014**, *39*, 87–96. [[CrossRef](#)]
32. Tzschentke, N.; Kirk, D.; Lynch, P.A. Reasons for going green in serviced accommodation establishments. *Int. J. Contemp. Hosp. Manag.* **2004**, *16*, 116–124. [[CrossRef](#)]
33. Barbulescu, A.; Moraru, A.D.; Duhnea, C. Ecolabelling in the Romanian Seaside Hotel Industry—Marketing Considerations, Financial Constraints, Perspectives. *Sustainability* **2019**, *11*, 265. [[CrossRef](#)]
34. Ho, Y.; Lin, C. An Empirical Study on Taiwanese Logistics Companies’ Attitudes toward Environmental Management Practices. *Adv. Manag. Appl. Econ.* **2011**, *2*, 223–241.
35. Yücel, M.; Ekmekçiler, Ü.S. Çevre Dostu Ürün Kavramına Bütünsel Yaklaşım; Temiz Üretim Sistemi, Eko-Etiket, Yeşil Pazarlama. *Elektron. Sos. Bilimler Derg.* **2008**, *7*, 320–333.
36. Kırız, A.C. Organik Gıda Sertifikasyonlarının ve Etiketlemelerinin Türkiye Gıda Sektörü İşletmelerinin İtibarı Üzerindeki Etkisi. *Sos. Bilimler Metinleri* **2014**, *1*, 1–13.
37. Gökdeniz, A. Konaklama Sektöründe Yeşil Yönetim Kavramı, Eko Etiket ve Yeşil Yönetim Sertifikaları ve Otellerde Yeşil Yönetim Uygulama Örnekleri. *Uluslararası Sos. Ve Ekon. Bilimler Derg.* **2017**, *7*, 54–61.
38. Atkinson, L.; Rosenthal, S. Signaling the Green Sell: The Influence of Eco-Label Source, Argument Specificity, and Product Involvement on Consumer Trust. *J. Advertising.* **2014**, *43*, 33–45. [[CrossRef](#)]
39. Ngouna, R.H.; Grabot, B. Assessing The Compliance of Product With an Eco-Label: From Standards to Constraints. *Int. J. Prod. Econ.* **2009**, *121*, 21–38.
40. Gallastegui, I.G. The Use of Eco-Labels: A Review of the Literature. *Eur. Environ.* **2002**, *12*, 316–331. [[CrossRef](#)]

41. Bougherara, D.; Combris, P. Eco-Labelled Food Products: What Are Consumers Paying For? *Eur. Rev. Agric. Econ.* **2009**, *36*, 321–341. [CrossRef]
42. Delmas, M.A.; Grant, L.E. Eco-Labeling Strategies: The Eco-Premium Puzzle in The Wine Industry. *Bus. Soc.* **2014**, *53*, 6–44. [CrossRef]
43. Thorgersen, J.; Haugaard, P.; Olesen, A. Consumer Responses to Ecolabels. *Eur. J. Mark.* **2010**, *44*, 1787–1810. [CrossRef]
44. Global Ecolabelling Network. *Global Ecolabelling Network (GEN) Information Paper: Introduction to Ecolabelling*. Available online: <https://globalecolabelling.net/assets/Uploads/intro-to-ecolabelling.pdf> (accessed on 15 June 2019).
45. Karacan, A.R. İşletmelerde Çevre Koruma Bilinci ve Yükümlülükleri, Türkiye ve Avrupa Birliğinde İşletmeler Yönünden Çevre Koruma Politikaları. *Ege Akad. Bakış* **2002**, *2*, 1–11.
46. Gautam, N. Sustainable Tourism. A Case Study: Klaus K Hotel Helsinki, Degree Programme in Tourism. Ph.D. Thesis, Laurea University of Applied Sciences, Vantaa, Finland, 2017.
47. Oflaç, B.S.; Göçer, A. Genç Tüketicilerin Algılanan Çevresel Bilgi Düzeyleri ve Eko-etiketli Ürünler Karşı Yaklaşımları Üzerine Bir Araştırma. *Gazi Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Derg.* **2015**, *17*, 216–228.
48. Laureiro, M.L.; McCluskey, J.J.; Mittelhammer, R.C. Assessing Consumer Preferences for Organic, Eco-Labeled, and Regular Apples. *J. Agric. Resour. Econ.* **2001**, *26*, 404–416.
49. EU. EU Ecolabel Products/Services Keep Growing. Available online: <https://ec.europa.eu/environment/ecolabel/facts-and-figures.html> (accessed on 15 June 2019).
50. Kından, A. *Bir Eko-Etiket Olarak Mavi Bayrak'ın Türkiye Kıyı Turizminde Bir Pazarlama Unsuru Olabilirliğinin Araştırılması, Yüksek Lisans Tezi*; Ankara Üniversitesi Sosyal Bilimler Enstitüsü: Ankara, Turkey, 2006.
51. Font, X. Regulating the Green Message: The Players in Ecolabelling. In *Tourism Ecolabelling*; Font, X., Buckley, R.C., Eds.; CABI Publishing: London, UK, 2001; pp. 1–18.
52. Duglio, S.; Ivanov, S.; Magliano, F.; Ivanova, M. Motivation, Costs and Benefits of the Adoption of The European Ecolabel in The Tourism Sector: An Exploratory Study of Italian Accommodation Establishments. *Izv. J. Varna Univ. Econ.* **2017**, *1*, 83–95.
53. Lo, J.Y.; Chan, W.; Zhang, C.X. Tools for Benchmarking and Recognizing Hotels' Green Effort-Environmental Assessment Methods and Eco-Labels. *J. China Tour. Res.* **2014**, *10*, 165–185. [CrossRef]
54. Korkmaz, H.; Atay, L. Otel İşletmelerinde Yeşil Pazarlama ve Çevre Sertifikalarının Değerlendirilmesi. *Aksaray Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Derg.* **2017**, *9*, 113–126.
55. Rodriguez, R.A.; Lopez, A.G.; Caballero, J.L.J. Has Implementing an Ecolabel Increased Sustainable Tourism in Barcelona? *Cuad. De Tur.* **2017**, *40*, 93–134. [CrossRef]
56. Font, X.; Sanabria, R.; Skinner, E. Sustainable Tourism and Ecotourism Certification: Raising Standards and Benefits. *J. Ecotourism* **2003**, *2*, 213–218. [CrossRef]
57. Sasidharan, V.; Sirakaya, E.; Kerstetter, D. Developing Countries and Tourism Ecolabels. *Tour. Manag.* **2002**, *23*, 161–174. [CrossRef]
58. Üngüren, E.; Çevirgen, A. Alanya'daki Konaklama İşletmelerinin Genel Yapısının Analizi. *Uluslararası Sosyal Araştırmalar Dergisi* **2016**, *9*, 2223–2236.
59. Türkiye Otelciler Birliği. *2018 Yılı İşletme (Bakanlık) Belgeli Tesisler Konaklama İstatistikleri*. Available online: <http://www.turob.com.tr/istatistikler> (accessed on 28 June 2019).
60. T.C. Kültür ve Turizm Bakanlığı. *İşletme ve Yatırım Belgeli Tesis İstatistikleri*. Available online: <http://yigm.kulturturizm.gov.tr/Eklenti/53370,isletme-ve-yatirim-belgeli-tesis-istatistikleri-2016xls-.xlsx?0> (accessed on 28 June 2019).
61. Kirk, D. Attitudes to environmental management held by a group of hotel managers in Edinburgh. *Int. J. Hosp. Manag.* **1998**, *17*, 33–47. [CrossRef]
62. Berezan, O.; Raab, C.; Yoo, M.; Love, C. Sustainable hotel practices and nationality: The impact on guest satisfaction and guest intention to return. *Int. J. Hosp. Manag.* **2013**, *34*, 227–233. [CrossRef]
63. Claver-Cortés, E.; Molina-Azorín, J.F.; Pereira-Moliner, J.; López-Gamero, M.D. Environmental strategies and their impact on hotel performance. *J. Sustain. Tour.* **2007**, *15*, 663–679. [CrossRef]
64. Mbasera, M.; Du Plessis, E.; Saayman, M.; Kruger, M. Environmentally-friendly practices in hotels. *Acta Commer.* **2016**, *16*, 1–8. [CrossRef]
65. Nunnally, J.C. *Psychometric Theory*, 2nd ed.; McGraw-Hill: New York, NY, USA, 1978.

66. Ceylan, Z.; Gürsev, S.; Bulkan, S. İki Aşamalı Kümeleme Analizi ile Bireysel Emeklilik Sektöründe Müşteri Profiline Değerlendirilmesi. *Bilişim Teknolojileri Dergisi* **2017**, *10*, 475–485. [\[CrossRef\]](#)
67. Unguren, E.; Dogan, H. Beş Yıldızlı Konaklama İşletmelerinde Çalışanların İş Tatmin Düzeylerinin Chaid Analiz Yöntemiyle Değerlendirilmesi. *Cumhuriyet Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* **2010**, *11*, 39–52.
68. Unguren, A. Investigation of Fatalistic Beliefs and Experiences Regarding Occupational Accidents among Five Stars Accommodation Companies Employees. *Tour. Acad. J.* **2018**, *5*, 1–15.
69. Erdogan, N.; Baris, E. Environmental protection programs and conservation practices of hotels in Ankara, Turkey. *Tour. Manag.* **2007**, *28*, 604–614. [\[CrossRef\]](#)
70. Chen, C.F. Investigating structural relationships between service quality, perceived value, satisfaction, and behavioral intentions for air passengers: Evidence from Taiwan. *Transp. Res. A Policy Pract.* **2008**, *42*, 709–717. [\[CrossRef\]](#)
71. Lee, J.S.; Hsu, L.T.; Han, H.; Kim, Y. Understanding how consumers view green hotels: How a hotel's green image can influence behavioural intentions. *J. Sustain. Tour.* **2010**, *18*, 901–914. [\[CrossRef\]](#)
72. Chan, E.S.W. Green marketing: Hotel customers' perspective. *J. Travel Tour. Mark.* **2014**, *31*, 915–936. [\[CrossRef\]](#)
73. Clark, D. What drives companies to seek ISO 14000 certification? *Pollut. Eng. Int.* **1999**, *1*, 14–15.
74. Stenzel, P.L. Can the ISO 14000 series environmental management standards provide a viable alternative to government regulation? *Am. Bus. Law J.* **2000**, *37*, 237–299. [\[CrossRef\]](#)
75. Kirk, D. Environmental Management in Hotels. *Int. J. Contemp. Hosp. Manag.* **1995**, *7*, 3–8. [\[CrossRef\]](#)
76. Enz, C.A.; Siguaw, J.A. Best hotel environmental practices. *Cornell Hotel Rest. A. Q.* **1999**, *40*, 72–77. [\[CrossRef\]](#)
77. González-Benito, J.; González-Benito, Ó. Environmental proactivity and business performance: An empirical analysis. *Omega* **2005**, *33*, 1–15. [\[CrossRef\]](#)
78. Delmas, M.A.; Toffel, M.W. Organizational responses to environmental demands: Opening the black box. *Strategic Manag. J.* **2008**, *29*, 1027–1055. [\[CrossRef\]](#)
79. Dodd, T.H.; Hoover, L.C.; Revilla, G. Environmental tactics used by hotel companies in Mexico. *Int. J. Hospit. Tour. Admin.* **2001**, *1*, 111–127.
80. Saha, M.; Darnton, G. Green Companies or Green Con-panies: Are Companies Really Green, or Are They Pretending to Be? *Bus. Soc. Rev.* **2005**, *110*, 117–157. [\[CrossRef\]](#)
81. Pizam, A. Green hotels: A fad, ploy or fact of life? *Int. J. Hosp. Manag.* **2009**, *28*, 1. [\[CrossRef\]](#)
82. Chang, N.J.; Fong, C.M. Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. *Afr. J. Bus. Manag.* **2010**, *4*, 2836–2844.
83. Moreno, C.E.; Lorente, C.J.; Jiménez, D.B.J. Environmental Strategies in Spanish Hotels: Contextual Factors and Performance. *Serv. Ind. J.* **2004**, *24*, 101–130. [\[CrossRef\]](#)
84. Gil, M.J.A.; Jimenez, J.B.; Lorente, J.J.C. An Analysis of Environmental Management, Organizational Context and Performance of Spanish Hotels. *Omega* **2001**, *29*, 457–471.
85. Mercan, Ş.O. Lisans Düzeyinde Turizm Eğitimi Alan Öğrencilerin Otel İşletmelerini Çevre Duyarlılığı Açısından Değerlendirmeleri. *Karabük Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* **2016**, *6*, 126–144.
86. Tsai, Y.H.; Wu, C.T.; Wang, T.M. Attitude towards Green Hotel by Hoteliers and Travel Agency Managers in Taiwan. *Asia Pac. J. Tour. Res.* **2014**, *19*, 1091–1109. [\[CrossRef\]](#)
87. Aslan, E.; Güneş, G. *Sürdürülebilir Turizm ve Konaklama İşletmeleri için Yeşil Anahtar Eko-Etiketi*, 1; Uluslararası Türk Dünyası Turizm Sempozyumu Bildiri Kitabı: Kastamonu, Turkey, 2015.
88. Akova, O.; Yaşar, A.G.; Aslan, A.; Çetin, G. Çalışanların Çevre Yönetimi Algıları ve Örgüt Kültürü İlişkisi: Yeşil Yıldızlı Otelere Yönelik Bir Araştırma. *Res. J. Bus. Manag.* **2015**, *2*, 169–184.
89. El Dief, M.; Font, X. The determinants of hotels' marketing managers' green marketing behavior. *J. Sustain. Tour.* **2010**, *18*, 157–174. [\[CrossRef\]](#)
90. Yılmaz, B.S.; Yumuk, Y. *Türk Turizm Pazarında Çevreye Duyarlı Bir Eğilim: Yeşil Yıldız Uygulaması Ve Yeşil Yıldız Sahibi Otel İşletmeleri Üzerine Bir Değerlendirme*, 14; Ulusal turizm Kongresi Bildiriler Kitabı: Kayseri, Turkey, 2013.
91. Robinot, E.; Giannelloni, J.L. Do hotels' green attributes contribute to customer satisfaction? *J. Serv. Mark.* **2010**, *24*, 157–169. [\[CrossRef\]](#)
92. Goodman, A. Implementing Sustainability in Service Operations at Scandic Hotels. *Interfaces* **2000**, *30*, 202–214. [\[CrossRef\]](#)

93. Slevitch, L.; Mathe, K.; Karpova, E.; Scott-Halsell, S. “Green” attributes and customer satisfaction: Optimization of resource allocation and performance. *Int. J. Contemp. Hosp. Manag.* **2013**, *25*, 802–822. [[CrossRef](#)]
94. Atay, L.; Dilek, S.E. Konaklama İşletmelerinde Yeşil Pazarlama Uygulamaları: Ibis Otel Örneği. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* **2013**, *18*, 203–219.
95. Peiró-Signes, A.; Segarra-Oña, M.D.V.; Verma, R.; Mondéjar-Jiménez, J.; Vargas-Vargas, M. The impact of environmental certification on hotel guest ratings. *Cornell Hosp. Q.* **2014**, *55*, 40–51. [[CrossRef](#)]
96. Chan, E.S. Barriers to EMS in the hotel industry. *Int. J. Hosp. Manag.* **2008**, *27*, 187–196. [[CrossRef](#)]
97. Cortes, E.C.; Azorin, J.M.; Moliner, J.P. Competitiveness In mass Tourism. *Ann. Tour. Res.* **2007**, *34*, 727–745. [[CrossRef](#)]
98. Alegre, J.; Cladera, M. Repeat visitation in mature sun and sand holiday destinations. *J. Travel Res.* **2006**, *44*, 288–297. [[CrossRef](#)]
99. Papatheodorou, A. Exploring the evolution of tourism resorts. *Ann. Tour. Res.* **2004**, *31*, 219–237. [[CrossRef](#)]
100. Beerli, A.; Martin, J.D. Factors influencing destination image. *Ann. Tour. Res.* **2004**, *31*, 657–681. [[CrossRef](#)]
101. Williams, P.W.; Ponsford, I.F. Confronting tourism’s environmental paradox: Transitioning for sustainable tourism. *Futures* **2009**, *41*, 396–404. [[CrossRef](#)]
102. Hardy, A.L.; Beeton, R.J. Sustainable tourism or maintainable tourism: Managing resources for more than average outcomes. *J. Sustain. Tour.* **2001**, *9*, 168–192. [[CrossRef](#)]
103. Esparon, M.; Gyuris, E.; Stoeckl, N. Does ECO certification deliver benefits? An empirical investigation of visitors’ perceptions of the importance of ECO certification’s attributes and of operators’ performance. *J. Sustain. Tour.* **2014**, *22*, 148–169. [[CrossRef](#)]
104. Bradley, J.C.; Waliczek, T.M.; Zajicek, J.M. Relationship between Environmental Knowledge and Environmental Attitude of High School Students. *J. Environ. Educ.* **1999**, *30*, 17–21. [[CrossRef](#)]
105. Karahan, M. İşletme Yöneticilerinin Çevre Duyarlılığı Ve Farkındalık Düzeylerinin Belirlenmesi. *MANAS J. Soc. Stud.* **2017**, *6*, 359–374.
106. Küçük, M. *Konaklama İşletmeleri Ve Çevre Duyarlı Uygulamalar. 14; Ulusal Turizm Kongresi Bildiriler Kitabı: Kayseri, Turkey, 2013.*
107. Chan, E.S.; Hon, A.H.; Chan, W.; Okumus, F. What drives employees’ intentions to implement green practices in hotels? The role of knowledge, awareness, concern and ecological behaviour. *Int. J. Hosp. Manag.* **2014**, *40*, 20–28. [[CrossRef](#)]
108. Chan, E.S.; Hawkins, R. Attitude towards EMSs in an international hotel: An exploratory case study. *Int. J. Hosp. Manag.* **2010**, *29*, 641–651. [[CrossRef](#)]
109. Bohdanowicz, P. European hoteliers’ environmental attitudes: Greening the business. *Cornell Hotel Rest. A Q.* **2005**, *46*, 188–204. [[CrossRef](#)]
110. Potoski, M.; Aseem, P. Covenants with weak swords: ISO 14001 and facilities’ environmental performance. *J. Policy Anal. Manag.* **2005**, *4*, 745–769. [[CrossRef](#)]
111. Caro, L.; Garcia, J. Does ISO 9000 certification affect consumer perceptions of the service provider? *Manag. Serv. Qual.* **2009**, *19*, 140–161. [[CrossRef](#)]
112. Eren, D.; Yılmaz, İ. *Otel İşletmelerinde Yeşil Pazarlama Uygulamaları: Nevşehir Örneği, Nevşehir: Nevşehir Üniversitesi İktisadi ve İdari Bilimler Fakültesi, 13; Ulusal Pazarlama Kongresi: Nevşehir, Turkey, 2008.*
113. Giritlioğlu, İ.; Güzel, M.O. Green-star Practices in Hotel Enterprises: A Case Study in the Gaziantep and Hatay Regions. *J. Int. Soc. Res.* **2015**, *8*, 889–904. [[CrossRef](#)]

