

Article

Water Tourism: A New Strategy for the Sustainable Management of Water-Based Ecosystems and Landscapes in Extremadura (Spain)

José Antonio Folgado-Fernández *^{ID}, Elide Di-Clemente^{ID}, José Manuel Hernández-Mogollón^{ID} and Ana María Campón-Cerro^{ID}

Faculty of Business, Finance and Tourism, University of Extremadura, 10071 Cáceres, Spain; ediclemente@unex.es (E.D.-C.); jmherdez@unex.es (J.M.H.-M.); amcampon@unex.es (A.M.C.-C.)

* Correspondence: jafolgado@unex.es; Tel.: +34-927257000 (ext. 57934)

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Abstract: Water is an important element for the conservation of ecosystems and for human wellbeing. Recently, there has been a loss of awareness about the value of this resource, which requires scientific and practical action to encourage the rise of a new cultural attitude regarding water. Tourism gives water resources great potential, because it facilitates the development of such attractive resources, combining their protection with respectful use. However, studies that have explored the water tourism–territory relationship are still scarce. The objective of this work is to explore the current, touristic use of the aquifer sites in the Spanish region of Extremadura in order to determine whether these practices have the potential to generate new sensitivity about the value of water and its importance in socioeconomic development and environmental conservation. This research uses qualitative and quantitative methodologies, obtaining results that confirm the strategic role of water in the proper management of ecosystems and for the enhancement of human wellbeing. The empirical results show the beginning of a change in water-based tourism from both a supply- and demand-side perspectives. The conclusions suggest potential new measures that will facilitate a better understanding of the value of water, enhance the quality of life for everyone, and safeguard ecosystems.

Keywords: water; nature-based tourism; ecosystems; territory; tourism marketing; sustainable management

1. Introduction

Aquatic and terrestrial ecosystems, acting jointly, guarantee the survival of essential habitats for endemic animal and vegetal species. The importance of water in our lives and ecosystems necessitates reflections about its value, its management, and the roles it plays for people and nature. At present, the ease of access to water resources, often marked by consumerist logic, jeopardizes their availability in the near future and encourages the loss of collective awareness about the value of water and the need for its conservation, responsible use, and valorization [1]. In response to this, there have been several lines of scientific research focused on returning this element to its original value, not only as a functional resource for maintaining environmental quality and human activities, but also as a cultural element from which educational values are generated, as well as habits and knowledge that promote the responsible utilization of water from a sustainable perspective and its optimal use with respect to the multiple benefits it generates for society.

Despite the fact that the uses of water have evolved over the centuries, this element has always been considered to be an economic and social asset. As an economic resource, water has been essential

for the sustenance, survival, and development of human beings and their activities. Since the dawn of their appearance on Earth, humans have sought to appropriate the water resources at their disposal in nature [2]. As a social asset, water has always been related to spirituality and health. Water has initiated collective customs that have been intended to enhance one's psychophysical wellbeing through socialization, leisure, and the beneficial effects of water on the body and mind [3].

These days, the risks of depletion, contamination, and misuse of water resources make it necessary to find new strategies for their management in order to guarantee the conservation of ecosystems, the protection of the quality of natural environments, and the sustainability of human activities and wellbeing [1]. Changing sensibilities regarding water and its importance for health signal the potential for the development of improved social awareness capable of generating a new business opportunities that can create value for both geographic territories and water users. This emerging water culture emphasizes the importance of achieving a harmonious, quality, and sustainable relationship with this element.

The tourism sector ascribes great importance to this resource because of its potential to revitalize and develop tourist destinations [4]. Territories endowed with water resources can offer a wide variety of products and experiences related to water. Some of these products and experiences are new and recent, such as water menus or floating hotels, by which the physical and visual interaction with this element is constant. Other products and experiences are revivals of traditional and ancient ideas and practices related to water that have—to varying degrees—continued to have a presence in societies from the beginning of history to the present, such as the thermal use of mineral waters that, thanks to their curative properties, can enhance one's physical and psychological wellbeing. According to McKay et al. [5], the amount of time spent in a place can be an important factor in determining the satisfaction of the visitors of a particular site or the participants in a particular experience. Therefore, it is necessary to offer enough, varied activities to encourage longer stays at a given water-based tourism destination.

According to Santarém [6], the development of ecotourism activities in destinations characterized by the presence of abundant reserves of water requires greater research so that the needs of the tourism industry can be compatible with environmental goals, avoiding uses that can damage these fragile socioecological systems.

This paper aims to explore the opportunities offered by water resources in the Extremadura region of Spain in order to determine the tourist activities that can lead to new strategies for sustainable water management, promoting the responsible conservation of local water-based ecosystems and the wellbeing of humans. To achieve this objective, an exploratory empirical study was carried out using both qualitative and quantitative methodologies for the collection of primary data. Regarding the qualitative study, in-depth interviews were conducted with managers of the tourist establishments that focus on the use of water. The quantitative study consisted of the dissemination of an original and structured survey targeting tourists visiting Extremadura in order to enjoy products and landscapes linked to water. The paper is organized in six sections. Following the Introduction, Section 2 describes the relationship between water and tourism. Section 3 details the methodology, the study area, and the materials used to carry out the empirical study. Section 4 lays out the results of the study, Section 5 analyzes the results, and Section 6 presents conclusions.

2. The Relationship between Water and Tourism

Beyond its well-known industrial and energy uses, water offers a wide variety of opportunities for recreational and tourist activities [7]. The relationship between water and tourism is characterized by a dual understanding of this element: as a precious resource and as an attraction. Considering water to be a valuable, scarce resource, researchers have conducted studies focused on identifying practical and business initiatives through which water-based tourism can be developed without jeopardizing the quality and availability of water resources. In this sense, the relationship between water and tourism is focused on sustainability [2,8,9].

On the other hand, as a tourist attraction, water represents a resource with a strong potential to attract tourists. Different types of bodies of water can sustain several, diverse forms of tourism, such as beach tourism, river tourism, tourism of reservoirs, lakes, and natural pools, and tourism of thermal waters. The latter must undoubtedly be considered to be the oldest form of tourism in general and, certainly, the oldest form of water-based tourism, in particular. According to Molina [10] (p. 33), the elements that influence current tourism trends can be found in the historical phenomenon of thermal baths, which predated the 20th century. Indeed, taking baths in natural, warm waters motivated the tourist patterns of the 19th century. Such natural hot springs and spas gave birth to an entire industry of services, including accommodations, catering, entertainment, and complementary activities, which offered a complete, touristic experience beyond the hydrotherapies offered by the thermal waters themselves. This phenomenon contributed to the establishment of thermal spas as the origin of a new hospitality industry, which favored both the economic growth of these areas and a new interest in preserving the water resources upon which such wealth and wellbeing depended [11].

The rise of new forms of tourism, such as beach tourism, together with the decrease in the interest in homeopathic health treatments as a result of the spread of modern medicine and drugs, has led to a gradually declining interest in hot springs, which, deprived of their therapeutic value, have become less popular options for leisure and recreation [12]. However, it is worth noting that the emergence of new health problems that are afflicting societies in the developed world, such as stress, physical inactivity, and chronic diseases, has highlighted certain weaknesses of the modern public health agencies. For this reason, public health organizations are seeking to increase the health and wellbeing of people through alternative routes (e.g., outdoor activities, appreciative outdoor recreation, etc.), in which water-based experiences can be included [5], thus creating an opportunity for a renewed interest in hot springs.

From an economical perspective, thermal tourism has remained relevant and attractive because of its target audience—the elderly. This segment of the population not only represents the largest portion of modern society, but it also typically possesses the most important currencies in the tourism sector—time and money. As a result, thermal tourism has the potential to endure fewer seasonal limitations and longer average stays than other forms of water tourism [13,14]. Nevertheless, even if it could be argued that thermal water activities represent the greatest and earliest example of the dual purpose and benefits of water tourism, it must be reiterated that, from a commercial perspective, this type of tourism has experienced a gradual decline in popularity because its medicinal and healing attributes may be less well known amongst younger audiences, who tend to be more interested in conserving the natural beauty of water than in its healing potential.

In any case, new and growing trends and mentalities with respect to water-based landscapes and activities have begun to emerge in today's society [3]. Moreover, these practices have become popular, because they are linked to various cultural values that are appreciated by diverse consumers, including health, wellbeing, and respect for nature. Thus, water-based tourism initiatives are being proposed in response to the growing demand of current consumers. In addition, these experiences are becoming attractive to new groups of tourists, such as groups of friends, families with children, and young people [5,15,16].

From an environmental perspective, these types of tourism offer important opportunities for the development and implementation of new sustainable models for the management of water resources, which have a positive impact on the conservation of the environment, biodiversity, and local ecosystems [17]. Thus, water-based tourism initiatives have the potential to turn this resource into a sustainable economic and social asset, and through tourism, water can be utilized as an engine for regional development, the protection of unique ecosystems [3], and the improvement of the quality of life for tourists and local communities [4].

3. Materials and Methods

3.1. The Study Context

The Spanish region of Extremadura is characterized by a dry Mediterranean climate, where rainfall is scarce and distributed in an uneven manner throughout the territory and the year. Despite this, this region has traditionally been considered to be an area where water is abundant due to the presence of large hydrographic reserves, mainly supplied by the waters of the Spanish Central System and by two large rivers—Tajo and Guadiana [18]. The Extremadura region's water reserves have a storage capacity of 14,225.71 hm³, which is almost fully utilized (10,709.78 in 2010) [7]. Therefore, water is a prominent resource in the orography of the region, and water inevitably marks this territory in terms of its landscapes and activities. Figure 1 shows the hydrographic resources of the region of Extremadura and the main establishments that take advantage of some of the local water resources for tourism purposes.



Figure 1. Hydrographic resources of Extremadura and water-based tourism establishments. (Source: Adapted from <https://www.actticsociales.com/geografia-3-%C2%BA-eso/clima/el-clima-en-extremadura/> (accessed on 7 November 2018).).

3.2. Methodology

The present work adopts an exploratory approach and considers Extremadura, a region located in the southwest of Spain, as a suitable study area. In order to analyze the role of water-based

tourism activities as a potential strategy for the protection and defense of the water ecosystems of the region, we have developed a qualitative and quantitative research approach that has helped to obtain a comprehensive view of the water-based tourism industry and its potential implications for the conservation of local ecosystems by obtaining the perspectives of the supply side (the qualitative inquiry) and the demand side (the quantitative inquiry) of the industry. In the qualitative inquiry, in-depth interviews were conducted with managers and owners of tourist establishments, whose business models are based on products and experiences linked to water, such as baths and hot springs, walks in landscapes where water is a major feature, and the observation of aquatic birds, among others. The information collected from the in-depth interviews on the supply side helped to inform the interpretation and analysis of the quantitative data regarding the demand side and vice versa.

The qualitative research was focused on the study of the supply side of the water-based tourism sector in Extremadura. During November–December 2017, we interviewed 10 respondents in the establishments they own or manage. They were interviewed using an original questionnaire with free-response questions focused on gathering information regarding the following issues: the history and idiosyncrasies of the water-based establishments, new market segments for attracting consumers, the services offered, the loyalty of the consumers, the products offered, complementary services, communication strategies, and the benefits the local area enjoys as a result of the water-based tourist establishments. Each interview lasted approximately 90 min.

In order to obtain a comprehensive understanding of the phenomenon of water tourism and its positive impacts on the wellbeing of individuals and the conservation of ecosystems, this qualitative approach was completed in conjunction with a quantitative study focused on exploring the demand side. The quantitative study was designed to evaluate tourists' satisfaction with the water-based products and services they experienced during their holidays, the improvements they perceived in their quality of life, and how these factors impacted their loyalty to the experience, as well as the conservation impact on local natural ecosystems. The survey was conducted in the form of a self-administered and structured questionnaire. It was developed based on the previous scientific literature on the issues of experience, quality of life, satisfaction, and loyalty. The survey was distributed among tourists who were visiting water tourism establishments in the region of Extremadura. The dissemination of the questionnaires was performed via two methods: (1) the paper-and-pencil method onsite in the establishments and (2) online questionnaires prepared with Google Forms and disseminated through the customer databases provided by the establishments that took part in the study. The survey was organized into 12 questions. In questions 1–6, the respondents could express their habits, interests, frequency of use, and preferences about the water-based tourism activities. Questions 7–9 encompassed the core issues of the research, asking the respondents to evaluate their water tourism experience, their perceived enhancement in their personal quality of life, their satisfaction with and loyalty to the experience, and their loyalty to the destination. Finally, questions 9–12 addressed the sociodemographic characteristics of the respondents. The questionnaire was prepared and distributed in Spanish. A final sample of 184 valid entries was collected. The sample was conveniently selected by applying a non-probability sampling technique. The survey data were collected from 3 November–24 December 2017.

To ensure that no significant bias was introduced into the analysis of the data collected with the two methods described, a *t*-test for independent samples was performed. This analysis revealed that there were hardly any significant differences for the indicators that made up the questions in this study. Only 7 out of 44 of the total indicators showed statistically significant differences. We understand that this result may suggest a possible bias, but we deemed it acceptable when unifying both samples for analysis. The data were analyzed with the statistical program IBM SPSS Statistics, Version 22.

3.3. Scales of Measurement

Based on our research of the literature, variables were identified to correspond to the objectives of this study. These variables were as follows: the tourists' evaluation of the water-based tourism

experience, their evaluation of their quality of life after the experience, their satisfaction with the experience, and their loyalty both to the type of experience and to the destination. The measurement of these variables was made based on scales that have already been tested in previous studies in different contexts [19–22]; however, slight modifications were made so that the scales of measurement would fit the new research scenario.

The scales used in this study are detailed in Table 1. A total of 32 items was employed to measure the selected variables. The reliability of the scales, with respect to their adaptation to the water-based tourism experiences, was measured with Cronbach’s alpha. The results show that the adapted scales were highly reliable, because the Cronbach’s alpha values were calculated to be above 0.86 (see Table 1). All the variables were assessed using a 5-point Likert scale.

Table 1. Measures and reliability of the scales.

Variable	References	Dimensions	Items
<i>Experience</i>	Song et al. (2015) [19]	Entertainment $\alpha = 0.901$	[ENT1] This water-based tourism experience is fun.
			[ENT2] This water-based tourism experience is enjoyable.
			[ENT3] This water-based tourism experience is entertaining.
			[ENT4] This water-based tourism experience is interesting.
		Educational $\alpha = 0.861$	[EDU1] This water-based tourism experience makes me more knowledgeable.
			[EDU2] This water-based tourism experience is educational.
			[EDU3] This water-based tourism experience allows me to learn more about its benefits for health.
		Escape $\alpha = 0.883$	[ESC1] This water-based tourism experience allows me to forget my daily routine.
			[ESC2] This water-based tourism experience allows me to have a break from the routine.
			[ESC3] This water-based tourism experience gives me a chance to see myself in a new way.
		Esthetics $\alpha = 0.872$	[EST1] This water-based tourism experience is attractive.
			[EST2] This water-based tourism experience is pleasant.
[EST3] This water-based tourism experience is appreciable.			
[EST4] This water-based tourism experience allows me to harmonize myself with the environment.			
<i>Quality of life</i> $\alpha = 0.921$	Sirgy et al. (2011) [20]	-	[QOL1] This water-based tourism experience has improved my quality of life.
			[QOL2] This water-based tourism experience has made me feel more satisfied with my life.
			[QOL3] This water-based tourism experience makes me feel good about my life, even though I have my ups and downs.
			[QOL4] This water-based tourism experience has enriched my life.
			[QOL5] This water-based tourism experience makes me feel happy.
<i>Experience satisfaction</i> $\alpha = 0.945$	Kim et al. (2015) [21]	-	[ESA1] My overall evaluation of this water-based tourism experience is positive.
			[ESA2] My overall evaluation of this water-based tourism experience is favorable.
			[ESA3] I am satisfied with this water-based tourism experience.
			[ESA4] I am pleased with this water-based tourism experience.

Table 1. Cont.

Variable	References	Dimensions	Items
<i>Experience loyalty</i> $\alpha = 0.874$	Mechinda, Serirat & Gulid (2009) [22]	-	[ELO1] I am loyal to water-based tourism experiences.
			[ELO2] My next trip will include some water-based tourism experience.
			[ELO3] I would choose a water-based tourism experience again.
			[ELO4] I would recommend these water-based tourism experiences to people who seek my advice.
			[ELO5] I would tell others positive things about these water-based tourism experiences.
<i>Destination loyalty</i> $\alpha = 0.903$	Kim et al. (2015) [21]	-	[DLO1] I would recommend to others this destination.
			[DLO2] Revisiting this destination would be worthwhile.
			[DLO3] I will revisit this destination.
			[DLO4] I would like to stay more days in this destination.

4. Results

4.1. Results of the Qualitative Research

The in-depth interviews provided significant insights into how the managers of the facilities that offer water-based tourism experiences Extremadura value this sector of the regional tourism industry. With this data, it was possible to extrapolate information regarding the benefits of these practices for both people and territories and thus confirm the thesis proposed by this work, that is, the importance of promoting tourism practices that emphasize environmentally sound uses of water to guarantee the quality and conservation of water ecosystems, human welfare, and the improvement of the quality of life of locals and tourists. The questions in the interviews related to the following issues: the history of the establishments, the current situation, the loyalty of current consumers, the current products, new products, new and future consumers, additional services, communication strategies, and the benefits for the region.

Most owners/managers stated that the water-based tourism establishments had histories linked to the healthful and healing properties of their waters. They experienced either a resurgence or the start of their businesses in the 19th century as “*Casas de Baños*” (bath houses). The beneficial properties of their waters have been demonstrated by the great numbers of both locals and tourists who have sought to improve their quality of life through physical contact with and, in some cases, the therapeutic use of these resources.

Most of the water-based tourism establishments are located in natural areas of the region, surrounded by vegetation, impressive landscapes, and unique natural enclaves, which favor relaxation and wellbeing. Current consumers have shown highly loyal behavior, as the respondents indicated a repetition rate of greater than 30%. Thus, the tourists visiting these establishments have had satisfactory and beneficial experiences to the point that they have chosen to repeat the experience.

With regard to the current products, many treatments are still offered for their health benefits (such as thermal baths at certain temperatures or with jets of water) and are still very linked to their healing value. However, all the respondents agreed about the need to innovate to develop new products. The new frontier for water-based tourism establishments is the creation of products that are more focused on wellbeing and are capable of mitigating stress and promoting relaxation, aesthetics, and spirituality, given that the younger generations appear to devote special care to their physical and mental wellbeing. These services will be suitable for attracting new clients who are interested in beauty and improving their quality of life. These establishments must transmit values related to wellbeing, relaxation, healthy lifestyles, and respect for nature. These new products should not replace the current products, but rather supplement the existing demand created by consumers interested in utilizing the healing properties of such water resources. This change would attract new consumers interested in

enhancing their personal quality of life through recreational activities that provide physical and mental benefits from the properties of natural resources such as water. Although they do not yet represent a significant number, families with children are increasingly becoming a new target population, because they are seeking innovative tourism products to enjoy together. Water tends to amuse children and relax adults. As a consequence, the respondents pointed out that there are activities that are gradually being added to the traditional offerings of these establishments. These include the sighting of waterfowl or walks along the paths of rivers or around water reservoirs.

Most of the respondents stated that the communication strategies of these kinds of establishments also need to be revitalized to give off a fresher image and appeal to middle-aged people who value the possibility of recovering their energies through contact with a healthy, natural environment.

The most interesting information that emerged from these interviews was certainly the existing link between the tourists' use of the water resources and the benefits for the local communities. The respondents identified several advantages for the territories that house establishments that offer tourism products based on the valorization of water as a unique resource. These benefits include the following: the improvement of access infrastructure and signage; the active involvement of local communities in the conservation of natural ecosystems where water is a prominent feature in order to continue to derive advantages from the responsible use of this resource—an impulse for economic, social, and local development; increases in the sales of local products, industries, and services; the greater popularity of the destination in the national and international tourism markets; greater appeal to a class of consumers who are respectful and sensitive to environmental issues and who value tourism practices that guarantee the protection and safeguarding of unique natural resources, such as waters with hydrotherapy properties; and the increase of the potential for the economic development of the area of influence.

The interviews confirmed the positive role played by tourist establishments that offer products linked to water and that promote the sustainable use of water for the territory, the local community, and for tourists. Such establishments respond to consumer demands for products focused on improving wellbeing and health by facilitating contact with natural resources.

Thus, the presence of such establishments, whose business models are based on using and experiencing local, hydrographic resources, can become successful tourist attractions and, at the same time, conserve and protect local water ecosystems.

4.2. Results of the Quantitative Research

The total sample consisted of 184 surveys. The respondents were 37.0% men and 57.6% women. The largest age bracket was "more than 55 years" of age (59.8%), followed by the age range from "46 to 55" years of age (16.8%). Most of the respondents came from other Spanish regions (56.5%), followed by respondents from Extremadura (40.2%) and respondents from other countries comprising only 1.1% of the sample. Regarding their level of education, the largest group of respondents declared that they had studied at a university (36.4%), followed by the group of respondents stating that they had obtained higher education (32.1%).

4.2.1. Characteristics of the Sample with Regard to Water-Based Tourism Experiences

Regarding their last tourist experience related to water and health, 136 respondents reported having visited a health resort, followed by those who opted for a spa (31) and those who visited a natural place where water is the main resource (31). Taking a ride on a river boat was the activity with the fewest responses (14). Some respondents (10) reported having performed other activities, such as having taken a cruise (3) or having visited Arab baths (3) (see Figure 2).

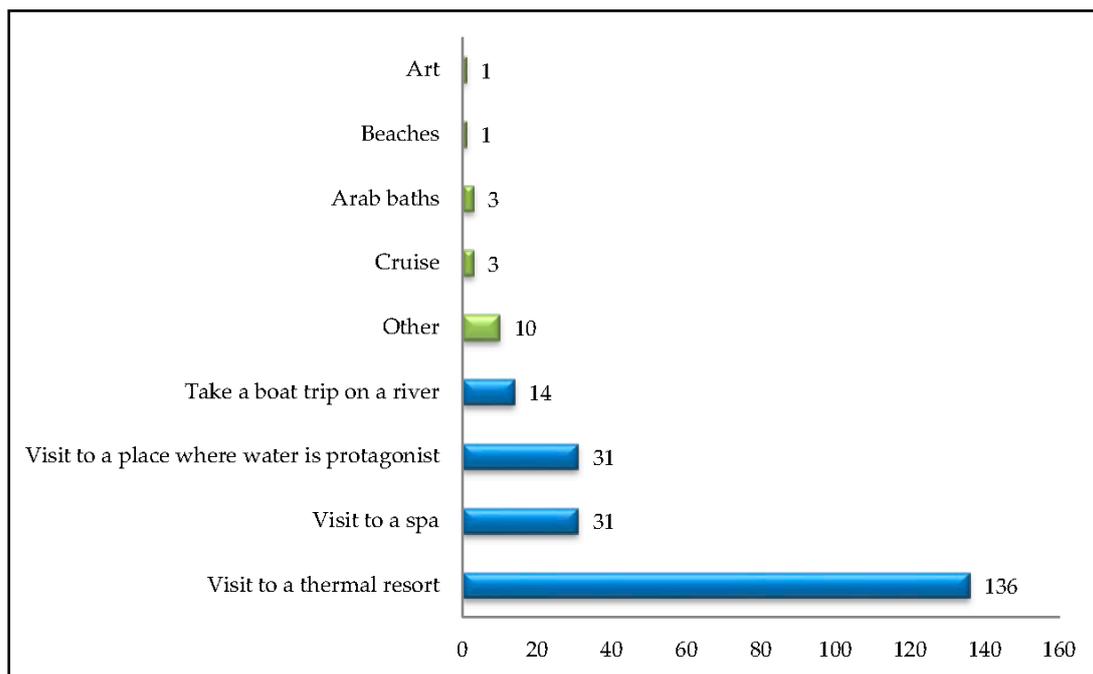


Figure 2. Water-based tourism experience recently lived.

With regard to the interest that the respondents expressed in the tourism experiences based on water and health, the most valued selection was “visiting thermal resorts” (3.87 out of 5), followed by “observing landscapes related to water” (3.68), “visiting fluvial beaches” (3.41), and “making trekking routes related to water” (3.35), respectively. It is worth noting that visiting spas ranked in the fifth position (3.09) (See Figure 3). This result can be explained by the appreciation that current consumers have for the hydrotherapy properties of mineral waters that are not found in spas, which use running water. The least valued activity was that of “requesting a water menu in a restaurant” (1.87), which was perhaps caused by the relative ignorance of the respondents regarding this particular product and its incipient introduction in a small number of restaurants.

The analysis of the distribution of the data showed a small disparity in the registered valuations; therefore, there existed a certain level of agreement in the findings as standard deviation’s values vary from 1.312 and 1.014. It must be emphasized that, except for the water menu, the indicators had an assessment level of above 2.5 out of 5, which indicates that, in general terms, consumers have a significant interest in the activities proposed, with a preference for visits to thermal resorts, followed by observations and enjoyment of water in nature (i.e., observation of landscapes and visits to river beaches and hiking trails), respectively. Therefore, there is a clear link between the enjoyment of water-based tourism activities and the need for the proper conservation of water ecosystems. Tourism practices, through diverse activities focused on emphasizing the potential of water resources, can enhance a new awareness of and interest in the management of local water resources, not only because of their environmental value, but also for their economic and social significance.

With regard to the tourists’ perceptions about the water-based tourism experiences, Figure 4 shows that the surveyed sample of respondents demonstrated that they understood that water-based tourism experiences provide health benefits considering the high average score for this indicator (4.24). Similarly, the respondents showed a high level of interest in including water-based tourism experiences in their trips (4.01), so it can be inferred that there is a potential, latent demand for these types of activities. In addition, the respondents confirmed that they chose to include water-based activities in their trips, foreseeing the opportunity to improve their health (4.01), so the health benefits offered by this kind of practice were again corroborated by the results obtained here. Again, it is important to

highlight the small distribution of the collected data (Standard deviation between 0.968 and 0.777), which indicates great agreement in the values of the averages obtained.

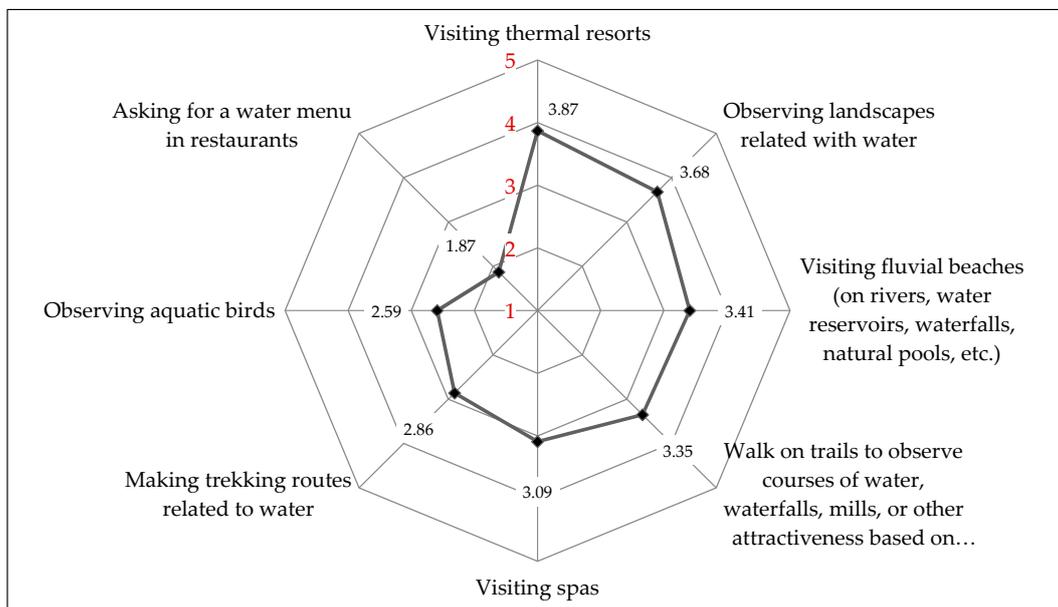


Figure 3. Interest in water-based tourist experiences (means).

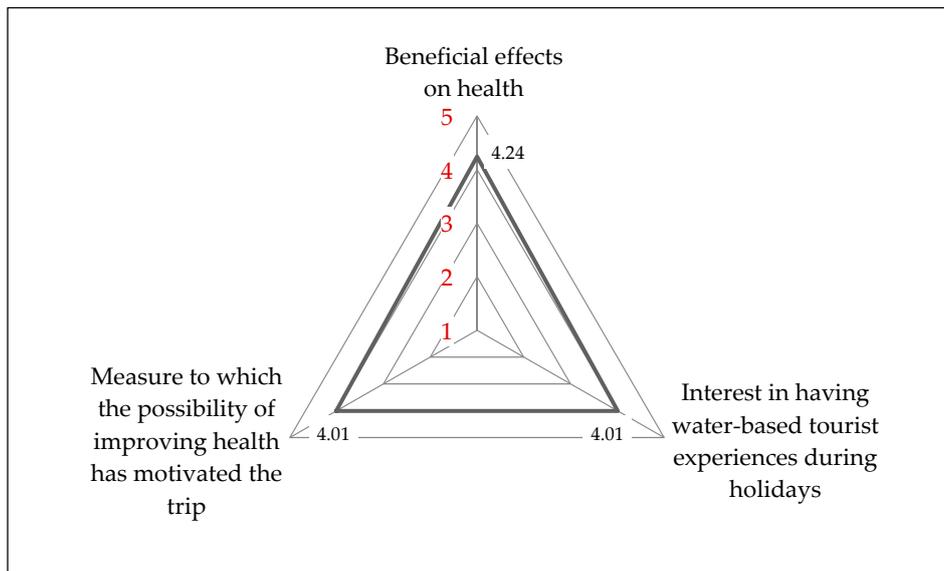


Figure 4. Perceptions about the water-based tourism experiences (means).

4.2.2. The Assessment of the Water-Based and Health-Related Tourist Experience and Its Impact on Quality of Life, Satisfaction, and Loyalty

Figure 5 shows the assessment of the tourist experience based on water and health. As can be seen, the ratings were high for all the dimensions of the experience according to the model of the 4Es proposed by Pine and Gilmore [23]—entertainment, education, escape, and esthetics—as all the average values were calculated to be above a 3 out of 5.

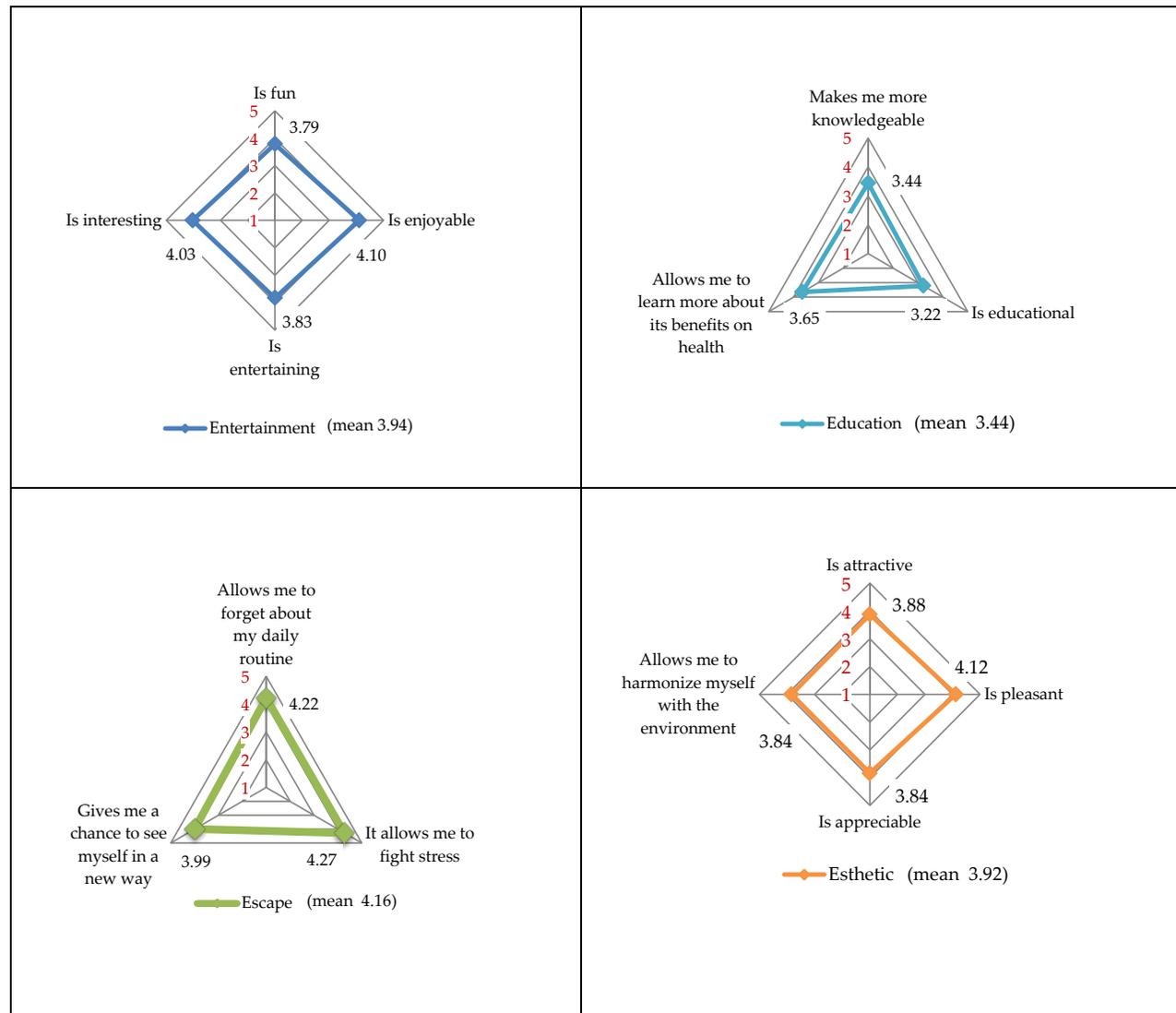


Figure 5. Assessment of the variable Experience (means).

With regard to the “entertainment” dimension (3.94), the “enjoyable” attribute (4.10) was the most selected characteristic, followed by “interesting” (4.03). The respondents found that the water-based tourism activities provided a fun experience not necessarily associated with therapeutic practices or needs. Additionally, the respondents considered these practices to be “interesting”, which suggests that these activities also aroused interest on a cultural level.

The “education” dimension had a lower overall rating compared with the rest of the dimensions, nevertheless, it had a high average rating (3.44). It was the dimension with which these experiences were least associated. The average value obtained by the item regarding the respondents’ ability “to learn more about [the experiences’] health benefits” was 3.65 out of 5. Therefore, the respondents understood that water-based experiences or experiences that take place in ecosystems with important water resources have an educational component, although this dimension was not the predominant feature of their experiences.

The opposite occurred with respect to the “escape” dimension, which obtained the highest average rating (4.16). The most valued selection related the respondents’ ability “to combat stress” (4.27), followed by the fact that the experience allowed them “to forget routine” (4.22). This result for the “escape” dimension is remarkable, because it corroborated the importance that contact with water can have for the psychophysical wellbeing of people and, therefore, the importance of taking care of natural spaces and ecosystems that encourage the prosperity of this resource.

Finally, with regard to the “esthetic” dimension (3.92), this activity was valued as pleasant (4.12), with the positive repercussions that this had for health and enjoyment.

The standard deviations were small, showing a generalized agreement in the obtained valuations and comments (values between 1.108 and 0.848).

The respondents maintained that water-based tourism activities contributed positively to their quality of life, judging by the high average values obtained by the indicators of this variable (above 3.5) (See Figure 6), as well as the low dispersion of the data (values from 1 to 1.060). Mainly, the respondents recognized that the tourist experiences associated with water improved their perception of their quality of life and made them feel happier (4.03).

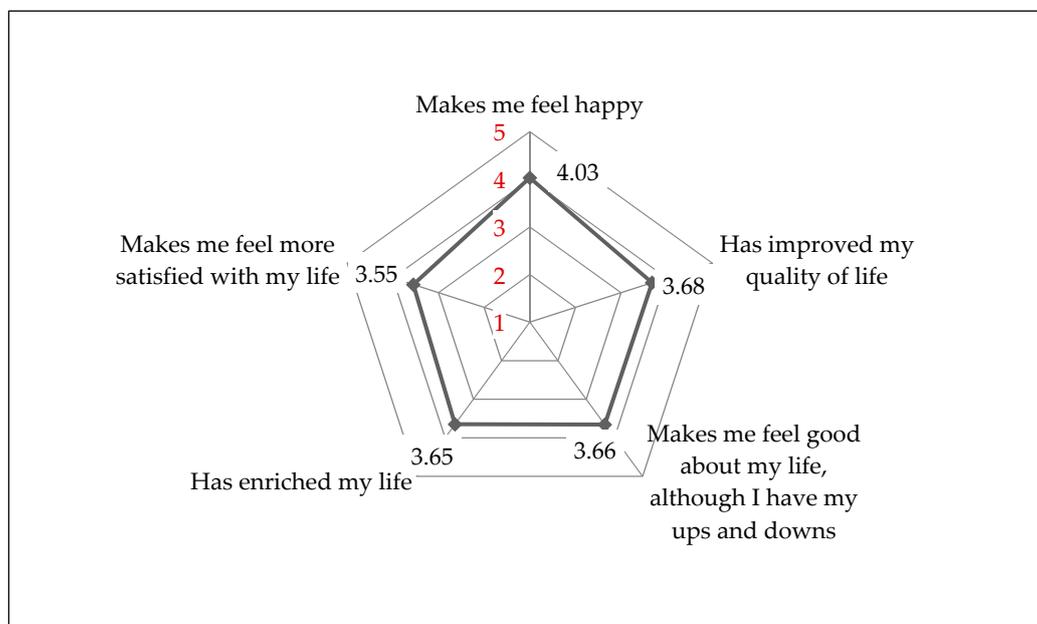


Figure 6. Assessment of the variable Quality of Life.

With regard to the assessment of their satisfaction with the experience, this variable received an excellent valuation based on the average of its indicators—higher than 4.2—and the high concentration of the data (Standard deviation between 0.838 and 0.901). In summary, we can conclude that people who engage in water-based tourism experiences often feel highly satisfied. The average obtained by the indicator that the respondents were “satisfied with this water-based tourist experience” (4.29) stood out among all the other indicators of this variable (See Figure 7).

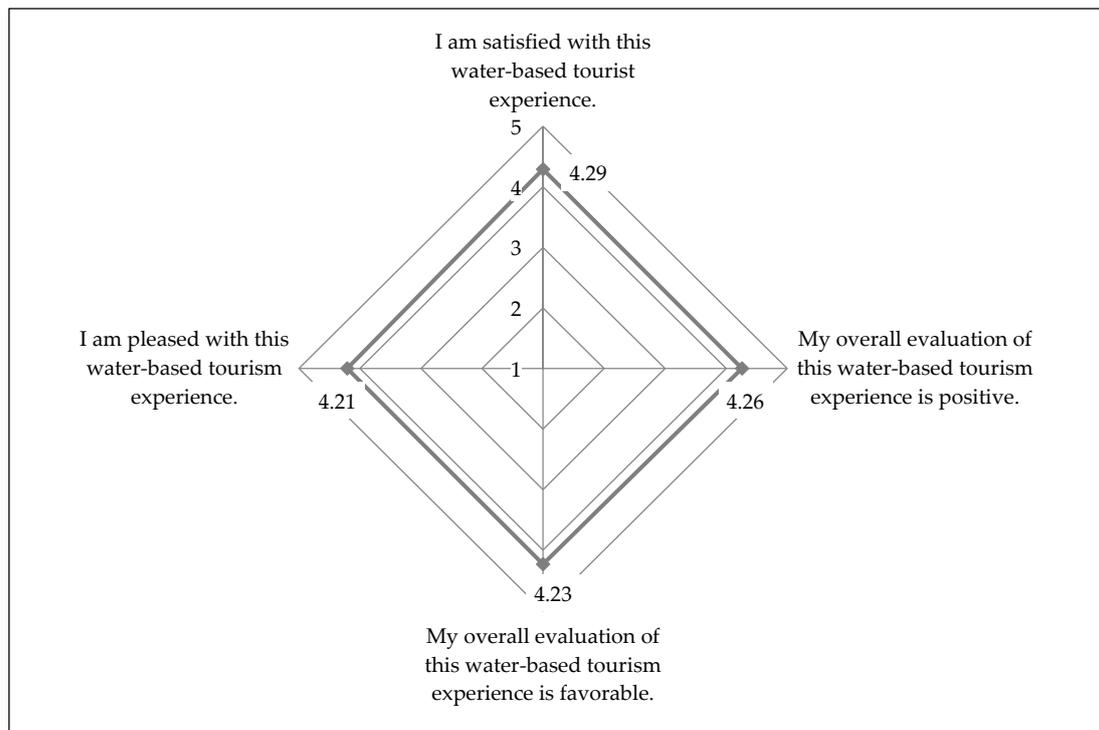


Figure 7. Assessment of the variable Satisfaction with the experience.

Finally, the results achieved for the variable regarding loyalty, which was assessed according to two dimensions—loyalty to the experience and loyalty to the destination—showed high average valuations of their indicators (above 3.6), obtaining an almost equal average for both dimensions (4.07 for loyalty to the experience and 4.19 for loyalty to the destination).

With regard to loyalty to the experience, the most valued indicators were “the intention to recommend the water-based tourist experience” and “to give positive comments about it” (4.34, in both cases). Then, the indicator of “the intention to repeat the experience in the future” received the next highest valuation (4.23). These indicators reflected high loyalty to the experience, which translates into the profitability of the businesses that focus on water-based tourism experiences.

With regard to loyalty to the destination, the indicator relating to “recommend[ing] this destination to other people” stood out (4.35) among the others, followed by the indicator stating that “revisiting this destination would be worthwhile” (4.29) (see Figure 8). These results confirm that enjoying water-based tourism experiences can drive the visitors’ intention to recommend and revisit the territory in the future and, therefore, contribute to the economic development of the area over the long term (see Figure 8). Data are highly concentrated (Standard deviations between 0.847 and 1.105).

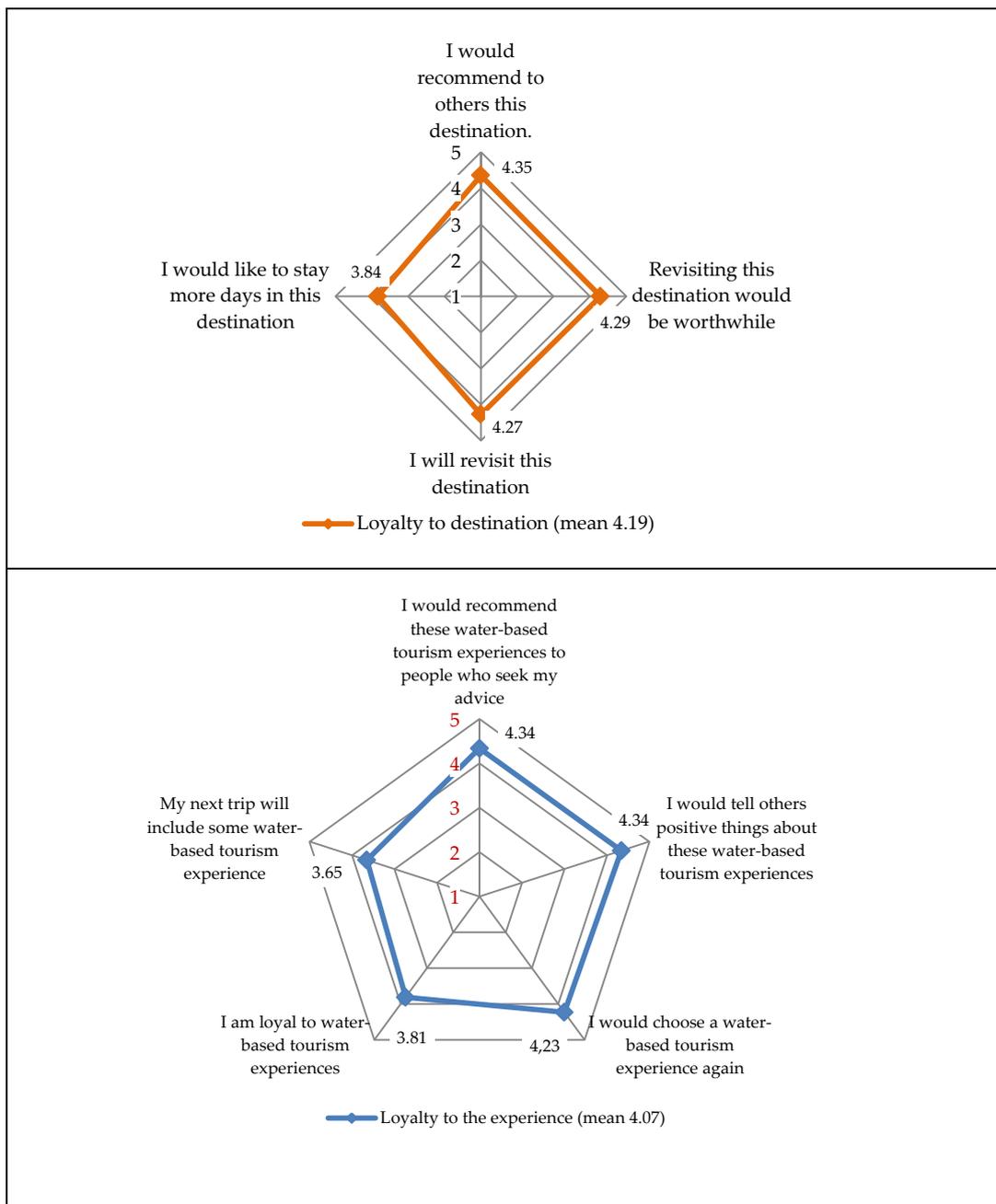


Figure 8. Assessment of the variable Loyalty.

5. Discussion of the Results

The scientific literature has shown great interest in the relationship between water and tourism, this being an industry that, similar to many economic activities, is very dependent on natural resources and can often encourage unsustainable uses of such resources [24]. However, Grössling et al. [2] has pointed out that there is still little research aimed at promoting the sustainable management of water in the tourism industry and that tourism is a sector that consumes more water and pollutes more hydrographic resources than expected, which makes it necessary to develop a new approach to the tourism–water relationship.

The thesis proposed in this work was that water-based tourism experiences have the potential to spread a new awareness about the responsible use of this resource, so that tourism can go from being

an exploitative sector to being a functional, conscientious, and educational sector for its strategic and purposeful use and conservation in terms of quality and quantity.

The data obtained in this research confirmed the positive relationship between the development of water-based tourism activities and the rise of a new understanding of this resource as a vehicle for the wellbeing of individuals and for the conservation of water-based ecosystems.

This work has addressed three major issues currently in the forefront of the scientific literature on tourism—the search for unique experiences, the improvement of the quality of life, and ecological sustainability [2,19,20]—highlighting an opportunity to give water a renewed value within the tourism context and thus to develop a positive relationship between the development of tourism and the conservation of natural and unique ecosystems based on these resources.

The qualitative research highlighted some aspects with regard to the water-based tourism establishments of Extremadura.

Most of them are family run business, whose mayor attraction has to be seen in the healthy properties of their thermal waters, some of them known since the romans times. Their popularity got to its maximum point during the XIX century as Bath Houses. Their success is attributable to the water properties, chased by those who wanted to enhance their mental and physical wellbeing. The in-depth interviews revealed that the major part of these establishments are located in outstanding natural environment, where the thermal properties of their water can be combined with the attractiveness of their natural surroundings, which represent a significant motivational factor for tourist visits.

However, to the purpose of this research, the most significant result obtained from the qualitative study has to be identified in the positive impacts that these types of activities have on those environments where water is a main resource and a determining factor in the definition of landscapes, ecosystems, and economic activities. The managers of tourist establishments taking advantage of local hydrological resources, such as hot springs, rivers, or reservoirs, affirmed that the tourist valorization of these resources creates a great socioeconomic and environmental impulse to protect these areas. Water-based tourism practices, in fact, give rise to a type of tourism that attracts a segment of consumers aware of and attentive to environmental issues and who, therefore, appreciate the use of water in a respectful and conservative approach.

On the other hand, the results achieved with the quantitative research, provided a snapshot of the consumers' profile of these kinds of establishments and products.

The current users of water-based products are, in their major part (59.8%), elderly people (over 55). This group of consumers looks for the therapeutic properties of thermal water and treatments. However, the results show also an increasing interest in water-based experiences by younger users who appreciate most the potential of these waters for enhancing personal relaxation, wellbeing and esthetics. This reflects also in the kind of water-based experiences preferred by respondents. Even if, "Visiting a thermal resort" is still the most popular choice, it cannot be disregarded that a significant number of informants declare to be interested in other water related activities such as, "observing water-related landscapes", "visiting fluvial beaches" or walking throughout landscapes with the chance to see some water bodies: waterfalls, mills, etc. These results show the presence of a new and latent marketing opportunity for water-based tourism establishments, showing the potential of attracting new segments of consumers and so, refresh their image and market position.

In addition, in line with Pueyo-Ros [4], the results of the quantitative study confirm the close relationship between contact with natural spaces with high environmental value and the enhancement of individuals' mental and physical wellbeing. According to the assessment of water-based experience performed in this research, these kinds of activities are highly valued by consumers, both in terms of the experience itself and with respect to consumer satisfaction (earning values higher than 3.5 out of 5 in this study). Similarly, these activities demonstrate a high potential for earning consumer loyalty, because most of the respondents declared the intention to visit the destination again or repeat similar experiences in future trips. Thus, it has been confirmed that contact with water resources

during vacations helps to enhance people's quality of life, which, in turn, has behavioral consequences, influencing consumers to revisit a destination and repeat that kind of experience in the future.

The results confirm the close link between tourism and water ecosystems. Water is an element with great potential for the development of tourism products that appeal to the expectations of modern consumers. Moreover, water-based tourism practices can play a strategic role in the conservation and the safeguarding of unique natural ecosystems. According to Willis [25], this focus on the tourism–environment relationship offers a wide range of new opportunities aimed at emphasizing individual wellbeing and the health of unique environments.

6. Conclusions

The objective of the study was to identify the role that water-based tourism initiatives can play as a strategic tool to achieve more responsible use, conservation, and protection of water ecosystems and the dissemination of a greater awareness about the value of this resource, which is a necessity for wellbeing, human activities, and the conservation of the environments that sustain our societies and economies.

The contribution of this research is the identification of water-based tourism activities as a suitable vehicle for achieving the proper management and safeguarding of unique water ecosystems. The results of a qualitative and quantitative study carried out in the Spanish region of Extremadura show that tourism is an industry that can make a great contribution to this goal. New tourism trends emphasize the importance of offering experiences rather than functional products and the interest of consumers in achieving a better quality of life and wellbeing as a result of a trip or holiday. This was made clear by the intentions of the local managers to modernize the current business models of their water-based tourism establishments in order to attract new tourist populations, such as young people and families with children. Similarly, the quantitative data showed the positive evaluation made by tourists about the water-based tourism experience, focusing on the fact that it provides aspects of escape (4.16 out of 5) and entertainment (3.94 out of 5). These results highlight the new mindset that can be promoted regarding water-based tourism experiences, which is not necessarily linked to the therapeutic or medical value of water. Contact with water during holidays can be fun as much as it can be relaxing.

In addition, even though the educational dimension of the water-based tourism experiences was the lowest rated by the tourists (3.44 out of 5), it still received a high rating, which demonstrates the beginning of a new trend in the tourism–water relationship. Tourism proposals based on natural water resources, in addition to encouraging local development, have the potential to encourage the dissemination of a new cultural mindset regarding water that considers this element to be a unique resource with plenty of tangible and intangible values. Due to its properties, water can turn a traditional tourist destination into a multidimensional experience, emphasizing the beauty of its landscapes, the relaxation it provides, its hypnotic sounds, and its irreplaceable value to achieving balance in and sustainability of local environments.

Considering the above, it could be argued that water provides tangible and intangible wealth to human beings and that its value from a tourism perspective has the potential to drive new strategies for development that are capable of encouraging economic innovation, environmental sustainability, and social wellbeing for both tourists and local communities. This is made particularly clear by the results obtained regarding both tourists' satisfaction (all the assessed items obtained values higher than 4 out of 5) and loyalty (all the indicators received scores of over 3.6 out of 5).

Based on the results of this study, it is possible to conclude that water-based tourism experiences can promote the development of quality tourism, practiced by consumers who are sensitive to environmental issues and interested in getting in contact with thriving and well-preserved natural settings due to the positive effects that such environments can have on their perceived happiness. Indeed, this research shows that water-based tourism experiences are perceived by consumers to be

highly beneficial for their general wellbeing, as the respondents perceived some enhancements in their personal quality of life after coming into contact with these natural resources during their holidays.

The results also reflect some useful managerial insights for tourism companies and the natural enclaves linked with hydrographic resources. Tourism companies and destination managers can utilize water resources as a strategic tool for innovation and competitiveness. New products and experiences, beyond the traditional thermal/medical treatments, can be outlined (e.g., yoga and mindfulness) in order to attract a younger and larger consumer base. Moreover, the practical implications of this research can be seen in the significance of these new tourist practices for the proper and sustained conservation of water ecosystems. The renewed value of hydrographic resources from a tourist perspective favors their protection due to the economic benefits that the tourism industry can generate for local communities in terms of employment, entrepreneurial opportunities, and social reinforcements.

One of the main limitations of this work is its exploratory nature, which provides only an initial approach to this topic. Similarly, from an empirical perspective, the data were obtained by a small, non-probability, conveniently selected sampling; thus, the results should only be interpreted within the context of this research.

On the basis of these limitations, future works should try to address these issues by carrying out more detailed studies aimed at confirming, with stronger statistical analysis, the causal relationships that link together water-based tourism experiences, the consumer-perceived enhancement in personal quality of life, and the improved conservation of water resources and ecosystems as a result of responsible, touristic use.

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