



# **Environmental Sustainability and Hospitality. An Exploratory Research on Modalities, Motivations and Barriers**

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## **Abstract**

*Purpose:* The natural environment is a key factor of attractiveness for tourist destinations, and hospitality may be considered both a contributor and a victim of environmental impacts. There still exists a knowledge gap regarding modalities, motivations and barriers for sustainability in the hospitality industry; therefore, the aim of this research is to explore the validity in a real context of two theoretical frameworks, the first dealing with modalities and the second addressing motivations and barriers, for the implementation of sustainable behaviors in lodging facilities.

*Methodology:* A qualitative research was conducted through interviews with 18 hospitality managers operating in the mature destination of Verona (Italy) and in the more emergent context of Huelva (Spain).

*Findings:* Sustainable behaviors implemented in hospitality are related to five areas of action: waste management, water conservation, energy conservation, sustainable purchasing and people involvement. The possibility to reduce operational costs and to meet the expectations of more sensitive customers are among the main motivations of sustainability, while upfront investments and lack of support from public administrations are mentioned as main barriers.

*Limitations:* Only managerial perceptions about sustainability are investigated in this work. Further research should address the perceptions of other relevant stakeholders, such as tourists, environmental associations or the public administration.

*Implications:* The research adds to previous literature exploring the validity in real context of two theoretical frameworks. Findings also provide relevant managerial implications about the advantages and disadvantages connected to environmental sustainability in hospitality.

*Value:* The value of the research consists in shedding light on motivations and barriers to sustainability in a real context and from the perspective of who is in charge of decision-making.

## **Keywords**

Sustainability; environmental management; hospitality; motivations; barriers.

## 1. Introduction

The natural environment is a key factor of attractiveness for tourist destinations, and environmental preservation becomes crucial for tourism survival and success (Gössling, 2002; Puig et al., 2017). The production of tourism experiences, however, requires the simultaneous protection and consumption of natural resources, leading to the so-called “resource-paradox” (Williams and Ponsford, 2009). Hotels and lodging facilities are both “contributors and victims” of environmental impacts (Reid et al., 2017): hospitality organizations are responsible for the 18% of the overall tourism impact (Puig et al. 2017), but the natural environment is a fundamental part of their core product, besides service quality (Chan and Wong, 2006). Therefore, hospitality can and should play a significant role in environmental sustainability.

The aim of the present research is to explore the modalities in which environmental sustainability is implemented in the hospitality industry; which are the motivations that lead to the adoption of environmental behaviors and, on the other side, which are the barriers that constrain environmental sustainability. Addressing the drivers of sustainability, rather than just sustainable behaviors, could be helpful to further enhance the diffusion of environmental preservation, which is the ultimate goal not just for tourism but for society at large (Bansal and Roth, 2000; Tencati and Pogutz, 2015).

Based on a systematic literature review about environmental sustainability in hospitality, two theoretical frameworks are derived: the first addressing sustainable practices, and the second dealing with motivations and barriers to sustainability. The first framework displays five areas for sustainability implementation, namely: waste management, water conservation, energy conservation, sustainable purchasing and people involvement. In the second framework, motivations and barriers to sustainability are grouped according to their monetary or non-monetary nature and four categories can be identified: direct monetary motivations/barriers, indirect monetary motivations/barriers, non-monetary motivations/barriers and personal motivations/barriers.

The applicability of these frameworks in a real context and from the perspective of who is in charge of decision-making inside hospitality organizations is explored throughout the research, that is conducted through semi-structured interviews with 18 hospitality managers. The unit of analysis is in fact made of 9 Italian lodging facilities and 9 Spanish lodging facilities. The Italian facilities are located in the mature tourist destination of Verona and surroundings, mainly lake Garda, while the Spanish ones belong to the less-developed destination of Huelva, and surroundings. The purpose of case studies is not to generalize data, but rather to obtain an in-depth investigation of the phenomenon under study (Yin, 2003). The value of this research consists, therefore, in the exploration of modalities, motivations and barriers to sustainability from the perspective of who is in charge of implementing sustainable practices inside hospitality organizations.

The rest of the paper is organized as follows: a brief literature review and the two theoretical frameworks are presented in section 2; methodology is explained in section 3; results are displayed and discussed in section 4 while section 5 deals with research implications and concluding remarks.

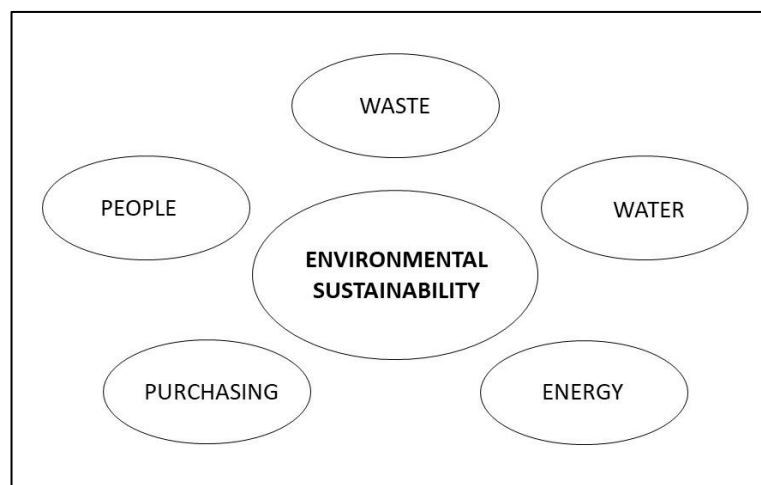
## 2. Theoretical background

A systematic literature review was conducted on Scopus database. The combination of “environmental sustainability” and “hospitality” as keywords provided 119 results, however, several papers were excluded because lacking consistency. In particular, some papers were not

dealing with the hospitality industry only, but also with the broader concept of the tourism value chain, while other papers adopted a customer perspective, rather than a managerial one. The aim of the research, however, is to address how hospitality managers implement sustainable practices, the motivations that lead managers to the implementation of these practices and the potential barriers they may face. A careful content analysis was performed on the remaining 46 papers, and issues regarding sustainability modalities, motivations and barriers were classified in order to derive two theoretical frameworks. Content analysis is widely adopted in literature reviews, since it increases quality and completeness of information (Qian et al., 2018).

In the first framework all environmental behaviors that are adopted in hospitality according to previous studies are grouped into five areas that are shown in Figure 1: waste management, water conservation, energy conservation, sustainable purchasing and people involvement. Waste management involves both the separate collection of waste and recycling programs (Bohdanowicz and Zientara, 2008), but also behaviors aimed at the reduction of waste production, such as the substitution of single packaging with soap and shampoo refillable dispensers (Mahachi et al., 2015). Water-related issues refer to the monitoring and conservation of water consumption, for example by adopting water conserving fixtures in rooms (Han and Hyun, 2018) or a towel and linen reuse program (Geerts, 2014). Energy conservation deals both with the reduction of energy consumption and the use of renewable sources of energy. Occupancy sensors and led lighting are among the most common energy saving tools implemented in hospitality (Stabler and Goodall, 1997; Verma and Chandra, 2017). Sustainable purchasing involves both the purchasing of local goods, especially for food, and the purchasing of eco-friendly or certified products, such as cleaning products that may be harmful to the environment (Aragon-Correa et al., 2015; Ruiz-Molina et al., 2010). Finally, both employees and customers may be involved, or at least informed, about the sustainable practices that are implemented in lodging facilities (Carlsen et al., 2001; Ruiz-Molina et al., 2010). Previous literature for example highlights the importance of involving customers in environmental activities (Carlsen et al., 2001), or of providing staff with an environmental training program (Sánchez-Ollero et al., 2014).

*Figure 1. The modalities framework*



Source: our elaboration

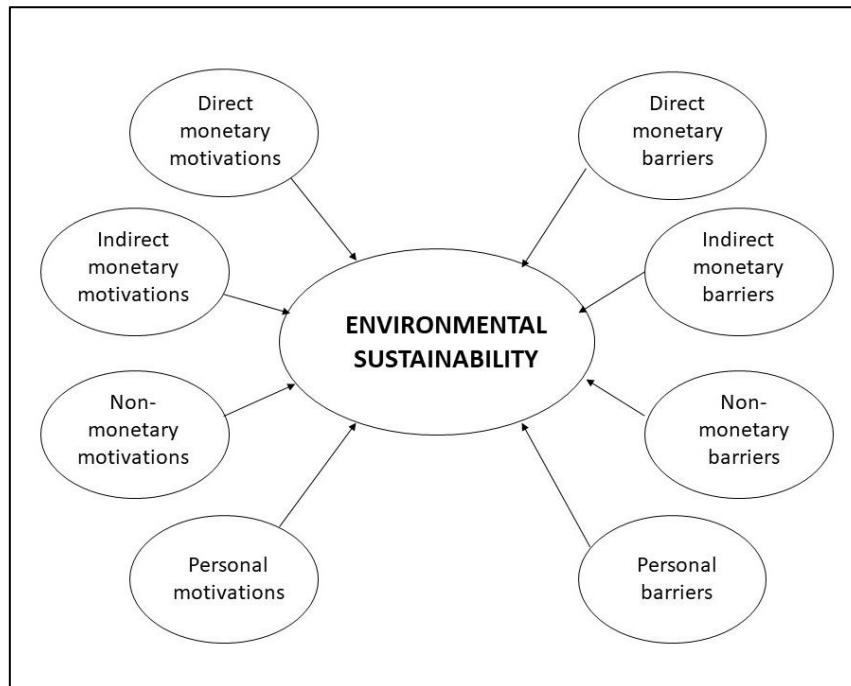
Motivations for environmental sustainability in the hospitality industry that have been found in previous studies can be classified according to their monetary or non-monetary nature. In particular, four categories of motivations are here presented: direct monetary, indirect monetary, non-monetary and personal motivations.

Direct monetary motivations refer to the envisioned financial benefits that are connected with the implementation of sustainable practices (Mahachi et al., 2015). In other words, the reduction of resource consumption or the optimization of resources may increase the overall organizational efficiency (Cvelbar and Dwyer, 2013), and allow substantial cost savings (Jones et al., 2014; Rodríguez-Antón et al., 2012). Moreover, there may be financial incentives and government grants related to the implementation of environmentally sustainable practices (Rodríguez-Antón et al., 2012; Stabler and Goodall, 1997). Other monetary benefits of sustainability may be derived from customers, that may be willing to choose a more sustainable lodging facility, or to pay a higher price to stay in a green accommodation. But since these benefits depend on customers' sensitiveness toward sustainability issues, they are here referred to as indirect monetary motivations. In particular, sustainability has been found to improve the overall organizational image (Bohdanowicz and Zientara, 2008), and it may therefore represent a tool to differentiate and position hospitality organizations (Jones et al., 2014; Stylos and Vassiliadis, 2015). Environmental awareness is growing among tourists (Cvelbar and Dwyer, 2013), and sustainable initiatives can help to meet and satisfy customers' expectations (Singal, 2014). Whether environmental sustainability may not affect the willingness to pay a higher price, it does affect the hotel selection process, and the number of customers willing to stay in a green lodging facility has increased (Deloitte, 2014 in Martínez, 2015). Non-monetary motivations of sustainability are connected to organizational response to every other stakeholder other than customers. Previous literature has found that growing environmental regulations (Carlsen et al., 2001), environmental protection organizations (Stylos and Vassiliadis, 2015), industry associations (Singal, 2014), local networks (Martini and Buffa, 2015) and even competitors (López-Gamero et al., 2011) have a strong influence on the adoption of environmentally sustainable behaviors in hospitality. Finally, managerial personal commitment toward environmental preservation has obvious implications in the effective implementation of sustainable behaviors in hospitality. Hence, managerial ethics (Xu and Gursoy, 2015a), personal values (Mahachi et al., 2015), and the acknowledgment of the need to reduce environmental impacts (Jarvis et al., 2010) are here considered as personal motivations.

In the same way, barriers to environmental sustainability in hospitality can be classified as direct monetary barriers, indirect monetary barriers, non-monetary barriers and personal barriers. The need to face upfront investments to meet sustainability requirements (Singal, 2014), or higher costs in order to purchase eco-friendly goods or certified products (Aragon-Correa et al., 2015; Haastert and Grosbois, 2010) is often reported as an important direct monetary barrier to sustainability. Indirect monetary barriers are represented by the fact that not all customers equally value environmental sustainability (Xu and Gursoy, 2015b), and even when they are aware of sustainability issues they may not be willing to pay a higher price, especially when service quality and comfort are at stake (Miao and Wei, 2013; Rahman et al., 2015). This gap between customers' attitudes and purchasing behaviors (Aznar et al., 2016) more than often constrains the implementation of sustainable behaviors, and managers have to find a balance between environmental protection and service quality (Verma and Chandra, 2017; Zhang et al., 2012). The lack of stakeholders' pressures toward environmental preservation, the low public awareness (Pérez-Pineda et al., 2017), or the lack of external support from local public administrations (Jarvis et al., 2010; O'Neill and Alonso, 2009)

constitute non-monetary barriers to sustainability. And finally, the lack of managerial awareness toward sustainability (O'Neill and Alonso, 2009), or the lack of managerial recognition about environmental impacts related to their activities (Haastert and Grosbois, 2010) represent personal barriers to sustainability. A framework encompassing motivations and barriers to environmental sustainability in hospitality is reported in Figure 2.

Figure 2. The motivations/barriers framework



Source: our elaboration

According to this review, and to the two theoretical frameworks that have been presented, the research aims to explore the validity of the following three propositions:

**Proposition 1:** Environmental sustainable behaviors implemented in hospitality belong to at least one of the following areas of action: waste management, water conservation, energy conservation, sustainable purchasing and people involvement.

**Proposition 2:** Environmental sustainable behaviors implemented in hospitality are driven by direct monetary motivations, indirect monetary motivations, non-monetary motivations and personal motivations.

**Proposition 3:** Environmental sustainable behaviors implemented in hospitality are constrained by direct monetary barriers, indirect monetary barriers, non-monetary barriers and personal barriers.

### 3. Methodology

Since the aim of the research is to provide an answer to how and why environmental sustainability is implemented in the hospitality industry, a qualitative case study approach is the selected methodology. In case studies in fact “a how or why question is being asked about

a contemporary set of events over which the investigator has little or no control” (Yin, 2003, p. 9).

Two tourist destinations in different stages of the tourist areas life cycle were chosen as research setting: the mature destination of Verona and lake Garda in Italy, and the less developed destination of Huelva in Spain. Tourism development in Huelva, in fact, started only in the 1990s (Vargas-Sánchez et al., 2015), much more recently with respect to Verona and lake Garda, that also thanks to their strategic position have experienced tourism since like forever. Verona and its province represent the fourth tourist destination of Italy, and in 2016 they counted with 4.484.355 arrivals and 16.535.415 overnight stays, more or less equally divided into international and domestic tourists (U. O. Sistema Statistico Regionale, Regione Veneto, 2016). The province of Huelva, on the contrary, faced the best tourist year in 2016, but only with 1.281.935 arrivals and 4.927.350 overnight stays, nearly 70% of them being Spanish tourists (Vargas-Sánchez, 2017).

The unit of analysis is made of 18 lodging facilities, 9 located in Italy and 9 in Spain, that were selected for their commitment to environmental sustainability. This purposeful sampling approach is considered appropriate to select cases rich in information (Mahachi et al., 2015; Patton, 1990). Commitment to the environment is here defined as participation to environmental programs, having an environmental certification or award, or being part of a business network committed to environmental preservation, i.e. Garda Green (only one facility was selected for being recommended by a peer organization), and it can be considered a useful device also to avoid any social desirability bias (Juvan and Dolnicar, 2014). Facilities vary for category, location, size, age and ownership structure, and in order to keep them anonymous Italian facilities were labeled from I1 to I9, while the Spanish ones from S1 to S9. The main characteristics of the unit of analysis are reported in Table 1.

Data were collected through semi-structured interviews with hospitality managers or owners in case of family businesses. Semi-structured interviews are a common tool in case studies, since they allow to place more emphasis on exploring “why” questions (Saunders et al., 2009). Qualitative interviews are especially useful in exploratory research in order to gain insights on the reasons behind certain decisions (Cooper and Schindler, 2008), and they may lead the discussion into not previously considered areas, allowing unexpected issues to emerge (Saunders et al., 2009). Managers were considered appropriate as key informants, since they are responsible for decision-making and they have sufficient knowledge about the company. Interviews were conducted *in situ*, according to managers availability, during two phases: Italian managers were interviewed between April and June 2017, while Spanish managers during October and November 2017. The semi-structured interview protocol was based on questions related to the environmental measures that are implemented, i.e. the “how” questions; the reasons for their implementation, i.e. the “why” questions, and the possible barriers managers have to cope with.

All interviews were recorded and transcribed verbatim. Transcripts were then coded following a template approach to text analysis (Crabtree and Miller, 1999). A middle ground approach to coding was selected, beginning with a basic set of codes based on the theoretical underpinnings of the research that was further expanded according to themes that have emerged during the interviews. Text analysis was performed with the aid of Atlas.ti. A codebook is a useful data management tool to organize larger segments of text, summarize data and look for recurrent themes, in order to explore the validity of three propositions of the current research. Results for each proposition are presented and discussed in the following section.

*Table 1. The unit of analysis*

ID	Location	Type	Year of foundation	Size	Ownership	Reason of choice
I1	Urban	4S hotel	1927	49 rooms 20 employees	Chain hotel, but family run	Life Gate Certification
I2	Rural	3S hotel	1990	13 rooms 6 employees	Family firm	Zero Waste Italy
I3	Rural	3S hotel	1900	26 rooms and 4 apart. 6 employees	Family firm	Peer recommendation
I4	Rural	Agritourism	2015	4 rooms 3 employees	Family firm	Great Wine Capitals; Casa Green Project
I5	Beach	3S hotel	1971	20 rooms 5 employees	Family firm	Garda Green; Peer recommendation
I6	Beach	3S hotel	1970	47 rooms 15 employees	Family firm	Garda Green
I7	Rural	3S hotel	1955	65 rooms 15 employees	Family firm	Garda Green
I8	Beach	Inn	2015	5 rooms 5 employees	Family firm	Garda Green
I9	Beach	4S campsite	1958	250 fixed bungalows and 700 emplacements 60 employees	Family firm	Garda Green; ISO 14001
S1	Rural	4S hotel	2009	20 rooms 18 employees	Family firm	Europarc; ISO 14001; Doñana 21
S2	Beach	4S hotel	1992	349 rooms 90 employees	Chain hotel	ISO 14001; Travelife; Ecoleader Tripadvisor
S3	Beach	4S hotel	2005	300 rooms 90 employees	Chain hotel	ISO 14001; Travelife
S4	Beach	4S hotel	1992	344 rooms 150 employees	Chain hotel	Travelife; Q Sostenible
S5	Rural	Farmhouse	2007	12 apart. 4 employees	Family firm	ISO 14001; CETS
S6	Rural	Farmhouse	2007	15 rooms 5 employees	Family firm	CETS (before ISO 14001; Doñana 21)
S7	Beach	4S hotel	1968	66 rooms 40 employees	Chain hotel, but publicly hold	ISO 14001; EMAS; CETS; Doñana 21
S8	Rural	Farmhouse	2000	6 rooms 3 employees	Family firm	CETS; Ecoleader Tripadvisor; Proyecto ecológico
S9	Beach	5S hotel	2001	175 rooms 95 employees	Chain hotel	ISO 14001; Travelife

Source: our elaboration

#### 4. Results

Results obtained from the Italian lodging facilities were analyzed first, then the data analysis process was replicated for the Spanish facilities. Replication is a useful tool to assess the quality of the research in terms of validity and reliability (Easterby-Smith et al., 2008). Hence, findings are presented according to this order.

#### *4.1. The Italian unit of analysis*

The analysis of the data confirms Proposition 1, since all sustainable behaviors reported by the Italian interviewees belong to one of the five areas of the proposed framework. With respect to waste management, all facilities adopt the separate collection of waste, at least in common spaces, which is also a mandatory behavior in Italy. More interestingly, 8 out of 9 interviewees try also to reduce the production of waste for example by substituting individual soap and shampoo containers with refillable dispensers, replacing plastic bottles with glass bottles, or implementing a composting plant. Monitoring the production of waste is also reported by 2 interviewees.

Behaviors related to water conservation are less common among Italian facilities and only 5 out of 9 interviewees have in place some tools to reduce the consumption of water, mainly consisting in towel reuse programs (3 out of 9 interviewees) and aerated faucets in rooms (2 out of 9 interviewees). In one facility extra towels for the pool are provided only on payment, in another one rainwater is recycled for the garden, and another facility has a water purifier.

Behaviors related to energy conservation are again quite common: led lighting (3 out of 9) and master keys to control for heating and air conditioning (4 out of 9) are the most common tools to reduce the consumption of energy; in one case timed lighting is adopted. Renewables too are a widespread practice: 5 out of 9 facilities are provided with solar panels, 3 facilities with photovoltaic plants, and 6 interviewees have selected green certified energy suppliers. The same 6 facilities have also implemented a charging point for electric cars or bicycles. In addition, monitoring the consumption of energy is reported by 5 interviewees.

With respect to the purchasing policy, all interviewees report having selected eco-friendly or certified cleaning products, 4 out of 9 also eco-friendly toilet paper, and in one case even organic painting. Local food is preferred by 4 out of 9 interviewees.

Finally, people involvement refers to a large amount of activities addressing both customers and employees. In 6 out of 9 facilities, customers are provided with information related to the sustainable behaviors that are implemented, and in 5 of these facilities they are directly asked to cooperate for sustainability, for example in towel reuse or recycling programs. Data on energy consumption are publicly available for customers in 3 facilities. Staff members are also informed about environmental policies in 5 out of 9 facilities, and in one case they are provided with a specific environmental training program.

Motivations for the implementation of the aforementioned behaviors are addresses by Proposition 2, that is confirmed by the analysis of the interviews. The possibility of cost saving deriving from the reduction of resource consumption or resource optimization is the most important direct monetary motivation, that is mentioned by 6 out of 9 interviewees. Again 6 interviewees also report the possibility to get access to funding and incentives associated to environmental practices, even if these cannot be considered real drivers of sustainability but rather facilitators. Only one interviewee does not mention cost saving nor access to funding, but indicates the importance of avoiding waste of money and penalties as direct monetary motivations.

Indirect monetary motivations for sustainability are represented in 5 out of 9 cases by the fulfillment of more sensitive customers' expectations, especially those coming from Northern



Europe. Sustainability is considered by 4 interviewees as an additional value that can be offered to customers. Image and reputation enhancement are mentioned by 4 interviewees, and the possibility to achieve a differentiation strategy based on sustainable criteria is also reported as indirect monetary motivation by 4 interviewees. Two interviewees consider environmental sustainability a tool that may help deseasonalization.

Fulfilling the expectations of every stakeholder other than customers is here considered a non-monetary motivation for environmental sustainability. Italian facilities, however, do not seem to face pressures from any category of stakeholders, except for mandatory behaviors such as recycling. Hence, during the coding process the term “pressure” was replaced by the term “support”, and several stakeholders’ categories have been found to be facilitators of sustainability, even if not real drivers. In particular, 7 out of 9 interviewees mention the importance of peer organizations as sources of knowledge and awareness about environmental issues. A common attitude that has emerged during the interviews (5 interviewees) is that sustainability is a way to simplify procedures, and to make things easier, especially when being part of a business network that is specifically committed to environmental preservation. In some cases, support is also provided by local public administrations (3 out of 9 facilities), and from suppliers (again 3 out of 9 facilities). Having a certification may also be useful to get help and support, and this is reported by 3 interviewees. Trade associations are mentioned by only 2 out of 9 interviewees as sources of support. One interviewee adds the support deriving from technology, another one the importance of participating to fairs to raise personal knowledge, and another one the growing awareness in society at large, that is somehow driving organizations toward a more sustainable path.

Lastly, with respect to personal motivations, all interviewees display a positive attitude toward environmental preservation, obviously due to the sampling approach. These personal motivations however may display nuances: 6 out of 9 interviewees are keen to emphasize their pride and satisfaction of playing an active role for the benefit of environmental sustainability. Hope and optimism toward the future are additional personal motivations that have emerged in 4 interviews. Being an example for others has also come out in 4 interviews, 2 interviewees mention the fact of “making a difference” as personal driving force toward sustainability and lastly, one interviewee indicates personal education and the fact of having children.

Findings also support Proposition 3, and several barriers to environmental sustainability can be identified. Cost that results from upfront investments or from the achievement of a certification is mentioned by 7 out of 9 interviewees as a direct monetary barrier. Moreover, additional costs for the purchasing of eco-friendly goods are reported by 6 interviewees. Four interviewees also refer to the lack of incentives or funding as an additional direct monetary barrier to environmental sustainability.

The fact that environmental sustainability is not a priority for customers, and that it does not have enough influence to affect their purchasing decision, is reported by almost all interviewees (8 out of 9) as an indirect monetary barrier. The remaining interviewee feels that in any case sustainability cannot be considered a tool to attract more customers. Another important indirect monetary barrier is represented by the need to balance service quality and environmental preservation, that is reported by 6 out of 9 interviewees.

Non-monetary barriers to environmental sustainability of course consist in the lack of pressures from external stakeholders, but again as for motivations the term “pressure” is better replaced with “support”. Italian facilities are generally lacking support from government, in the sense that the environment is not perceived as a priority for local public administrations, as reported by 8 out of 9 interviewees. Six interviewees also face problems with bureaucracy and other regulations, such as aesthetic preservation regulations. Political fragmentation of tourist

destinations is an additional administration-related barrier, that is mentioned by 3 interviewees. Another non-monetary barrier is represented by the scarcity of suppliers for eco-friendly goods, or their low awareness about environmental issues, as reported by 4 interviewees. Four interviewees complain about the general lack of awareness in society at large. Finally, a general feeling that sustainability is something complicated emerged from each interviewee. In many cases, this additional complexity results from additional workload, or additional time that would be required for an effective implementation of sustainable measures. This last fact reinforces the usefulness of belonging to a business network, to avoid complexity problems.

Lastly, the sampling approach prevents the emergence of personal barriers toward environmental protection. However, 6 out of 9 interviewees highlight the fact that in their opinion environmental preservation is not a priority for their competitors, and it can therefore be assumed that a lack of commitment toward the environment is probably not so unusual in the Italian hospitality industry.

#### *4.2. The Spanish unit of analysis*

The same data collection and data analysis procedures were replicated in the Spanish context, and findings provide support for Proposition 1 since all sustainable behaviors reported by the Spanish interviewees belong to one of the five areas of the framework. The separate collection of waste, which is not mandatory in Spain, is implemented in 8 out of 9 facilities. Reducing the production of waste is also a common behavior, that is adopted in 5 facilities, for example by avoiding printing too much paper and opting for online internal communication, or replacing individual amenities in rooms with refillable dispensers. Two out of 9 interviewees are monitoring their waste production too. Water conservation tools mainly consist in towel reuse programs (5 out of 9 facilities) and aerated faucets or dual-flush toilets (7 facilities). Two facilities are provided with a water purifier and in another one rainwater is recycled for the garden. Water consumption is monitored in 3 facilities. One of the most common behavior to reduce energy consumption is led lighting, which is implemented in 6 out of 9 facilities. Other behaviors include sensors to control for air conditioning (2 facilities), an energy recovery system (2 facilities) or occupancy sensors for lighting (1 facility). One or more sources of renewable energy are implemented in 7 out of 9 facilities. The large majority adopts solar panels (6 facilities), 2 facilities are provided with a biomass plant, another one with a photovoltaic plant and another one with geothermal energy. In one case, a charging point for electric cars has also been implemented. Several interviewees adopt a sustainable purchasing policy favoring local suppliers (3 interviewees) and local food (3 interviewees). Eco-friendly goods, such as detergents, toilet paper, amenities in rooms, are preferred by 7 interviewees. Two facilities have a proper supplier assessment form, which involves some sustainability criteria. Organic painting is adopted in 2 facilities, and salt is preferred to chlorine in other 2 facilities. With respect to the last area of the framework, i.e. people involvement, customers are provided with information about the sustainable behaviors that are in place in 7 out 9 facilities. In 2 facilities communication to customers is used in order to raise their awareness and sensitivity, and in 4 facilities customers are involved in activities related to environmental preservation, such as cleaning the beach or planting trees. In one case, employees are also involved in these environmental activities, and in 4 facilities staff is provided with a specific environmental training program.

Considering motivations for the adoption of sustainable behaviors, Proposition 2 finds support in the Spanish context too. Cost saving is reported by 7 out of 9 interviewees as a relevant direct monetary motivation, especially those savings that result from energy saving.

One interviewee also mentions the importance of avoiding penalties from tour operators that may derive from non-compliance with sustainability criteria.

All interviewees agree to consider the fulfillment of sensitive customers' expectation an indirect monetary motivation for environmental sustainability. Similarly to the Italian unit of analysis, the majority of the Spanish interviewees (6 out of 9) perceives tourists from Northern Europe as being more concerned with environmental issues, 3 interviewees report having customers that are specifically attracted by the natural environment, and 2 interviewees consider sustainability as a tool to create loyalty among customers. Sustainability is also perceived as an additional value that can be provided to customers by 4 interviewees. Four interviewees consider sustainability as tool to achieve differentiation and promotion from a sustainable point of view, while other 2 interviewees mention the opportunity to enhance organizational image. Lastly, meeting tour operators' requirements represent another indirect monetary motivation for environmental sustainability for 4 facilities, that strongly cooperate with tour operators.

Non-monetary motivations for sustainability vary considerably among the Spanish facilities: 4 interviewees mention certification bodies as relevant stakeholders to comply with, but at the same time they may provide much support. Compliance with the law is reported by 3 interviewees that are subjected to environmental regulations for being located inside a natural park. Monitoring and imitating competitors is reported both as driver and facilitator of sustainability by 3 interviewees. Technology and the Internet are important facilitators for sustainability in 2 cases, either as sources of information or of improved operational efficiency. The fact that environmental awareness is growing in the whole society is mentioned by 3 interviewees as another element that drives toward sustainability. Only one interviewee indicates trade associations as source of support related to environmental issues.

Lastly, personal commitment toward environmental preservation is displayed by all interviewees, as in the Italian context, also thanks to the sampling method. However, personal motivations are also combined with corporate culture in 3 facilities. Moreover, several subcategories of personal motivations emerged: "being unique" (2 interviewees), "being proud" (1 interviewee), "start doing something" (1 interviewee), "being a contribution" (1 interviewee). Lastly, one interviewee stresses the importance of having children.

Data analysis reveals the existence of barriers to environmental sustainability, providing support for Proposition 3. Cost for investments is the major direct monetary barrier for 7 out of 9 interviewees, and cost for the purchasing of eco-friendly goods is also reported by 3 interviewees. Moreover, the lack of governmental funding, especially for larger companies, is mentioned by 4 interviewees. Only one interviewee is not reporting any direct monetary barrier, and merely indicates that "costs have always to be kept in mind".

Indirect monetary barriers are not perceived by all interviewees, since 2 managers do not mention any customer related issue. However, the lack of awareness among customers is reported by 6 interviewees, 3 of them referring to domestic customers, and 4 interviewees do not consider environmental sustainability as having an influence on the hotel selection process. Only one interviewee mentions the problem of balancing service quality and environmental preservation.

Among non-monetary barriers, the local public administration seems to play a key role for almost all interviewees (8 out of 9): 5 interviewees believe that environmental preservation is not a priority for administrations, and the lack of support from administrations is reported by 5 interviewees, while other 2 interviewees admit that the law or the long bureaucratic procedures are in some cases even constraining the implementation of more sustainable behaviors. The general lack of awareness in society and among the local population is reported by 5 interviewees as slowing down the process toward sustainability. Lack of support from trade

associations and lack of pressures from environmental associations are mentioned by 2 and one interviewee respectively. One interviewee connects sustainability with additional workload, and another one reports the problem of having some difficulties in finding environmentally sustainable suppliers.

As for Italian facilities, Spanish managers do not generally present personal barriers toward environmental preservation but rather agree that the environment is not a priority for their competitors (4 out of 9 interviewees). The only exception is represented by one manager that, although being concerned with environmental issues, does not feel its business being responsible for environmental degradation.

To sum up, it can be observed that the research method holds for both Italian and Spanish facilities. In both settings of the research sustainable behaviors can be classified into one of the five areas of implementation that result from the first theoretical framework and Proposition 1 is therefore supported by the data. With respect to drivers of environmental sustainability, direct monetary motivations, indirect monetary motivations, non-monetary motivations and personal motivations have been reported by interviewees belonging to the unit of analysis, thus providing support for Proposition 2. In particular, it can be assumed that personal managerial commitment plays a pivotal role in the effective implementation of sustainable practices, and that envisioned cost saving and fulfillment of customers' expectations are other relevant drivers of sustainability. Belonging to a business network committed to the environment is a relevant source of support for the selected Italian facilities, that somehow corresponds to the support that comes from certification bodies in the Spanish context. Lastly, direct monetary barriers, indirect monetary barriers and non-monetary barriers have emerged, and Proposition 3 is supported by the data. The necessity to face large upfront investment, the low environmental awareness among customers, especially domestic customers, and the low support from local public administrations are barriers that are common to both settings. Due to the sampling method, interviewees are unlikely to report any personal barrier to environmental preservation, even if they do highlight the low environmental consciousness among their competitors. It is possible to assume that environmental preservation is not always a priority for hospitality managers.

## 5. Conclusion

The aim of the research was to explore the validity in a real context of two theoretical frameworks and three research propositions that have been derived from the literature review. The qualitative analysis of the data provides support for both frameworks since modalities, motivations and barriers to environmental sustainability have emerged from the interviews and could have been classified according to the three research propositions. With respect to modalities for implementation of sustainable behaviors, no significant difference between the two research settings can be found since the five areas of action are reported by both Italian and Spanish interviewees. Personal commitment toward environmental preservation, envisioned cost saving, fulfillment of sensitive customers' expectations and being provided with an environmental certification are reported as main drivers for environmental sustainability in both settings, and some Italian interviewees also add the importance of being part of a business network, for knowledge sharing and support. Upfront investments, the fact that environmental sustainability is still not a priority among customers, and the low support provided from local

public administrations represent the main barriers to sustainability. A general feeling of complexity of practices and procedures emerges from Italian managers, while it is not reported by the Spanish interviewees. Lastly, personal barriers seem also to exist, even if not in the selected facilities but rather in the competing organizations.

The research adds to previous literature on sustainability in the hospitality industry by providing two theoretical frameworks addressing modalities, motivations and barriers for the implementation of environmental sustainability. The validity of both frameworks in real contexts has been successfully explored by the current research, and no significant difference has emerged between the two tourist destinations, even if they are in a different stage of the tourist area life cycle.

Relevant practical implications may also be derived. In particular, the first framework could be a useful tool for hospitality managers to assess the level environmental sustainability of their facility and to check the areas of implementation that deserve further attention. The second framework instead provides insights about the potential benefits connected to environmental sustainability; about the stakeholders that may provide support and therefore act as drivers and facilitators of environmental sustainability; about the advantage of being part of a business network. On the other hand, it also warns managers about the potential disadvantages that may derive from the implementation of sustainable practices; about the stakeholders that are not able or not willing to provide support to organizations; about the dangerous position of being alone.

One limitation of the study is related to the impossibility to generalize results, due to the research methodology and the limited sample size. However, generalizability is not the aim of case studies, but rather obtaining deep insights into the phenomenon under study. Another important limitation is represented by the fact the only managers' perspectives are addressed, while perspectives of other stakeholders are lacking, such as tourists, public administration or environmental associations. Customers, in particular, have been found to be a relevant stakeholder, with a strong influence on the level of implementation of sustainable behaviors. Further research should investigate the importance customers ascribe to sustainability, to justify and reinforce managerial efforts toward the implementation of environmentally sustainable behaviors. Another direction for further studies consists in the assessment of the relation between the level of development of sustainable practices, as determined by perceived motivations and barriers, and organizational performance. The existence of a positive relation between the two variables could indeed enhance the diffusion of environmental sustainability in the hospitality industry and lead tourist organizations toward a more sustainable path.

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