

Article

# Environmental Practices. Motivations and Their Influence on the Level of Implementation

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**Abstract:** The objective of this research is to identify and analyze good environmental practices followed by the Thermal sector in Spain. It is also to analyze if the motivations that lead thermal establishments to implement environmental practices influence their level of implementation. The methodology used is the performance of a descriptive and regression analysis of the data obtained through a structured questionnaire. The target population consists of 112 health resorts, obtaining a sample size of 62 valid surveys, which implies a response rate of 55.36%. The results obtained have enabled the performance of an environmental diagnosis of the Thermal sector in Spain, identifying the strengths and weaknesses of Environmental Management, as well as corroborating that motivations affect the level of implementation of environmental practices.

**Keywords:** health resorts; good environmental practices; environment; sustainable tourism

## 1. Introduction

Tourism is an important industry all over the world if its figures are considered. The contribution of Travel and Tourism generated 7.2 trillion dollars, which represents 9.8% of the world's GDP (in Spain, 26.0% of GDP), growing for the fifth consecutive year; additionally, 284 million jobs were funded by travel and tourism in 2015 (1 out of each 11). In Spain, it represents 16.2% of total employment, which is 2,901,500 jobs [1,2].

In this context, unlimited tourist development of all economic, social and environmental goods is not possible. A balance must be found in order to avoid the deterioration of the environment, thus achieving a balance between the level of demand of visiting tourists and the load capacity of the local community and its resources; without losing the inherent quality that generated the demand of these resources. In this sense, Crosby and Moreda [3] (p. 59) states that “most of the negative impacts are derived from the overuse and saturation of spaces, so a critical point must be found at which the level of demand is balanced with the optimum capacity of absorption of visitors, that an area or resource can bear without deteriorating”.

This approach, namely the search for balance within the ecosystem and correcting existing ecological problems within it, promotes the implementation of a form of tourism that is much more responsible and committed to the environment, called “sustainable tourism”. This form of tourism is favored by an increasing awareness of environmental issues by tourist and ecological groups, a concern which is transferred to the tourist company, and that begins to realize the non-beneficial impact of the development of its activity.

In this regard, the World Tourism Organization (WTO) [4] defines sustainable tourism as “tourism that fully takes into account current and future economic, social and environmental impacts to meet the needs of visitors, of the industry, environment and host communities”. According to the World Tourism Organization Network [5], “sustainable tourism must make optimum use of environmental resources, respect the socio-cultural authenticity of host communities, and ensure long-term viable economic activities that provide all agents with well-distributed socio-economic benefits, including opportunities for stable employment and income and social services for host communities, and which contribute to poverty reduction”. The World Tourism Organization—UNWTO already shows the dimensions of this concept: environmental, social and cultural sustainability, as well as economic sustainability [6].

In Spain, the thermal sector is starting to realize the negative impacts that its economic activity can generate on its surroundings. This linked to the demands of tourists, who increasingly show a greater awareness of environmental issues, to the pressure of ecological groups and public administration, which has led health centres to manage their activities while taking into account sustainability and environmental management. To this end, good environmental practices are implemented aimed at minimizing the negative impact of their activity and are committed to promoting their thermal resources (mineral-medicinal waters) through sustainable tourism. These practices implement environmental management by following voluntary instruments such as Manuals of Good Practices or the implementation of Environmental Management Systems (EMS), which is the ISO 14001 standard or the EMAS Regulation (Eco-Management and Audit Scheme), which is the most well-known, according to Saizarbitoria et al. [7] (p. 49).

The inclusion of environmental management within the overall strategy of the company will allow, according to Conde et al. [8] (p. 45), for compliance with current legislation in order to avoid administrative sanctions [7], and to respond to the demands of clients and other stakeholders, as well as to meet the requirements of competition and customers in relation to environmental protection. All this will result in important cost savings [9–11], in an improvement of its external image among its clients and an internal one among its workers [12], improvements in productivity [10,13,14] and improvement in the environmental impact of organizations [13,15], among others.

In this context, the objective is to identify and analyze good environmental practices followed by this sector in Spain, which will allow for measuring the degree of commitment or involvement of thermal centres with the environment and propose improvement actions, so that this sector will go further into environmental matters than the mere fulfilment of the legal requirements required by its activity. We also analyze if the motivations that lead thermal establishments to implement environmental practices influence their level of implementation.

This work is structured in five sections. After the introduction, the theoretical framework contextualizes the concept of Environmental Management in the tourism sector and its involvement in health spas, as well as a discussion of the voluntary instruments that help with its implementation. In Section 3, the methodology followed in the research work is presented and in Section 4 the diagnosis of good environmental practices of health resorts in Spain is carried out. Finally, in the last section, the most relevant conclusions are presented, as well as the proposals for improvement.

## 2. Contextualization of the Topic and Working Hypotheses

### 2.1. Environmental Management in the Health Resort

The environmental management of tourist enterprises is driven by the population that promotes the development of non-abusive and environmentally-friendly practices through their ecological and responsible attitude, the pressure of NGOs, but above all by the coercive power of current legislation and environmental requirements at regional, national and European level. Legislation that they must comply with to avoid administrative sanctions [7] and that, on the other hand, their compliance helps to carry out adequate environmental management, which leads to important cost savings [9–11],

an improvement of their external image among their clients and their internal one among their workers [12,16], improvements in productivity [10,14], as well as improving the environmental impact of organizations [15,17,18].

With regard to health resorts, the current legislation is very extensive and according to Vargas Sánchez et al. [19] (pp. 30–56) is grouped into 17 categories: environmental management system, classified activities (annoying, unhealthy, harmful and dangerous), tourist activities, air pollution, water discharge, waste management, noise, diesel tanks, thermal installations, fire protection system, hazardous substances, pesticide services, heated swimming pool, biodiversity, environmental impact assessment and legionellosis.

On the other hand, López López [20] claims that in the tourist sector, tourist companies play a very important role in environmental preservation and protection, in the sense that they implement and promote actions aimed at the preservation of their environment, that go beyond the legislation they must comply with. In order to help the tourist company in this process, there are different voluntary instruments whose implementation will allow the resorts to reduce their negative environmental impacts derived from their activity [21] (p. 231), such as Manuals of Good Environmental Practices (a set of actions that aim to reduce the negative environmental impact derived from business activities) and Environmental Management Systems (EMSs).

EMSs that are defined in the ISO 14001 international standard as “an environmental management system is the part of the overall management system that includes the organizational structure, planning of activities, practices, responsibilities, procedures, processes and the resources to develop and implement its environmental policy and manage its environmental aspects”. The most commonly used models are ISO 14001 (international) and the European Eco-Management and Audit Regulation, also known as EMAS (Eco-Management and Audit Scheme) [7] (p. 49).

These models are used by companies to define the actions to be carried out at a strategic and operational level in order to achieve the objectives set for the protection of the environment, which allow, on the one hand, to comply with environmental legislation and on the other hand, to reduce the environmental impact of their activities [21] (p. 231). According to Greeno et al. [22] (p. 6) their aim is “to guide an organization to achieve and maintain a performance in accordance with established goals and to respond effectively to changes in regulatory, social, financial and competitive pressures, as well as environmental risks”.

In the scientific literature that addresses this subject, many researchers have demonstrated the benefits and results that are derived from the implementation of EMS, being these benefits economic, social, environmental and competitive. In this sense, Casadesús et al. [21] (pp. 246–247) summarizes these benefits in: “(1) optimizing the use of resources, (2) minimizing waste generation, (3) improving both productive and administrative processes, (4) improving the corporate image by showing co-responsibility of the company towards society and its environment, (5) greater customer loyalty, since the company is differentiated from its competitors, it is also able to attract new clients (6) greater assurance of compliance with current legislation, (7) reduction of accident risk and likelihood of sanctions, (8) improvement of the financial capacity through a reduction of financial costs and premiums in insurance policies, (9) access to new subsidies and tax incentives, (10) reinforcement of employee motivation, due to the widespread social awareness of current environmental issues”.

On the other hand, the scientific literature that addresses the results that companies obtain from implementing an EMS is also very extensive, focusing on improving competitiveness and business efficiency [23], which is derived from greater awareness of managers and employees about environmental issues [9,24]. In this sense, some authors consider that the improvement of competitiveness is favored rather than the improvement of internal efficiency [24,25] and others associate it to the reduction of the use of resources [9,26] or energy saving [16,27].

## 2.2. Hypothesis Testing: Motivations

In order to propose the work hypotheses, an extensive review of the academic literature published on ISO 14001 and EMAS was performed on motivations that lead to the implementation of environmental practices. Most of the research deals with how the implementation of these quality systems affects the benefits and results obtained by companies, for example in improving competitiveness and business efficiency [13,14,23]. In this sense, some authors consider that the improvement of competitiveness is favored by the improvement of internal efficiency [24,25] and others associate it to the reduction of the use of resources [9] or energy saving [27]. Other investigations analyze the motivations that lead companies to implement these systems [14,28], the barriers to be overcome in the process [29], the difficulties to comply with the requirements of the standard.

The novel contribution of this study is to analyze if the motivations influence the level of implementation of the practices. Many studies show that a greater motivation influences obtaining greater benefits related in many cases to a higher level of implementation [10,13,14]. On the other hand, if the existing literature is taken into account, which mainly discusses two types of motivations, internal and external [30], that are not mutually exclusive and reinforce each other, several studies analyse the most important ones [10,13,31]. In this sense, De Durana [32] (p. 293) states, taking into account the studies carried out, that for most companies external factors are a priority compared to internal factors. The findings and conclusions of the literature review enable to propose and justify the following hypotheses:

**Hypotheses (H1).** *The motivations that lead health resorts to implement environmental practices are internal and external, with external motivations being the most important in this sector.*

**Hypotheses (H2).** *The greater the motivation that leads health resorts to implement environmental practices, the higher their level of implementation.*

**Hypotheses (H3).** *External motivations have a dominant role in the level of implementation of environmental practices in the thermal sector, which lead to greater efforts being made by health resorts in the implementation of practices than internal motivations.*

## 3. Methodology

### 3.1. Universe Study, Questionnaire and Measurement

The methodology used is the performance of a descriptive analysis and a regression analysis of the data obtained through a structured questionnaire, with 83 items grouped into three sections (internal environmental practices, practices related to their stakeholders and resource management), which were sent to the quality managers of the establishments. The questionnaire was designed taking into account the manuals and guides of the Conselleria de Medi Ambient [33], Manual of good environmental practices in professional groups: Tourism and Hospitality [34], Guide to good environmental practices. Tourism sector (hotels and golf courses). Biodiversity Foundation [19] (Appendix A Table A1).

The target population is the 112 health resorts in Spain, obtaining a sample size of 62 valid surveys, which means a response rate of 55.36% and a sampling error of 8.35% for a confidence level of 95% ( $z = 1.96$ ,  $p = q = 0.5$ ). The scale of measurement is a Likert type of 7 points (1—totally disagree, 7—totally agree).

Regarding the characteristics of the sample, 59 of the 62 health resorts have associated hotel facilities, with the majority of them being 3 and 4 stars (43% and 34%, respectively). With regard to the size of the establishments, taking into account the number of employees and the thermal area, 40.32% can be considered micro-enterprises (0–9 workers), 56.45% small (10–49) and 3.23% medium-sized (50–249). On the other hand, the associated hotels can be considered micro-businesses in 4.84% of the cases, small enterprises in 59.68% and 35.48% of the hotels medium-sized enterprises. If the quality certifications are observed, 20 of the 62 thermal centres are certified in ISO 9001:2015, 3 with ISO 14001

and 4 in both, and 1 has EMAS. On the other hand, there are 30 thermal centres that do not have any quality certification.

### 3.2. Analysis of Data

The data analysis is performed using SPSS 19.0 (Statistical Package for the Social Sciences) statistical program. First a descriptive analysis is performed and the measurement scales (reliability and validity) are validated. For the analysis of internal consistency, the calculation of the correlation coefficients of Pearson item-total was used (the correlation between the items should exceed 0.3 according to Nunnally [35] and Cronbach's alpha, where alpha must be greater than 0.7 [35] or 0.8 for confirmatory studies. Secondly, an exploratory factor analysis (EFA) with varimax rotation was carried out to identify the dimensionality of the scales motivations [36]. This process allowed to group the items of each of the concepts and to know their structure. The varimax rotation method was selected because it is one of the most used methods in those cases in which the data will be used in subsequent analyses.

Finally, regression analysis was used for the purpose of comparing the working hypotheses. This analysis allows for analyzing the relationship between a dependent variable and its independent or predictor variables. The sign of the correlation coefficient  $\beta$  allows to know the direction of the relationship and the statistical F, the goodness of fit of the regression and the  $p$ -value ( $>$  or  $<$  than 1) indicates the degree of significance with the dependent variable. First, the underlying assumptions on which this analysis is based were verified.

## 4. Results

### 4.1. Environmental Diagnosis of Health Resorts

#### 4.1.1. Reasons for Implementing Environmental Practices

Before starting the environmental diagnosis of health resorts, the aim in the first place was to identify the motives that prompt these establishments to implement environmental practices in their establishments. For this purpose, 12 motives were given and they were asked to rate them on a 7-point Likert scale (1, totally disagree, 7, totally agree). The data obtained show that the main ones are: they consider it important to incorporate environmental care into their corporate strategy (average value of 5.85 out of 7), they help to avoid penalties for non-compliance with current legislation (5.62); they allows for improving the relationship with public administrations in order to maintain a socially acceptable behavior (5.59) and knowledge of the deteriorating situation in which the environment is located, a situation that may have impact on their activity (5.56).

On the contrary, the less valued ones refer to the requirements of the stakeholders which they perform with. In this sense, they have a weak influence on their process of implementing environmental practices at the request of their clients (3.87), and the fact that their competitors (3.82) or travel agencies which they work with do have environmental policies implemented (3.67).

As for the reliability of the scale, the item-total correlation in all cases reaches the generally accepted minimum of 0.3 [37], and the estimate of Cronbach for the total sample is 0.866, which is higher than the recommended value of 0.8 by Grande and Abascal [38]. The results allow to state that the proposed scale measures the concept in a consistent and stable way, as well as being free of systematic and random errors. To verify the unidimensionality of the scale, an exploratory factorial analysis of principal components with varimax rotation was carried out [36], proving that the scale is not unidimensional, but is divided into two factors: factor 1, which is called "motivations as required by the stakeholders" (the eigenvalue is 3.740 and the % of the variance explained by the factor is 31.16%) and factor 2, which is called "internal motives" (eigenvalue = 3.557 and 29.63% of variance explained). Prior to this analysis, the validity of the data was checked: correlation matrix  $>$  0.5, the Bartlett Sphericity test showed that Chi-square was high and significant (443.534, sig. 0.000),

the Kaiser–Meyer–Oklim (KMO) measure is very good (0.807) and the sample adequacy measure is acceptable (0.792–0.852).

To conclude, the two types of motivations were analyzed to observe which one has the greatest influence on the decision to start the process of implementing the practices. The results show that internal motivations have a greater influence with an average of 5.36 and a standard deviation of 0.98 than the motivations due to stakeholders' requirements (mean = 3.95 and standard deviation 0.93). With these results it can be stated that hypothesis H1 is not corroborated.

#### 4.1.2. Organization vs. Environmental Practices

The data obtained allow to observe which are the most implemented environmental practices that affect their organizational structure internally (they were asked with reference to 11 practices). It was observed that the overall implementation level of environmental practices with a 53.39% in this dimension is low. The practices with a higher level of compliance are the definition of clear and realistic objectives for the establishment of environmental policies (4.57), environmental management awareness (4.55), staff training and awareness in environmental policy (4.52) and the information to the staff about the environmental policies that want to be implemented, as well as the objectives set forth (4.48).

On the contrary, the less implemented actions and therefore less valued within the thermal centres would be the implementation of an incentive scheme that motivates the staff to contribute ideas on environmental matters so as to develop the best ones (2.30), the evaluation of the results obtained within each area (3.02) and finally, information to workers and clients of the results obtained (3.21) (See annex).

#### 4.1.3. The Organization vs. Environment

For the correct performance of any organization, the relationship and collaboration with its stakeholders or interest groups is essential, which leads to analyzing the environmental practices implemented by the health resorts, which affect or take into account these stakeholders. In the case of customers, suppliers and society, it was observed that the average of each of the items considered are below the midpoint of the scale (except for two items), which shows that there is a great scope for improvement regarding their environmental practices with respect to their stakeholders. The overall level of compliance does not exceed 50% in any of the dimensions considered (47.07% customers, 48.79% suppliers, 47.50% company) (See annex).

The scale organization vs environmental practices and environment was also validated. The item-total correlation did not result in the elimination of any item and the estimate of Cronbach's  $\alpha$  is 0.952 and 0.894 respectively. In the case of the unidimensionality analysis, it was confirmed (% variance explained, 67.876 and 54.923, the standardized coefficients ( $\beta$ ) are in all cases higher than 0.5). Prior to this analysis, the validity of the data was checked: correlation matrix  $>0.5$ , the Bartlett Sphericity test showed that Chi-square was high and significant (1669.276, sig. 0.000), the Kaiser–Meyer–Oklim (KMO) measure is very good (0.852) and the sample adequacy measure is acceptable (0.935–0.818).

#### 4.1.4. Resources Management

The overall analysis shows that those with a higher degree of compliance are environmental practices related to energy saving (71.73%) and pollution and waste management (69.70%). Practices which are followed very closely by those related to water saving with 67.61% and to noise management (64.76%). The results by item can be seen in the annex.

In this case, the scale validation analysis was also performed. Reliability and validity were tested through item-total correlation ( $>0.5$ ) and Cronbach's  $\alpha$  (0.943). However, the analysis of unidimensionality was not performed as the previous tests performed showed that it was not relevant

to continue with the analysis (Kaiser–Meyer–Oklim = 0.114 and the adequacy measure (0.125–0.120) are both unacceptable for values lower than 0.5).

In summary, in Figure 1 it is possible to observe globally the degree of compliance of each of the dimensions considered.

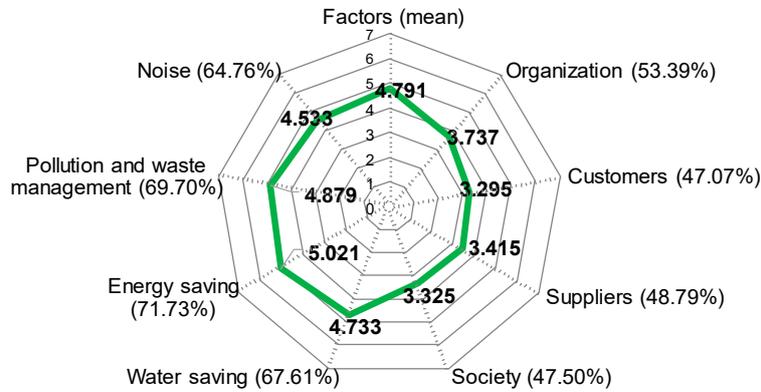


Figure 1. Degree of compliance in dimensions. Source: Authors’ own data.

In Figure 2 we can see that most of the health resorts analyzed are located in the 3rd quadrant with high waste management and low management at organizational and environmental level. There are also quite a few in the 4th quadrant with good management in both dimensions.

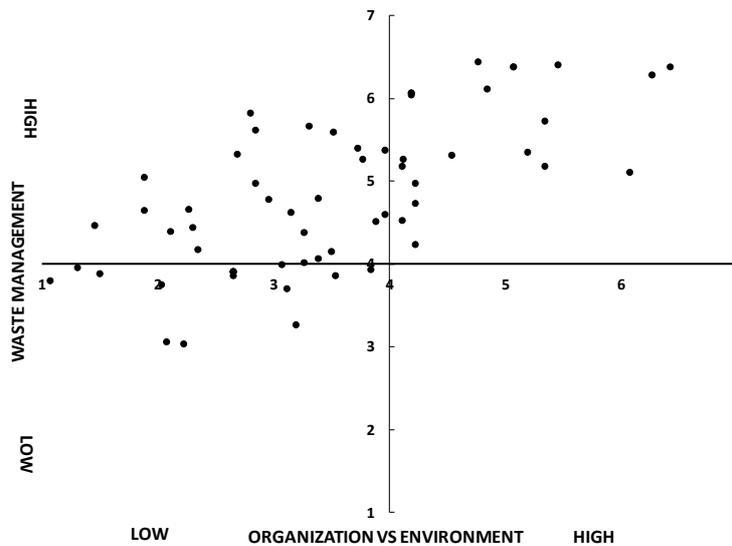


Figure 2. Matrix Portfolio.

#### 4.2. Testing the Working Hypotheses

Four regression analyses were proposed in order to corroborate the objectives. First, the results obtained in the matrix of correlations between the variables of analysis (Table 1) were analyzed, whose results allow to confirm that hypothesis H2 is corroborated, there is a positive relationship between motivations and environmental practices, strong and significant correlation coefficients.

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation as well as the experimental conclusions that can be drawn.

Prior to the regression analysis, the assumptions underlying this type of analysis (linearity, independence, homoscedasticity, normality and non-coloneality) were verified.

**Table 1.** Correlations motivations and environmental practices.

Variables	(1)	(2)	(3)	(4)	(5)
Internal Motivation	1				
External Motivation	0.538 *	1			
Organization vs Practices	0.373 **	0.420 *	1		
Organization vs Environmental	0.445 *	0.442 *	0.776 *	1	
Resources	0.492 *	0.345 **	0.554 *	0.712 **	1

Note: \*  $p < 0.001$  and \*\*  $p < 0.05$ . Bilateral test.

In the regression analysis carried out, it is observed that the models presented have a good fit, in this sense the explanatory variables contained in the model (internal and external motivations) explain 20.6%, 25.6% 25.2% of the dependent variables (organization, organization vs. environmental and resource management). In addition, the F statistic that allows to decide if there is a significant relationship between the dependent variable and the set of independent variables taken together offers a good fit to the point cloud (sig. 0.000 indicates that there is a significant linear relationship) (Table 2). The sign of the correlation coefficient  $\beta$  enables to know the meaning of the relationship. In this sense, the greater the motivations, either internal or external, the greater the level of implementation of environmental practices, which confirms the H2 hypothesis. In this same line, different studies corroborate that a greater motivation, either internal or external, influences obtaining greater benefits, one of these benefits being “a higher level of implementation of practices” [10–14,23,39–41].

**Table 2.** Results of regression analysis.

	Dependent Variables			
	Organization	Organization vs Environmental	Resource Management	Environmental Practices
<b>Independent variables</b>				
Internal motivations	0.308 *	0.291 *	0.113	0.329 *
External Motivations	0.207	0.286 *	0.432 *	0.287 *
<b>Model Information</b>				
R <sup>2</sup>	0.206	0.256	0.252	0.287
F for Regression	7.545 **	9.976 **	9.9746 **	11.685 **
Durbin Watson	2.176	2.127	1.680	1.966

Note: Cell entries are standardized coefficients; \*  $p < 0.05$ ; \*\*  $p < 0.001$ . Bilateral test.

In the general model (environmental practices), it is observed that both motivations influence the level of implementation of practices, but internal motivations do so to a greater extent. These data do not confirm the working hypothesis H3, it is not the external motivations that lead companies to make a greater effort to implement environmental practices, but the internal ones. This result is supported by the studies of Hillary [40], Kitazawa and Sarkis [41] and Rondinelli and Vastag [27] who, based on the results obtained, state that companies that implement EMS due mainly to motives of internal nature, obtain better results than those that have done so for external motives (pressures from their stakeholders).

## 5. Conclusions

The results obtained have made it possible to carry out an environmental diagnosis of the thermal establishments sector in Spain, identifying the strengths and weaknesses of Environmental Management and proposing the necessary improvement actions to go beyond the mere fulfilment of the legal requirements that thermal establishments must meet due to their activity. The strengths are in the practices related to the management of resources, while the weaknesses observed enable to confirm

that there are many improvement actions that must be implemented to achieve the optimization of environmentally-friendly activities.

In this sense, this research has important implications for managers of thermal establishments, as well as for public administrations and associations, as it provides the strengths and areas for improvement, as well as enabling to know the characteristics and the degree of commitment to the environment.

Taking into account the results obtained, it is evident that although health resorts in Spain consider it important to incorporate environmental care into their corporate strategy, especially with the aim of avoiding penalties for non-compliance with current legislation, their level of implementation of environmental practices shows a wide scope for improvement. In this sense, it is necessary for this sector to become more aware of the environmental impacts of its activity by incorporating environmental management into its strategy.

The analysis shows that thermal centres are currently developing environmental practices that affect different areas of the company; at organizational level with a compliance level of 53.39%, at customer level (47.07%), at supplier level (48.79%), at society level (47.50%) and management of resources. Its highest level of implementation is in the latter case, with 71.73% in energy control and management, 69.70% in pollution and waste management, 67.61% in water control and management and 64.76% in noise management. However, there are many actions that can still be implemented, especially in relation to the local society and customers, being this a primary objective, since obtaining benefits depends to a great extent on them. It is observed that the commitment to the environment is high in this type of establishment located in rural areas with an environment of very important nature, according to Deboer et al. [42], the firm proximity to a sacrosanct environment has a positive effect on firms' level of voluntary environmental program engagement.

It was observed that customers, suppliers and society show no interest in the environmental policy of health resorts. In this sense, the need to reinforce their environmental awareness was detected, by undertaking staff training actions, as well as improving the relationships of health resorts with customers and suppliers, with the aim of increasing their commitment and degree of involvement with environmental care. It is also important to provide information on how health resorts perform their environmental management and the objectives achieved in order to reach this goal.

Finally, it is necessary to emphasize that in the highly labor-intensive tourism industry, the success of the application of environmental practices is largely determined by the level or degree of involvement of the staff, since in many cases this involves a change in the way they perform their activities, as well as the involvement of customers. For this reason, it is not possible to achieve adequate levels of awareness and collaboration without training in this regard and without carrying out communication actions aimed at informing both interest groups about their commitment to the environment, the objectives set and the level of compliance thereof for the quality of the Thermal establishments surveyed and the second one is its cross-section.

The regression analysis allowed to contrast the proposed hypotheses H2, H1 and H3, which are not corroborated. In this study, the most important motivations are internal as in the study of Fryxell et al. [43] and Mariotti et al. [28]. It also allowed to analyze the influence of each of the groups (predictor variables) on the dependent variable. With regard to hypothesis H3, it raises that external motivations lead health resorts to make greater efforts to implement environmental practices, the results do not corroborate it. These results were contrasted with previous studies, and a discussion of them is carried out.

Moreover, they have significant academic implications and for major stakeholders (public administrations, certification agencies, etc.). Finally, the limitations of this study are mentioned. The first one refers to the bias of the data, as they are provided by those responsible.

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## Appendix A

**Table A1.** Questionnaire and Descriptive Findings.

Items	Mean	S.D.	(%)
<b>Organization vs. Environmental Practices</b>			
We have clearly defined an environmental policy, with realistic objectives, clearly defined and measurable	4.57	1.64	65.34
We have an environment manager, with clearly defined tasks	3.72	1.66	53.16
The staff is informed of the environmental policy and objectives	4.48	1.75	63.93
The staff is trained and aware about environmental management	4.52	1.44	64.64
The staff is aware-involved in environmental management	4.55	1.52	65.00
Training schemes on environmental issues are carried out	3.39	1.86	48.48
We encourage our staff to contribute their own ideas to improve in environmental issues and the best ones are developed	3.98	1.66	56.91
We have an incentive scheme to motivate staff to provide environmental ideas and the best ones are developed	2.30	1.39	32.79
The results obtained in environmental issues are evaluated and compared with those planned, with the aim of achieving improvements	3.21	1.88	45.90
With the results obtained in environmental issues the objectives are achieved	3.36	1.76	48.01
Workers and customers are informed of the results obtained	3.02	1.74	43.10
Total	3.74	—	53.39
<b>The organization vs the environment (customers, suppliers and society)</b>			
<b>Customers</b>			
We have a defined environmental commitment that is public (on the web, at reception ... etc.)	3.23	2.19	46.14
The results obtained in environmental issues are available to clients in a visible place (on the web, in reception ...)	2.57	1.66	36.77
Adequate means are available to clients (forms, suggestion boxes, etc.) to express their opinions and suggestions on environmental issues and the best ones are developed	3.98	2.21	59.91
We contribute to the environmental awareness of our customers by informing them of our policy and requirements, as well as providing guides (upcoming ecological itineraries ...), brochures (water, energy ... etc. saving) or other means	3.93	1.99	56.21
Customers are interested in our environmental policy	2.75	1.41	39.34
Total	3.29	—	47.07
<b>Suppliers</b>			
Our suppliers are informed of our interest in the environment, by informing them of our environmental policy and its requirements (environmentally-friendly products)	3.85	1.97	55.04
We are preferably looking for recyclable products or recycled material and in general, those with characteristics that minimize environmental impact	4.43	1.70	63.23
We are willing to pay more for environmentally-friendly products	3.89	1.53	55.50
We inform our suppliers of the results obtained	2.46	1.58	35.13
Suppliers show interest in our environmental policy	2.45	1.54	35.00
Total	3.41	—	48.79

Table A1. Cont.

Items	Mean	S.D.	(%)
<b>Society</b>			
The local society is aware of our interest in the environment	3.13	1.77	44.73
We participate in local initiatives (of associations, diverse institutions, etc.) that are carried out in favour of the environment	3.39	1.86	48.48
We carry out actions that contribute to the ecological and vegetal restoration of our natural environment	4.56	1.74	65.11
We inform the local society of the results obtained	2.87	1.62	40.98
The local society shows interest in our environmental policy	2.67	1.42	38.17
Total	3.32	—	47.50
<b>Resources</b>			
<b>Water saving</b>			
We know our water consumption	6.41	0.94	91.57
We have set measurable targets to reduce our water consumption	5.67	1.36	81.03
We know and control consumption by areas or sections (thermal area, rooms, kitchen, etc.) to establish savings measures	5.08	1.77	72.60
We have continuous measuring and network analysis equipment to obtain information and determine the required savings and adjustments	4.75	1.78	67.92
We have a leak detection system for immediate repair	3.74	1.94	53.40
We have installed low-consumption taps, showers and cisterns (with eco function) suitable for saving water	5.10	1.69	72.83
We offer our clients the necessary information for the proper use of water and saving in its consumption	5.18	1.54	74.00
The water circuit allows closing the water supply in unoccupied areas	4.97	1.92	70.96
Rainwater is collected for watering gardens	3.00	2.23	42.86
We have native plants in our gardens, prepared to survive with natural water resources	4.84	1.93	69.09
The gardens are equipped with irrigation systems that save water consumption (with eco function)	4.30	2.09	61.36
Watering gardens is done at hours when there is less sunlight to reduce loss of water due to its evaporation	5.48	1.62	78.22
Workers and clients are informed of the consumption obtained	2.62	1.59	37.47
The staff has precise knowledge and instructions aimed at promoting water consumption as efficiently as possible	5.13	1.74	73.30
Total	4.73	—	67.61
<b>Energy saving</b>			
We know our energy consumption	6.48	0.84	92.51
We have established measurable goals to reduce our energy consumption	5.85	1.10	83.61
We know and control consumption by areas or sections to establish savings measures (thermal area, rooms, kitchen, etc.)	5.13	1.60	73.30
We have energy control systems (timers, thermostats, presence detectors, etc.)	5.66	1.38	80.80
Energy audits of the facilities are performed	4.70	1.72	67.21
The heated areas are organized, thus avoiding useless energy expenditures	5.25	1.26	74.94

Table A1. Cont.

Items	Mean	S.D.	(%)
We perform adequate maintenance of boilers, pipes and radiators (cleaning and regular purging) and air conditioning facilities (cleaning filters and changing them)	6.13	0.99	87.59
The health resort establishment has good ventilation and thermal insulation to avoid resorting as little as possible to air conditioning and avoid condensation	5.52	1.35	78.92
We have revolving doors to avoid the loss of heat or cold in each case, windows with thermal bridge breaking and double glass	4.00	1.86	57.14
We have installed solar panels, and we intend to progressively increase the generation and use of this type of energy (clean)	3.49	2.38	49.88
When replacing equipment, we always opt for the most energy efficient	5.66	1.46	80.80
The lighting of the establishment is calculated and aimed at reducing energy consumption (energy-saving bulbs or low consumption LEDs, etc.)	5.90	1.37	84.31
We have installed photovoltaic sensors in outdoor lighting	4.05	2.19	57.85
Workers and clients are informed about the consumption obtained	2.43	1.45	34.66
The staff has precise knowledge and instructions aimed at promoting energy consumption that is as efficient as possible	5.07	1.52	72.37
Total	5.02	—	71.73
<b>Pollution and waste management</b>			
We know and control the quantities of waste generated and in their different categories: containers and packaging, organic waste, special waste (cooking oils and grease, toner ...) and hazardous waste (batteries, fluorescents, light bulbs ...)	5.21	1.70	74.47
We have set measurable targets to reduce waste generation	4.15	2.00	59.25
We have a record of the hazardous waste we generate	4.93	2.05	70.49
This hazardous waste is stored in a safe place until its collection to avoid its manipulation	5.54	1.78	79.16
Special and hazardous waste is treated in a special way, being withdrawn by authorized companies specialized in its treatment	5.77	1.59	82.44
We classify the containers and packaging separating their different types: glass, plastic, metal and paper-cardboard for recycling	5.56	1.54	79.39
In order to facilitate the collection of waste and recycling by staff and/or customers, rubbish containers are of different colours in accordance with the regulations	5.31	1.80	75.88
We have posters in visible places to remind staff and customers of the need to separate waste for recycling	4.44	2.18	63.47
Workers and clients are informed about the results obtained	2.67	1.68	38.17
The staff has precise knowledge and instructions aimed at reducing the generation of waste	5.20	1.79	74.24
Total	4.88	—	69.70
<b>Noise</b>			
To reduce noise, the doors and windows of the facilities are made of materials suitable for this purpose	4.92	1.63	70.26
In areas with greater noise (dining room, meeting room ...), the walls are covered with materials that absorb the noise	4.25	1.60	60.66
The floors are covered with suitable materials to avoid the noise that occurs with people's movements	4.31	1.78	61.59

Table A1. Cont.

Items	Mean	S.D.	(%)
When choosing machinery for our facilities, we choose the ones that give off the least possible noise (boilers, purifiers, etc.)	4.98	1.73	71.19
We have installed volume limiters in Televisions, etc.	3.57	2.19	51.05
The machinery of greater acoustic impact is installed in suitable areas reducing its acoustic impact.	5.16	1.70	73.77
Total	4.53	—	64.75

Note: To facilitate their interpretation, in addition to the average obtained for each of the items, in the last column (degree of compliance) they are expressed in a percentage scale of 0–100%, however, both scales are equivalent.

## References

1. WTTC. Economic Impact Annual Update Summary. World Travel & Tourism Council, 2016. Available online: [http://sp.wttc.org/-/media/files/reports/economic-impact-research/2016-documents/economic-impact-summary-2016\\_a4-web.pdf](http://sp.wttc.org/-/media/files/reports/economic-impact-research/2016-documents/economic-impact-summary-2016_a4-web.pdf) (accessed on 22 August 2017).
2. WTTC. Travel and Tourism. Economic Impact 2016 Spain. World Travel & Tourism Council, 2013. Available online: <http://sp.wttc.org/-/media/files/reports/economic-impact-research/countries-2016/spain2016.pdf> (accessed on 14 September 2017).
3. Crosby, A.; Moreda, A. *Elementos Básicos Para un Turismo Sostenible en Las Áreas Naturales*; Centro Europeo de Formación Ambiental y Turística (CEFAT): Madrid, Spain, 1996.
4. WTO. World Tourism Organization. Available online: <http://sdt.unwto.org/es/content/definicion> (accessed on 28 August 2016).
5. World Tourism Organization. World Tourism Organization Network. Available online: <http://www2.unwto.org/es> (accessed on 28 August 2017).
6. Fullana, P.; Ayuso, S. *Turisme Sostenible*, Rubes ed.; Departament de Medi Ambient: Barcelona, Spain, 2002.
7. Saizarbitoria, I.H.; Landín, G.A.; Azorín, J.F.M. *EMAS Versus ISO 14001: Un Análisis de su Incidencia en la UE y España*; Boletín Económico de ICE: Madrid, Spain, 2008; pp. 49–64.
8. Conde, J.; Pascual, S.; Sánchez, I. La gestión ambiental en la empresa. In *Empresa y Medio Ambiente, Hacia la Gestión Sostenible*; Conde, J., Ed.; Nivola: Madrid, Spain, 2003; pp. 43–67.
9. Melnyk, S.A.; Sroufe, R.P.; Calantone, R.L. Assessing the effectiveness of US voluntary environmental programmes: An empirical study. *Int. J. Prod. Res.* **2002**, *40*, 1853–1878. [[CrossRef](#)]
10. Pan, J. A comparative study on motivation for and experience with ISO 9000 and ISO 14000 certification among Far Eastern countries. *Ind. Manag. Data Syst.* **2003**, *103*, 564–578. [[CrossRef](#)]
11. Zutshi, A.; Sohal, A. Environmental management system adoption by Australasian organisations: Part 1: Reasons, benefits and impediments. *Technovation* **2004**, *24*, 335–357. [[CrossRef](#)]
12. Zeng, S.X.; Tam, C.M.; Tam, V.W.; Deng, Z.M. Towards implementation of ISO 14001 environmental management systems in selected industries in China. *J. Clean. Prod.* **2005**, *13*, 645–656. [[CrossRef](#)]
13. Poksinska, B.; Jörn Dahlgaard, J.; Eklund, J.A. Implementing ISO 14000 in Sweden: Motives, benefits and comparisons with ISO 9000. *Int. J. Qual. Reliab. Manag.* **2003**, *20*, 585–606. [[CrossRef](#)]
14. Gavronski, I.; Ferrer, G.; Paiva, E.L. ISO 14001 certification in Brazil: Motivations and benefits. *J. Clean. Prod.* **2008**, *16*, 87–94. [[CrossRef](#)]
15. Link, S.; Naveh, E. Standardization and discretion: Does the environmental standard ISO 14001 lead to performance benefits? *IEEE Trans. Eng. Manag.* **2006**, *53*, 508–519. [[CrossRef](#)]
16. Chin, K.S. Factors influencing ISO 14000 implementation in printed circuit board manufacturing industry in Hong Kong. *J. Environ. Plan. Manag.* **1999**, *42*, 123–134. [[CrossRef](#)]
17. King, A.A.; Lenox, M.J.; Terlaak, A. The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Acad. Manag. J.* **2005**, *48*, 1091–1106. [[CrossRef](#)]
18. Potoski, M.; Prakash, A. Covenants with weak swords: ISO 14001 and facilities' environmental performance. *J. Policy Anal. Manag.* **2005**, *24*, 745–769. [[CrossRef](#)]

19. Vargas Sánchez, A.; Vaca Acosta, R.M.; García De Soto Camacho, E. Guía de Buenas Prácticas Ambientales. Sector Turismo (Hoteles y Campos de Golf) 2003. Fundación Biodiversidad. Available online: [http://www.uhu.es/alfonso\\_vargas/archivos/GUIA%20BUENAS%20PRACTICAS%20AMBIENTALES%20TURISMO%20definitiva-Huelva-2003.pdf](http://www.uhu.es/alfonso_vargas/archivos/GUIA%20BUENAS%20PRACTICAS%20AMBIENTALES%20TURISMO%20definitiva-Huelva-2003.pdf) (accessed on 15 September 2017).
20. López López, A. El medio ambiente y las nuevas tendencias turísticas: Referencia a la región de Extremadura. *Obs. Medioambient.* **2001**, *4*, 205–251.
21. Casadesus, M.; Heras, I.; Merino, J. *Calidad Práctica. Una Guía Para No Perderse en el Mundo de la Calidad*; Prentice Hall: Madrid, Spain, 2005.
22. Greeno, J.L.; Hedstrom, G.S.; Diberto, M. *Environmental Auditing-Fundamentals and Techniques*; John Wiley and Sons: New York, NY, USA, 1985.
23. Yiridoe, E.K.; Clark, J.S.; Marett, G.E.; Gordon, R.; Duinker, P. ISO 14001 EMS standard registration decisions among Canadian organizations. *Agribusiness* **2003**, *19*, 439–457. [[CrossRef](#)]
24. Montabon, F.; Melnyk, S.A.; Sroufe, R.; Calantone, R.J. ISO 14000: Assessing its perceived impact on corporate performance. *J. Supply Chain Manag.* **2000**, *36*, 4–16. [[CrossRef](#)]
25. Kolln, K.; Prakash, A. EMS-based environmental regimes as club goods: Examining variations in firm-level adoption of ISO 14001 and EMAS in UK, US and Germany. *Policy Sci.* **2002**, *35*, 43–67. [[CrossRef](#)]
26. Bansal, P.; Bogner, W.C. Deciding on ISO 14001: Economics, institutions, and context. *Long Range Plan.* **2002**, *35*, 269–290. [[CrossRef](#)]
27. Rondinelli, D.; Vastag, G. Panacea, common sense, or just a label?: The value of ISO 14001 environmental management systems. *Eur. Manag. J.* **2000**, *18*, 499–510. [[CrossRef](#)]
28. Mariotti, F.; Kadasah, N.; Abdulghaffar, N. Motivations and barriers affecting the implementation of ISO 14001 in Saudi Arabia: An empirical investigation. *Total Qual. Manag. Bus. Excell.* **2014**, *25*, 1352–1364. [[CrossRef](#)]
29. Boiral, O.; Henri, J.F. Modelling the impact of ISO 14001 on environmental performance: A comparative approach. *J. Environ. Manag.* **2012**, *99*, 84–97. [[CrossRef](#)] [[PubMed](#)]
30. Bansal, P.; Roth, K. Why companies go green: A model of ecological responsiveness. *Acad. Manag. J.* **2000**, *43*, 717–736. [[CrossRef](#)]
31. Schylander, E.; Martinuzzi, A. ISO 14001—Experiences, effects and future challenges: A national study in Austria. *Bus. Strategy Environ.* **2007**, *16*, 133–147. [[CrossRef](#)]
32. De Durana, D.D.J.G. Regulación Empresarial Voluntaria y Medio Ambiente: Análisis de la Adopción de ISO 14001 en Las Organizaciones de la CAPV. Ph.D. Thesis, Universidad del País Vasco, Leioa, Spain, 2014.
33. Generalitat Valenciana. Las Buenas Prácticas Ambientales en la Hostelería y Ocio. Conselleria De Medi Ambient, Generalitat Valenciana. 2003. Available online: [http://www.fundacionglobalnature.org/proyectos/tuismo\\_y\\_ma/Manual%20BP%20Hosteler%EDa%20y%20ocio.pdf](http://www.fundacionglobalnature.org/proyectos/tuismo_y_ma/Manual%20BP%20Hosteler%EDa%20y%20ocio.pdf) (accessed on 17 June 2017).
34. Ministerio de Trabajo y Asuntos Sociales (MTAS). Manual de Buenas Prácticas Ambientales en Las Familias Profesionales: Turismo y Hostelería. España: ANALITER. 2017. Available online: <http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/red-de-autoridades-ambientales-raa-/sensibilizacion-medioambiental/manuales-de-buenas-practicas/> (accessed on 17 June 2017).
35. Nunnally, J.C. *Psychometric Theory*; McGraw-Hill: New York, NY, USA, 1979.
36. Bagozzi, R.B.; Baumgartner, H. The evaluation of structural equation models and hypothesis testing. In *Principles of Marketing Research*; Richard, P.B., Ed.; Blackwell Publishers: Cambridge, MA, USA, 1994; pp. 386–422.
37. Nurosis, M.J. *SPSS. Statistical Data Análisis*; SPSS Inc.: Chicago, IL, USA, 1993.
38. Grande, I.; Abascal, E. *Fundamentos y Técnicas de Investigación Comercial*, 5th ed.; ESIC Editorial: Madrid, Spain, 2000.
39. Darnall, N.; Gallagher, D.R.; Andrews, R.N. ISO 14001: Greening management systems. In *Greener Manufacturing and Operations*; Greenleaf Publishing: Oxon, UK, 2001.
40. Hillary, R. *Small and Medium-Sized Enterprises and the Environment: Business Imperatives*; Greenleaf Publishing: Oxon, UK, 2000.
41. Kitazawa, S.; Sarkis, J. The relationship between ISO 14001 and continuous source reduction programs. *Int. J. Oper. Prod. Manag.* **2000**, *20*, 225–248. [[CrossRef](#)]

42. DeBoer, J.; Panwar, R.; Rivera, J. Toward A Place-Based Understanding of Business Sustainability: The Role of Green Competitors and Green Locales in Firms' Voluntary Environmental Engagement. *Bus. Strategy Environ.* **2017**, *26*, 940–955. [[CrossRef](#)]
43. Fryxell, G.E.; Chung, S.S.; Lo, C.W. Does the selection of ISO 14001 registrars matter? Registrar reputation and environmental policy statements in China. *J. Environ. Manag.* **2004**, *71*, 45–57.



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