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Tourist taxation as a sustainability financing mechanism for mass tourism destinations

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Abstract

Tourism taxation is one of the tools that can effectively contribute to obtaining resources that favor the development of policies to improve sustainability and the tourist experience in the destination. In this context, the objectives of this research are, on the one hand, to identify tourist preferences when offered 15 different taxes and fees, and, on the other hand, to identify which socio-demographic factors and trip characteristics condition the tourist's willingness to pay (WTP) of the five most accepted taxes and fees. This study was carried out in Andalusia, a region in southern Spain with a mass tourism specialization.

KEYWORDS

Andalusia, mass tourism, sustainability, tourism experience, tourism taxation

1 | INTRODUCTION

Of the different models of specialization, mass tourism is often considered among the most responsible for the impacts generated by tourism; being that it is incompatible with the concept of sustainability (Budeanu, 2005). Additionally, the profile of the tourist has changed significantly in recent years. Tourist destinations are faced with a more complex and experienced tourist demand with greater levels of personalization, quality, authenticity, and memorable experiences (Brandão et al., 2019). However, there is also a growing concern for the tourist regarding aspects related to the environmental, social, and cultural impacts that tourist activity can have (Pulido-Fernández & López-Sánchez, 2016). Therefore, the rise of this new type of tourist, together with the degradation of mass tourist destinations, is leading the latter into a state of decline, with these destinations now having reached their limits, both from a quantitative and qualitative point of view (Moutinho, 2000).

Given that mass tourism destinations are a present-day reality that continues to attract millions of tourists every year, public intervention becomes fundamental. As such, a preventive approach to tourism strategies and the development of action plans are needed. These should contain more responsible activities which integrate the principles of sustainable development. However, these new strategies

require an allocation of funds, which in most cases exceed public budgets (Mansourian & Dudley, 2008). It is, therefore, necessary to design new strategies that allow for the generation of new sources of public income.

The establishment of taxes and/or fees for tourism can be an instrument of economic and fiscal policy that contributes to obtaining generalized public income (Buckley, 2003). This allows for public policies related to sustainability and the design of a differentiated offer in a particular destination. Furthermore, due to its size, mass tourism allows for public income to be obtained, which subsequently allows for action in a destination (Bruce, 2001; Budeanu, 2005). In this regard, the main innovation of this work is its answering of two key questions that have yet to be addressed in the literature; 1) what are the tourist's preferences in regard to the taxes and fees? Are these instruments aimed at improving sustainability and the overall experience of the destination? and 2) what factors condition the tourist's willingness to pay the most widely accepted taxes and fees?

The objective of this work is two-fold. On the one hand, it aims to identify tourist preferences when offered 15 different fiscal instruments; all aimed at obtaining public income that will subsequently contribute to the development of policies for the improvement of both the sustainability and the tourist experience of a destination. This first aim is motivated by an interest in knowing the places,

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activities, and public services tourists would be willing to pay for. On the other hand, through a binary logistic regression model, this study also looks to identify which socio-demographic factors and trip characteristics condition the tourist's WTP of the five most accepted fiscal instruments from the 15 categories proposed. This study was carried out in Andalusia, a region with significant tourism in southern Spain whose mass tourism specialization attracted 32.4 million tourists in 2019.

2 | THEORETICAL FRAMEWORK

2.1 | Sustainable tourism and tourism taxation

Traditionally, mass tourism has been considered responsible for generating the most severe negative impacts on tourism (Budeanu, 2005; Nunkoo & Gursoy, 2012). However, it has not been proven that all examples of mass tourism are unsustainable (Butler, 1999), given that the development of an adequate tourism policy has resulted in more sustainable destinations (Nunkoo & Gursoy, 2017). In fact, the large size of this type of tourism provides an opportunity to obtain more widespread benefits (Budeanu, 2005), which can be allocated to the development of policies contributing to the improvement of destination sustainability (Durán-Román et al., 2021).

Sustainable development in tourism can be defined as that which meets the needs of today's tourists and host regions while protecting and promoting opportunities for the future. It is intended to be a path toward the management of all resources so that economic, social, and esthetic needs can be met, while also respecting cultural integrity, essential ecological processes, biological diversity, and life support systems (UNWTO, 2003).

The difficulty of sustainably managing tourist destinations lies in the nature of public goods, which are present in many areas within a destination (Briassoulis, 2002; Healy, 1994). In terms of tourist demand, for a destination to be attractive, there has to be public investment in the installation or renovation of both general and touristic infrastructures. Moreover, the costs of different services need to be covered—conservation of environmental, cultural, and artistic heritage, cleaning and sanitation, among others—to guarantee an adequate tourist experience (Bokobo, 1999; Pedreño & Monfort, 1996). Regarding supply, Kozak and Rimmington (1999) argue that the local tourism industry benefits from a large number of services provided by public administrations, such as transport, security, cultural events, convention centers, and the modernization of infrastructures.

Public goods raise the issue of how to fund their provision since voluntary private financing is non-existent or is reduced for optimum levels of provision. This matter stems from the possibility of simultaneously consuming while another individual also does so, but without the need to pay for the privilege (Martínez-García, 2010). In recent decades, there has been significant discussion regarding the unstoppable increase in public spending on tourist activity, with there being demands that governments reflect on complementary sources of funding to maintain all the actions. Therefore, according to Balmford

and Whitten (2003), costs should be borne in proportion to the benefits received.

Sustainable development in tourism, therefore, requires both public and private financing (Morar, 2012) to be able to advance toward new funding formulas capable of defraying part of the expenditure committed by public authorities (Gago & Labandeira, 2001; Pulido & Cárdenas, 2012), since inadequate financing is one of the greatest obstacles for the development and promotion of tourism destinations (Wilson et al., 2001).

2.2 | Tourism taxation

There is a clear alternative option offered by tax-based and fee-based instruments linked to tourist activity, which avoids “the tragedy of the commons,” as well as faces the problems derived from tourist development (Gooroochurn & Sinclair, 2003). This is due to these instruments forcing those agents on whom they fall to participate in its financing. Both taxes and fees subsequently allow for resources for financing demanded goods, and, therefore, have a positive social value (Durán-Román, 2020).

UNWTO (1998, p. 16) defined tourism taxes as “*applicable specifically to tourists and the tourism sector or, alternatively, if not specific to the tourism sector, those which are applied differently in tourist destinations.*” While OECD (2014, p. 76) defined tourism taxation as “*the indirect taxes, taxes and tributes that mainly affect the activities related to tourism*”; and it is considered to be one of the main elements to “*contribute to the obtaining of taxation income, financing the protection of the environment and public investment and the development of infrastructures to improve the management of the tourism impact in sensitive areas.*”

Therefore, sustainable tourism development requires new and effective policies. These policies, in turn, will establish fiscal and economic instruments that provide the necessary funds (Edwards, 2009; Young et al., 2011) to achieve policy objectives related to the sustainability of a destination (Palmer & Riera, 2003; Ritchie, 1999). They will also contribute to cost recovery, generate greater business opportunities for local stakeholders (Buckley, 2003), and will increase the quality of services and facilities available (Young et al., 2011).

For more than four decades, numerous studies have analyzed the establishment of taxes and fees linked to tourist activity. Tourism taxation affects a wide range of activities. This can be seen in the lodging sector (Arguea & Hawkins, 2015; Bonham et al., 1992; Bonham & Gangnes, 1996; Fujii et al., 1985; Jensen & Wanhill, 2002; Mak & Nishimura, 1979), and the consumption of goods and services, through indirect taxes, such as sales tax, goods and services tax, or value-added tax (Durbary, 2008; Gago et al., 2009; Gooroochurn & Sinclair, 2003; Gooroochurn & Sinclair, 2005; Ihalanayake, 2012; Ponjan & Thirawat, 2016). This can be also noted in the so-called “eco-taxes” for environmental protection (Aguiló et al., 2005; Guzmán, 2004) and the vast literature addressing the taxation of air transport through air passenger duty—APD—(Adedoyin et al., 2021; Seetaram et al., 2014; Seetaram et al., 2016; Seetaram et al., 2018; Song et al., 2019; Tol, 2007; Tsvetanova & Seetaram, 2019).

Among said studies, the interesting results obtained by Tsvetanova and Seetaram (2019) are particularly noteworthy as they suggest that consumers have a greater awareness of environmental problems and are more willing to pay to reduce the negative impact and correct externalities. Moreover, it is also worth noting the work by Seetaram et al. (2014), who suggested that a much greater level of taxation is required if the objective is to affect a change in the current ideology regarding air travel. Furthermore, Adedoyin et al. (2021) emphasize that increasing tourism taxation without a correlative significant increase in public spending is contractionary and, consequently, detrimental to the tourism industry, and thus highlights the extra-fiscal purpose of taxes and fees.

Additionally, Seetaram et al. (2018) asked individuals about their preferred way to be charged APD and how it should be allocated. More than one-third of the respondents preferred a fixed amount charged per ticket and most of them (35%) were in favor of spending APD on environmental projects. Finally, Song et al. (2019) analyzed the effects of tourism taxes, specifically APD, on tourist spending behavior and found that the components of tourist expenditure are interdependent, and that changes in one component may have profound effects on the composition of expenditure.

However, the studies referred do not address the tourist's preferences regarding the form appropriate modality of said fiscal instruments (whether tax or fee). This is precisely the first of the two innovations of this study, which looks at the tourist's willingness to pay from a proposal of 15 taxes and fees previously defined by a group of experts. This is based on the fact that planning and management decisions regarding a tourist destination—like any other consumption process—need to be carried out considering the needs and preferences of the consumers (Mazzocchi et al., 2019).

To justify and achieve people's acceptance of the additional costs, it is essential that the tourist is aware of the benefits derived from the payment of such fiscal instruments (Edwards, 2009; Williams et al., 1999), and is informed as to why money is needed and where it will go, as this will positively affect their support to the paying option and their WTP (Eagles et al., 2002; Reiling et al., 1988). However, it is also necessary that policymakers understand and take into account tourist preferences so that the implementation of taxes and/or fees has a greater level of acceptance (Cater, 1994; Lindsey & Holmes, 2010; Mazzocchi et al., 2019; Smith, 1997; Wight, 1998). This is because it is usually policymakers who determine both the specific modality of the fiscal instrument to be introduced as well as the amount considered as fair in this respect (Dharmaratne et al., 2000), and in most cases, they do not consider the opinion of the tourist as a baseline reference regarding both aspects.

Moreover, when the tourist is willing to pay to maximize the utility of an instrument to be able to carry out their favorite activity or is willing to pay for what they consider to be fair, the instrument may adopt several fiscal modalities that differ from those initially proposed by the public authorities (Laarman & Gregersen, 1996). It may even be possible that the amount the tourist is willing to pay is higher than the amount established by the political and/or tourism authorities (Depondt & Green, 2006).

In light of the above, the first hypothesis was formulated as the following:

H1. *Understanding and incorporating tourist preferences when introducing tourism-related taxes and/or fees will lead to their greater acceptance.*

2.3 | Conditioning factors for the willingness to pay

The use of non-market goods valuation techniques, usually carried out through the estimation of the tourist's willingness to pay (Reynisdottir et al., 2008), is a management tool used in many destinations (Edwards, 2009) to support political decisions regarding the establishment of tourism-related taxes and/or fees (Chase et al., 1998) which, in addition, can provide valuable information regarding the tax amount (Kaffashi et al., 2015). Additionally, it allows for the compensation of the negative externalities generated by the activity while also obtaining certain marginal benefits (Seetaram et al., 2018).

Many studies have considered tourists' WTP in very distinct contexts, including the tourist's payment of an additional amount (*premium price*) to improve not only the product quality and/or the experience enjoyed at the destination (Bigné et al., 2008; Mgxekwa et al., 2018; Veréb & Azevedo, 2019) but also the sustainability of the destination (Baddeley, 2004; Cheung & Jim, 2014; López-Sánchez & Pulido-Fernández, 2014) and the conservation and management of natural resources (Casey et al., 2010; Piriapada & Wang, 2015).

Consequently, a significant challenge that both those responsible for formulating public policies and the managers of tourist destinations have to face is identifying which socio-demographic variables and which characteristics of the tourist's stay explain the WTP. This will allow for greater effectiveness in the formulation and implementation of policies to achieve objectives related to sustainable management and the tourist experience in the destination (Durán-Román, 2020). WTP has been considered a dependent variable that is explained, to a greater or lesser extent, by a union of the tourist's socio-demographic variables (Reynisdottir et al., 2008; Seetaram et al., 2018) and the characteristics of the tourist's stay (López-Sánchez & Pulido-Fernández, 2017), as shown in Table 1.

In light of the above, the second hypothesis was formulated as the following:

H2. *It is possible to determine which socio-demographic variables and trip characteristics condition the willingness to pay of those taxes and/or fees that enjoy a greater acceptance from tourists and whose income will be used to improve sustainability and the tourism experience in the destination.*

3 | METHODOLOGY

3.1 | Data collection and descriptive results

The study was carried out in Andalusia as it is a mass tourism destination that received a total of 32,476,854 tourists in 2019, of which

TABLE 1 Factors that influence the WTP (literature review)

Socio-demographic factors	Literature
Income	López-Sánchez and Pulido-Fernández (2017); Reynisdottir et al. (2008); Witt (2019).
Place of origin	López-Sánchez and Pulido-Fernández (2017); Reynisdottir et al. (2008); Witt (2019).
Age	Daniere and Takahashi (1999); Kostakis and Sardanou (2012); Van Liere and Dunlap (1980).
Education level	Alves et al. (2014); Bowker et al. (1999); Halkos and Matsiori (2012); Reynisdottir et al. (2008).
Gender	Arcury et al. (1987); Kostakis and Sardanou (2012); Liu et al. (2019).
Profession	Rose et al. (1995).
Professional category	López-Sánchez & Pulido-Fernández, 2017.
Trip characteristics	Literature
Purpose of the trip	López-Sánchez and Pulido-Fernández (2017); Witt (2019).
Length of stay	López-Sánchez and Pulido-Fernández (2017); Liu et al. (2019); Schuhmann et al. (2019).
Frequency of the trip	Reynisdottir et al. (2008); Schuhmann et al. (2019).
Companions	López-Sánchez and Pulido-Fernández (2017).
Lodging type	López-Sánchez and Pulido-Fernández (2017).

Source: Author's own creation.

12,633,644 were of foreign origin (IECA, 2020). To this end, a total of 1068 surveys were conducted among tourists who visited Andalusia (sampling error: 3.1%; 95% confidence level; $p = q = 0.50$). To achieve the objectives of this research, and in view of the impossibility of identifying all tourists who have visited Andalusia, stratified probabilistic sampling was carried out.

The sampling process was developed through a time-location sampling (TLS) design, as conducted in De Cantis and Ferrante (2011). TLS attempts to recruit participants at places and times they would reasonably be expected to be. The sampling framework consisted of venue-day-time (VDT) units, also known as time-location units, which represent the potential universe of venues, days, and times. The units of interest were represented by tourists who were leaving Andalusia after having spent at least one night in Andalusian territory. Regarding the TLS design, all the airports (Malaga, Seville, Almeria, Jerez, Granada-Jaen, Cordoba, and Algeciras Heliport) and the three high-speed train stations (Malaga, Seville, and Cordoba) were selected; maintaining the proportionality in the number of interviews with respect to the total number of passengers of both means of transport. The surveying period was from July to October. During this period, a large percentage of tourists visiting Andalusia is concentrated in the area. The specific TLS implementation was treated as a two-stage stratified sampling design with unequal selection probabilities for the

first-stage units, and with constant selection probabilities for the second-stage units. Finally, first-stage units included a combination of venues, days, and times; and the second-stage units were made up of tourists who were selected within the first-stage units through a systematic selection procedure.

The questionnaire was structured into two blocks. The first block corresponded to the characterization of the tourist on the basis of certain socio-demographic variables (gender, age, education level, net annual income, place of origin, professional activity, and professional category) and the characteristics of their stay (purpose of the trip, type of travel companion, length of stay, lodging type and frequency of visit). The second block analyzed the tourist's opinion regarding the possibility of improving the tourist experience in Andalusia, their willingness to pay, and what amount they would consider paying toward the improvement of the sustainability and tourist experience in Andalusia. This block also evaluated the tourist's preferences regarding the specific fiscal modality to be adopted (tax or fee).

More specifically, in this second block, questions of the following nature were asked: how much could the tourist experience that you are enjoying be improved? How would you react if it were compulsory for all tourists (nationals and foreigners) to pay a tax or a fee destined to projects aimed at improving the tourist experience in a destination? Would you be willing to pay an additional amount, both to improve your tourist experience (more and better infrastructures, public services, and tourism), minimize the negative impacts of tourism (waste generation, pollution, congestion in places of tourist interest, saturation in certain services, environmental, heritage, and architecture degradation, etc.), and expand the cultural and artistic offer? If so, what maximum daily amount would you be willing to pay?

Finally, tourists were asked to indicate, from a proposal of 15 taxes and/or fees, which ones they would be willing to pay for and, if any, how much of their daily budget they would allocate to it. Nominal, ordinal, and Likert-type scales were used to measure the variables studied.

Moreover, the survey was answered by a similar number of tourists with respect to gender (50.9%, $n = 544$ female and 49.1%, $n = 524$ male), with income being equal or higher than 25,001€ (61.6%, $n = 658$), average budget of 87.61€; with the main purpose of their trip being sun and beach (28.2%, $n = 301$), cultural (24%, $n = 256$), interior/rural (16.4%, $n = 175$), and family (11%, $n = 118$); high school (49%, $n = 523$) and university (44.9%, $n = 480$) level of education; of both national (50.5%, $n = 539$) and foreign (49.5%, $n = 529$) origin; who traveled mainly with family (60.4%, $n = 645$) and friends (35%, $n = 374$), staying in hotels (64.9%, $n = 694$) and camping (13.6%, $n = 145$), and predominantly on their first visit to the destination (46.8%, $n = 500$).

3.2 | Applied methodology

Logistic regression models are commonly used to build a model from a linear predictor of the probability of the occurrence of an event

(Kostakis & Sardianou, 2012; López-Sánchez & Pulido-Fernández, 2017). In this study, it was proposed that this type of regression model be used to predict the probability of a positive WTP. The multivariate logistic model (or logit) expresses the probability that the tourist is willing to pay, based on socio-demographic variables and trip characteristics that serve as independent variables (Greene, 1997).

The logistics model expresses the odds (defining the odds as the ratio between the probability of a tourist being willing to pay and the probability of a tourist not being willing to pay) as an exponential function of the independent variables:

$$\frac{p}{1-p} = e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n} \quad (1)$$

Where p is the probability of being willing to pay and X_i ($i = 1, 2, \dots, n$) are the independent variables (demographic characteristics and trip characteristics). The β_i are the regression coefficients, to be estimated in the analysis. Note that an equivalent way of writing the equation is:

$$\frac{p}{1-p} = e^{\beta_0} e^{\beta_1 X_1} e^{\beta_2 X_2} \dots e^{\beta_n X_n} \quad (2)$$

As such, the unit increase of a specific factor X_i —or the presence of a factor with respect to the absence in the case of dichotomous factors—multiplies the odds by the value. Thus, the significant influence of a factor is measured in terms of the variation produced in the odds. For the quantification of the goodness of fit provided by the model, the probability of the results of the sample was studied, as well as the assumptions of the estimated parameters and plausibility.

Therefore, the following statistic was used: $-2 \log$ -likelihood ($-2LL$); if $-2LL$ is zero, the fit is perfect. Another goodness of fit measure is Nagelkerke's R^2 coefficient, which is an interpretation of the % of variance that is explained. In parallel, the Hosmer-Lemeshow test contrasts the calibration of the model, that is, the degree to which the predicted probability adjusts to reality. Finally, the area under the curve—AUC—is also included to validate the quality of the test used; the values of AUC that are close to 1 or 0 indicate the adequacy or inadequacy of the test, respectively, while values close to 0.5 indicate that the usefulness of the test is no better than chance.

4 | RESULTS

4.1 | Preferences of the tourist regarding their willingness to pay and the amount

Regarding the willingness of the tourists visiting Andalusia to pay an additional amount as a means of improving their tourist experience (more and better infrastructures as well as public and tourist services), minimizing the negative impacts of tourist activity (waste generation, pollution, congestion in places of tourist interest, saturation in certain services, environmental, heritage, and architecture degradation, etc.), and expanding the cultural and artistic offer, 75.28% of those

interviewed (804 tourists) expressed a positive WTP, with 5.16 euros (± 2.00 euros) being the average maximum daily amount that they would pay. Considering that 24.72% of the respondents (264 tourists) showed a negative WTP, the average WTP amount for the sample was 3.88 euros.

Of the 262 tourists that expressed a negative WTP, 139 (53.1%) noted that businesses are the ones that benefit the most from tourist activity and, as such, it should be them who contribute. Moreover, 136 (51.9%) respondents preferred to use their money for other things; 125 (47.7%) outlined that they already contribute with their taxes and that the national government should be the one financing these expenses; 108 (41.2%) said they do not believe that the money will be used for its intended purpose and that everything will remain the same; 58 (22.1%) noted that they would like to contribute but cannot afford it; and, finally, 44 tourists (16.8%) lacked sufficient information to decide on the matter—12 tourists did not know or did not answer. In terms of place of residence, 139 tourists (53.05%) from the group with a negative WTP were nationals, while 123 (46.95%) were foreigners. It should be noted that European legislation prevents discrimination between national and foreign tourists.

Subsequently, as reflected in Table 2, tourists with a positive WTP were asked to express their payment preferences regarding 15 taxes and fees linked to tourism, which were defined by a panel of experts in a previous study (Durán-Román et al., 2020). These taxes and fees were defined with the objective of contributing to the financing of policies that increase both sustainability and the tourist experience in a destination.

The average number of taxes and/or fees that a tourist with a positive WTP would be willing to pay was 4.84 (± 1.94). Moreover, a first descriptive analysis allowed for the deduction that there are certain instruments with a high percentage of WTP on the part of the tourism demand. These are associated both with the payment for benefiting from tourist resources, tourist stays, and environmental protection. More specifically, this analysis highlighted the important difference in the WTP of the tourist visiting Andalusia in regard to the 15 taxes and fees proposed. This included a large percentage of tourists having a positive WTP regarding public entrance fees for public tourist resources (71.6%), tax on tourist stays (62.2%), tax on tourist attractions (52.5%), entrance fee to public museums (52.5%), and environmental conservation tax in municipalities whose main activity is eco-tourism (50.1%). There was also less WTP in terms of taxes on gambling (10.2%), car rental (8.5%), and taxes on betting (3.6%). The difference in the variables between the higher and lower rates of WTP regarding the tourism demand can be explained by the different perceptions of the tourists surveyed.

The average amount of the tourist's WTP for each of the five fiscal instruments with the greatest acceptance was as follows: public entrance fees for public tourist resources (1.11 euros), tax on tourist stays (1.00 euros), tax on tourist attractions (1.05 euros), entrance fee to public museums (1.11 euros), and environmental conservation tax in municipalities whose main activity is eco-tourism (1.05 euros). Of the five instruments that received the greatest acceptance by the tourist, two were fees and three were taxes. However, the most

TABLE 2 Willingness to pay taxes and/or fees and the amount to be paid from the tourist's daily budget

		N	%	Valid N	Mean	Stan. Dev.	Min.	Med.	Max.
WTP Tax on tourist stays	Total	804	100.0%						
	Yes	500	62.2%						
	No	304	37.8%						
	€			500	1.00	0.18	0.25	1.00	2.00
WTP Tax on hiking and mountain climbing	Total	803	100.0%						
	Yes	165	20.5%						
	No	638	79.5%						
	€			165.0	1.02	0.26	0.25	1.00	2.00
WTP Tax on tourist attractions	Total	804	100.0%						
	Yes	422	52.5%						
	No	382	47.5%						
	€			422	1.05	0.28	0.50	1.00	3.0
WTP Tax on gambling	Total	803	100.0%						
	Yes	82	10.2%						
	No	721	89.8%						
	€			82	1.17	0.41	1.00	1.00	3.0
WTP Tax on betting	Total	804	100.0%						
	Yes	29	3.6%						
	No	775	96.4%						
	€			29	1.16	0.36	1.00	1.00	2.0
WTP Visitor tickets at the main tourist attractions	Total	804	100.0%						
	Yes	114	14.2%						
	No	690	85.8%						
	€			114	1.09	0.33	0.50	1.00	3.0
WTP Entrance fee at monuments and national parks	Total	804	100.0%						
	Yes	157	19.5%						
	No	647	80.5%						
	€			157	1.03	0.23	0.50	1.00	2.0
WTP Entrance fee to public museums	Total	804	100.0%						
	Yes	422	52.5%						
	No	382	47.5%						
	€			422	1.11	0.37	0.50	1.00	3.0
WTP Taxes for overnight stays at peer to peer (P2P) accommodations	Total	804	100.0%						
	Yes	145	18.0%						
	No	659	82.0%						
	€			145	0.97	0.24	0.25	1.00	2.00
WTP Public natural/national parks entrance fee	Total	802	100.0%						
	Yes	261	32.5%						
	No	541	67.5%						
	€			261	1.03	0.22	0.50	1.00	2.0
WTP Car rental fee	Total	804	100.0%						
	Yes	68	8.5%						
	No	736	91.5%						
	€			68	1.05	0.25	0.50	1.00	2.0
WTP Public theaters and shows entrance fee	Total	804	100.0%						
	Yes	358	44.5%						
	No	446	55.5%						
	€			358	1.18	0.43	0.50	1.00	3.0

TABLE 2 (Continued)

		N	%	Valid N	Mean	Stan. Dev.	Min.	Med.	Max.
WTP Tax on entry to municipality classified as touristic	Total	804	100.0%						
	Yes	190	23.6%						
	No	614	76.4%						
	€			190	1.02	0.25	0.50	1.00	3.0
WTP Environmental conservation tax in municipalities whose main economic activity is eco-tourism	Total	804	100.0%						
	Yes	403	50.1%						
	No	401	49.9%						
	€			403	1.05	0.26	0.25	1.00	2.00
WTP Public entrance fees for public tourist resources	Total	803	100.0%						
	Yes	575	71.6%						
	No	228	28.4%						
	€			575	1.11	0.42	0.50	1.00	5.0

Source: Author's own creation.

accepted category corresponds to a fee (public entrance fees for public tourist resources; 71.6% positive WTP). The highest average amounts that tourists were willing to pay also corresponded to fees (1.11 euros for public entrance fees for public tourist resources and for entrance fees to public museums) and the maximum amount that tourists were willing to pay was also for both the public entrance fees for public tourist resources (5.00 euros) and the entrance fee to public museums (3.00 euros); although the tax on tourist attractions also obtained a maximum of 3.00 euros.

4.2 | WTP protective factors

The WTP protective factors for the five instruments, regarding which tourists have shown greater preference, were also analyzed. To this end, five logit models were employed. However, in this context, the analysis focused on the probabilistic detection model for WTP protective factors, without calculating the indices of sensitivity, specificity, VP+, and VP-, which are typical of a prediction model. This is due to the objective not being the prediction, but rather the identification of which factors increased or decreased the rate of WTP. Therefore, the entire sample was used instead of using a training and validation sample.

4.2.1 | WTP protective factors regarding public entrance fees for public tourist resources

Public tourist resources refer to the natural surroundings (natural parks, national parks, biosphere reserves, forests, flora and fauna, wildlife sighting spots, beaches, rivers, etc.), and to architectural, cultural, and artistic heritage (historic buildings, monuments, architectural ensembles, emblematic gardens, museums, interpretation centers, etc.). In Andalusia,

there are many examples of tourist resources that can be enjoyed for free all year. The following are just a few of them: the beaches along the almost 1000 km of coastline, the 24 natural parks (of which 9 are declared Biosphere Reserves), monuments such as the Plaza de España, the Archivo General de Indias, and the María Luisa Park in Seville, the Synagogue and the Posada el Potro in Cordoba, El Carmen de los Mártires, the Madrasa of Granada, and the Federico García Lorca Center in Granada, the Municipal Heritage Museum and the Contemporary Art Centre in Málaga, the Museum of the Cádiz Parliament, the House of Ibero-America and the Reina Sofía Cultural Centre in Cádiz, the Villardompardo Palace, the Museum of Naïf Art, and the largest Arab Baths (11th century) in Europe in Jaen, to name a few.

As shown in Table 3, the purpose of the trip, place of origin, professional category, and income are all factors that influence the tourist's WTP with respect to the public entrance fees for public tourist resources. This is a valid model with an R^2 of 24.3% and an AUC of 0.762 (AUC values close to 1 or 0 indicate that the adequacy or inadequacy of the test, respectively; while values close to 0.5 indicate that the usefulness of the test is no better than chance), p -value 0.000, C.I. (95% 0.725, 0.799). The Hosmer-Lemeshow test has a χ^2 value of 9.708 and a p -value of 0.336 (the Hosmer-Lemeshow statistic indicates a poor fit if the significance value is less than 0.05); therefore, the model fits the data properly.

The probability of having a positive WTP is multiplied by 2.3 for tourists whose reason for traveling is motivated by culture when compared to tourists who are motivated by the sun and beach. Being motivated by family reduces the probability of WTP in this variable by 66% when compared with tourists motivated by the sun and beach. The probability of having a positive WTP for tourists from the European Union, as well as foreigners residing in the rest of the world, is multiplied by 2.5 and 3.4, respectively, when compared with the Andalusian tourist. The probability of having a positive WTP for the professional categories of senior

TABLE 3 Public entrance fees for public tourist resources: WTP protective factors

	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Purpose of the trip: Coastal—sun and beach—(Ref. Cat.)					
Interior/rural	−0.180	0.526	0.835	0.479	1.458
Cultural	0.806	0.003	2.238	1.314	3.814
Family	−1.090	0.001	0.336	0.172	0.658
Golf	0.369	0.438	1.446	0.570	3.670
Health-Well-being	−0.516	0.228	0.597	0.258	1.382
Meetings/Congresses	−0.133	0.850	0.876	0.222	3.461
Nautical/Sports marina	0.481	0.473	1.618	0.434	6.030
Cruise	−0.562	0.585	0.570	0.076	4.282
Nature	0.894	0.132	2.444	0.764	7.815
Food and wine	0.276	0.755	1.318	0.232	7.477
Languages	−1.739	0.180	0.176	0.014	2.230
Place of origin: Andalusia (Ref. Cat.)					
Spain	0.523	0.075	1.687	0.949	2.999
Foreigner—European Union	0.934	0.003	2.544	1.380	4.687
Foreigner—Rest of the world	1.228	0.002	3.416	1.580	7.386
Professional category: Employee (Ref. Cat.)					
Employee—middle level	−0.072	0.790	0.931	0.548	1.581
Employee—upper executive	−1.298	0.000	0.273	0.135	0.553
Employer	−0.792	0.020	0.453	0.232	0.883
Others	0.333	0.387	1.394	0.656	2.964
Income: <12,000€ (Ref. Cat.)					
12,001 € to 15,000 €	−1.274	0.065	0.280	0.072	1.084
15,001 € to 20,000 €	0.091	0.874	1.095	0.358	3.353
20,001 € to 25,000 €	0.888	0.114	2.430	0.809	7.302
25,001 € to 30,000 €	0.795	0.156	2.215	0.738	6.648
30,001 € to 35,000 €	0.950	0.091	2.586	0.860	7.780
35,001 € to 40,000 €	2.012	0.001	7.475	2.286	24.448
40,001 € to 50,000 €	1.794	0.004	6.014	1.801	20.089
Over 50,000 €	2.422	0.000	11.274	2.937	43.273
Constant	−0.618	0.306	0.539		

Source: Author's own creation.

executive and entrepreneur is reduced to between 55% and 75% when compared to salaried employees. The probability of having a positive WTP for travelers with incomes between €35,000 and €40,000, between €40,000 and €50,000, and more than €50,000 is multiplied by 7.4%, 6%, and 11%, respectively, when compared with travelers with incomes less than €12,000.

4.2.2 | WTP protective factors regarding the tax on tourist stays

Regarding the tax on tourist stays, as reflected in Table 4, the purpose of the trip, lodging type, and income are all factors that influence the

WTP of this tax (valid model with an R^2 of 19.0% and an AUC of 0.728, p -value 0.000, C.I. 95% 0.691, 0.765). The Hosmer-Lemeshow test has a χ^2 value of 9.754 and a p -value of 0.283, therefore the model fits the data properly.

The probability of having a positive WTP for tourists motivated by culture, golf, and meetings/congress is reduced by 49%, 64%, and 90%, respectively, when compared with tourists motivated by the sun and beach. The probability of having a positive WTP for tourists staying in campsites, tourist apartments, and other accommodations is reduced by 69%, 47%, and 65%, respectively, when compared to tourists staying in hotels. The probability of having a positive WTP for tourists with incomes over €40,000 and €50,000 is multiplied by 3.2 and 3.6, respectively, when compared with tourists with incomes under €12,000.

TABLE 4 Tax on tourist stays: WTP protective factors

	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Purpose of the trip: Coastal –sun and beach- (Ref. Cat.)					
Interior/rural	–0.498	0.076	0.608	0.350	1.054
Cultural	–0.656	0.006	0.519	0.325	0.828
Family	–0.102	0.766	0.903	0.461	1.769
Golf	–1.021	0.019	0.360	0.154	0.845
Health-Well-being	–0.286	0.546	0.751	0.297	1.902
Meetings/Congresses	–2.364	0.005	0.094	0.018	0.488
Nautical/Sports marina	0.590	0.391	1.803	0.469	6.939
Cruise	–0.117	0.914	0.889	0.106	7.489
Nature	–0.222	0.670	0.801	0.288	2.228
Food and wine	–0.386	0.657	0.680	0.124	3.734
Languages	–0.327	0.801	0.721	0.056	9.221
Lodging type: Hotel lodging (Ref. Cat.)					
Camping	–1.170	0.002	0.310	0.148	0.650
Hostel	–0.318	0.293	0.727	0.402	1.317
Tourist apartment	–0.619	0.005	0.538	0.349	0.830
Others	–1.034	0.001	0.355	0.198	0.639
Income: <12,000€ (Ref. Cat.)					
12,001 € to 15,000 €	0.146	0.804	1.157	0.367	3.647
15,001 € to 20,000 €	0.262	0.599	1.299	0.489	3.447
20,001 € to 25,000 €	0.065	0.884	1.067	0.446	2.553
25,001 € to 30,000 €	0.445	0.309	1.561	0.662	3.678
30,001 € to 35,000 €	0.298	0.497	1.348	0.570	3.188
35,001 € to 40,000 €	0.772	0.091	2.164	0.885	5.291
40,001 € to 50,000 €	1.183	0.014	3.263	1.274	8.355
Over 50,000 €	1.283	0.015	3.609	1.286	10.131
Constant	–0.500	0.315	0.607		

Source: Author's own creation.

4.2.3 | WTP protective factors regarding the tax on tourist attractions

Regarding the tax on tourist attractions, the purpose of the trip and the lodging type are the factors that influence the WTP, as shown in Table 5 (valid model with an R^2 of 18.8% and an AUC of 0.700, p -value 0.000, C.I. 95% 0.663, 0.736). The Hosmer-Lemeshow test has a χ^2 value of 3.332 and a p -value of 0.912, therefore the model fits the data properly.

The probability of having a positive WTP for tourists motivated by health and well-being is reduced by 69% when compared with tourists motivated by the sun and beach. The probability of having a positive WTP for tourists motivated by nature is reduced by 85%, while the WTP for tourists motivated by nautical activities is multiplied by 4.6 when compared with tourists whose motivation is the sun and beach. Finally, the probability of having a positive WTP for tourists staying in campsites and other accommodations is reduced by 72% and 44% when compared to tourists staying in hotels.

4.2.4 | WTP protective factors regarding the entrance fee to public museums

As shown in Table 6, the purpose of the trip, the frequency of the trip, and the tourist's income are all factors that influence the tourist's WTP with respect to the entrance fee to public museums (valid model with an R^2 of 23.7% and an AUC of 0.750, p -value 0.000, C.I. 95% 0.716, 0.784). The Hosmer-Lemeshow test has a χ^2 value of 7.097 and a p -value of 0.526, therefore the model fits the data properly.

The probability of having a positive WTP for tourists motivated by nature is reduced by 84% when compared with the tourists motivated by the sun and beach, while the probability of having a positive WTP for tourists with interior, family, and cultural motivation is multiplied by 1.9, 2.8, and 5.3, respectively, when compared with tourists motivated by the sun and beach. The probability of having a positive WTP is reduced by 30% if it is the second time the tourist visits the destination, compared to if it is the first time, and is reduced by 50% if

TABLE 5 Tax on tourist attractions: WTP protective factors

	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Purpose of the trip: Coastal –sun and beach- (Ref. Cat.)					
Interior/rural	–0.425	0.103	0.654	0.392	1.090
Cultural	–0.024	0.916	0.977	0.628	1.518
Family	–0.436	0.184	0.646	0.340	1.231
Golf	–0.537	0.166	0.584	0.273	1.251
Health-Well-being	–1.150	0.005	0.317	0.143	0.703
Meetings/Congresses	0.605	0.395	1.831	0.455	7.371
Nautical/Sports marina	1.535	0.021	4.640	1.260	17.078
Cruise	–1.106	0.351	0.331	0.032	3.381
Nature	–1.931	0.005	0.145	0.037	0.561
Food and wine	0.046	0.952	1.047	0.234	4.690
Languages	–21.232	0.999	0.000	0.000	
Lodging type: Hotel lodging (Ref. Cat.)					
Camping	–1.250	0.004	0.286	0.122	0.671
Hostel	–0.293	0.318	0.746	0.420	1.326
Tourist apartment	–0.025	0.907	0.975	0.639	1.488
Others	–0.579	0.044	0.560	0.319	0.984
Constant	0.705	0.095	2.024		

Source: Author's own creation.

it is the third, or any further, time. The probability of having a positive WTP for tourists with incomes over €40,000 and €50,000 is multiplied by 2.2 and 2.6, respectively, when compared with tourists with incomes under €12,000.

4.2.5 | WTP protective factors regarding the environmental conservation tax in municipalities whose main activity is eco-tourism

Finally, the purpose of the trip, place of origin, professional category, and the tourist's income are all factors that influence the WTP of the environmental conservation tax in municipalities whose main activity is eco-tourism (valid model with an R^2 of 27.9% and an AUC of 0.763, p -value 0.000, C.I. 95% 0.729, 0.796). The Hosmer-Lemeshow test has a χ^2 value of 8.664 and a p -value of 0.371, therefore the model fits the data properly (Table 7).

The probability of having a positive WTP for tourists motivated by family is reduced by 53% when compared to tourists motivated by the sun and beach. The probability of having a positive WTP for tourists motivated by interior, health and well-being, nautical and nature reasons is multiplied by 2.5, 3.1, 3.1, and 24.8, respectively, when compared to tourists motivated by the sun and beach. The probability of having a positive WTP is reduced between 55% and 57% for executives and entrepreneurs when compared to employees. Regarding tourists who reside in Andalusia, the probability of having a positive WTP is multiplied by 1.3, 2.4, and 1.5 if residing outside Andalusia, in

the EU, or in the rest of the world, respectively. Finally, the probability of having a positive WTP for tourists with incomes over €30,000, €35,000, €40,000, and €50,000 is multiplied by 3.4, 3.4, 4.6, and 13.5, respectively, when compared to tourists with incomes below €12,000.

5 | DISCUSSION

The results of this study show a majority WTP in tourists visiting Andalusia, since three out of four respondents (75.28%) were in favor of paying taxes and/or fees to contribute to the improvement of sustainability and the experience in the destination. These results are in line with several studies in the literature reviewed in the previous sections, which confirm the tourist's WTP for improving not only the product quality and/or the experience enjoyed at the destination (Bigné et al., 2008; Mgxekwa et al., 2018) but also the sustainability of the destinations (Baddeley, 2004; Cheung & Jim, 2014) and the conservation and management of natural resources (Casey et al., 2010; Piriypada & Wang, 2015; Seetaram et al., 2018). However, it is important to note that WTP is a dependent variable that represents intentions and not real behaviors, which is one of the limitations of this study.

The introduction of taxes and/or fees requires adequate planning by policymakers to avoid undesired results derived from their non-acceptance. According to Cater (1994), Lindsey and Holmes (2010), Mazzocchi et al. (2019), Smith (1997), and Wight (1998), public participation in the planning process is recommended to obtain useful

TABLE 6 Entrance fee to public museums: WTP protective factors

	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Purpose of the trip: Coastal—sun and beach—(Ref. Cat.)		0.000			
Interior/rural	0.672	0.008	1.958	1.191	3.218
Cultural	1.657	0.000	5.245	3.288	8.367
Family	1.041	0.001	2.831	1.496	5.360
Golf	−0.390	0.327	0.677	0.310	1.477
Health-Well-being	0.402	0.293	1.494	0.707	3.158
Meetings/Congresses	−0.374	0.597	0.688	0.172	2.751
Nautical/Sports marina	0.581	0.211	1.787	0.719	4.443
Cruise	−20.289	0.999	0.000	0.000	
Nature	−1.987	0.009	0.137	0.031	0.609
Food and wine	0.156	0.827	1.169	0.289	4.725
Languages	−20.337	0.999	0.000	0.000	
Frequency of the trip: First time (Ref. Cat.)		0.011			
Second time	−0.370	0.047	0.691	0.479	0.996
Three or more times	−0.686	0.005	0.503	0.313	0.809
Income: <12,000€ (Ref. Cat.)		0.017			
12,001 € to 15,000 €	−0.317	0.619	0.728	0.209	2.537
15,001 € to 20,000 €	−0.153	0.779	0.858	0.295	2.497
20,001 € to 25,000 €	−0.073	0.882	0.930	0.354	2.444
25,001 € to 30,000 €	0.373	0.441	1.452	0.562	3.752
30,001 € to 35,000 €	0.440	0.361	1.552	0.604	3.987
35,001 € to 40,000 €	0.678	0.162	1.971	0.762	5.095
40,001 € to 50,000 €	0.807	0.040	2.242	1.855	5.874
Over 50,000 €	0.959	0.048	2.610	1.931	7.320
Constant	−0.747	0.096	0.474		

Source: Author's own creation.

information from the people who will be affected by political decisions; allowing for the understanding of their priorities, preferences and the amount they are willing to pay. Therefore, identifying tourists' preferences regarding their WTP when offered 15 taxes and fees, whose collection allows for the improvement of sustainability and the experience of a destination, is one of the main contributions of this study to the existing literature.

Not all the taxes and/or fees proposed are met with the same willingness to pay by the tourists who visit Andalusia. Of the 15 fiscal instruments proposed to the tourist with positive WTP, only five of them received an acceptance rate of over 50%. They are related mainly to the benefit resulting from the use of public resources, tourist attractions and environmental protection. These results confirm the findings of other studies mentioned in this paper, which note that destinations are now met with a tourist demand that is seeking a memorable experience (Brandão et al., 2019) but that is also more aware of environmental problems and willing to pay taxes to reduce negative impacts and correct negative externalities (Seetaram et al., 2018; Tsvetanova & Seetaram, 2019).

The average amount that tourists are willing to pay for the five most accepted fiscal instruments varies between 1.11 euros for public entrance fees for public tourist resources and the entrance fee to public museums, and 1 euro for the tax on tourist stays. This information is vital for policymakers, since, according to Depondt and Green (2006), it is possible for the amount that the tourist is willing to pay to be higher than the amount established by the political and/or tourism authorities.

Additionally, the second contribution of this study to the existing literature is the identification of the socio-demographic factors and trip characteristics that condition the WTP with regard to the five most accepted fiscal instruments that have been determined (Table 8 shows the significant factors for each of the five taxes and fees analyzed).

The purpose of the trip is a factor that influences the tourist's WTP with regard to the five most accepted taxes and fees among tourists visiting Andalusia. These results are consistent with the literature reviewed in the previous sections (López-Sánchez & Pulido-Fernández, 2017; Witt, 2019), which confirms that the purpose of the

TABLE 7 Environmental conservation tax in municipalities whose main activity is eco-tourism: WTP protective factors

	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Purpose of the trip: Coastal—sun and beach—(Ref. Cat.)		0.000			
Interior/rural	0.928	0.000	2.530	1.502	4.260
Cultural	0.158	0.495	1.171	0.744	1.844
Family	-0.750	0.043	0.472	0.228	0.978
Golf	-0.105	0.788	0.900	0.418	1.939
Health-Well-being	1.134	0.009	3.109	1.331	7.259
Meetings/Congresses	-1.126	0.185	0.324	0.061	1.716
Nautical/Sports marina	1.144	0.030	3.140	1.116	8.835
Cruise	-20.311	0.999	0.000	0.000	
Nature	3.212	0.000	24.825	5.510	111.841
Food and wine	1.025	0.192	2.787	0.598	12.981
Languages	-20.606	0.999	0.000	0.000	
Place of origin: Andalusia (Ref. Cat.)		0.008			
Spain	0.312	0.314	1.367	0.744	2.510
Foreigner -European Union-	0.882	0.006	2.416	1.294	4.509
Foreigner -Rest of the world-	0.425	0.244	1.530	0.749	3.127
Professional category: Employee (Ref. Cat.)		0.030			
Employee -middle level-	-0.124	0.618	0.884	0.544	1.436
Employee -upper executive-	-0.780	0.021	0.458	0.237	0.887
Employer	-0.837	0.009	0.433	0.232	0.809
Others	-0.233	0.508	0.792	0.397	1.579
Income: <12,000€ (Ref. Cat.)		0.000			
12,001 € to 15,000 €	-0.197	0.782	0.821	0.203	3.318
15,001 € to 20,000 €	0.296	0.625	1.344	0.410	4.409
20,001 € to 25,000 €	0.524	0.358	1.688	0.553	5.150
25,001 € to 30,000 €	0.301	0.598	1.352	0.441	4.148
30,001 € to 35,000 €	1.230	0.030	3.423	1.126	10.407
35,001 € to 40,000 €	1.245	0.032	3.473	1.115	10.813
40,001 € to 50,000 €	1.532	0.010	4.628	1.448	14.794
Over 50,000 €	2.608	0.000	13.568	3.795	48.516
Constant	-1.490	0.016	0.225		

Source: Author's own creation.

TABLE 8 Summary of WTP protective factors by tax or fee

	Public entrance fees for public tourist resources	Tax on tourist stays	Tax on tourist attractions	Entrance fee to public museums	Environmental conservation tax in municipalities whose main activity is eco-tourism
Purpose of the trip	*	*	*	*	*
Income	*	*		*	*
Place of origin	*				*
Professional category	*				*
Lodging type		*	*		
Frequency of the trip				*	

Source: Author's own creation.

trip is an explanatory factor of the tourist's willingness to pay to contribute to greater sustainability of the destination and, therefore, to the improvement of the tourist experience. The tourist's income influences their WTP in four of the five most accepted instruments, with the exception being the tax on tourist attractions. These results are in line with the literature reviewed in the previous sections (López-Sánchez & Pulido-Fernández, 2017; Reynisdóttir et al., 2008; Witt, 2019), in which higher income levels mean higher WTP to contribute to greater sustainability of the destination. The place of origin also influences the tourist's WTP in two of these five fiscal instruments (public entrance fees for public tourist resources and environmental conservation tax in municipalities whose main activity is eco-tourism), which is in line with the literature reviewed in the previous sections (López-Sánchez & Pulido-Fernández, 2017).

The professional category has significance for both the public entrance fees for public tourist resources and the environmental conservation tax in municipalities whose main activity is eco-tourism. These results are consistent with the literature reviewed in the previous sections (López-Sánchez & Pulido-Fernández, 2017), which confirms that the tourist's professional category is an explanatory factor of their willingness to pay to contribute to greater sustainability of the destination. The lodging type influences the tourist's WTP in both the tax on tourist stays and the tax on tourist attractions. These results are in line with the literature reviewed in the previous sections (López-Sánchez & Pulido-Fernández, 2017), which confirms that the lodging type is an explanatory factor of the tourist's willingness to pay. Finally, the frequency of the trip influences only one fiscal instrument; the entrance fee to public museums. This result is confirmed by the literature reviewed in the previous sections (Reynisdóttir et al., 2008; Schuhmann et al., 2019) which explains that the frequency of the trip is an explanatory factor of the tourist's willingness to pay.

However, the results obtained should be considered with caution due to the limitations of this study with regard to the conformity bias and social desirability, the fact that the WTP only represents intentions and not real behaviors, and the fact that it was not possible to know the opinion of those tourists traveling by road.

6 | CONCLUSIONS

This study provides evidence regarding the success that the implementation of certain taxes and fees linked to tourist activity would have in collecting the necessary funds to develop strategies, in a mature destination, related to sustainability and the improvement of the destination experience. However, the introduction of said taxes and/or fees requires adequate planning by policymakers to avoid undesired results derived from their non-acceptance. According to Lindsey and Holmes (2010), public participation in the planning process is recommended to obtain useful information from the people who will be affected by political decisions. This allows for the understanding of their priorities and preferences.

These are precisely the main contributions of this study to the existing literature. On the one hand, the tourist preferences regarding their willingness to pay when offered 15 different taxes and fees have been identified. These instruments are aimed at obtaining public income that will subsequently contribute to the development of policies that will improve both the sustainability and the tourist experience of a destination. On the other hand, the socio-demographic variables and trip characteristics that condition the WTP in regard to the five most accepted taxes and fees have been determined.

Of the 15 taxes and fees proposed, there are some for which participants showed a greater willingness to pay. These were mainly linked to the tourists paying for their use of tourist resources, for tourist stays, and environmental protection, with the average amount that the tourist is willing to pay for said taxes and fees varying between 1 and 1.11 euros. This finding allows us to accept the first hypothesis: *Understanding and incorporating tourist preferences when introducing tourism-related taxes and/or fees will lead to their greater acceptance.*

However, we are faced with an increasingly segmented tourism market which is formed by groups of tourists with different needs and interests. It is fundamental to understand and identify which socio-demographic variables and trip characteristics influence the five instruments that receive the highest WTP from tourists. This will subsequently allow for greater effectiveness in the formulation and implementation of policies that allow for the achievement of the aforementioned objectives. The conditioning factors of the WTP identified in the tourists visiting Andalusia are in line with the literature review carried out.

More specifically, the WTP protective factors in the five most accepted instruments were: the purpose of the trip, income, place of origin, professional category, lodging type, and frequency of the trip. As such, these results allow us to accept the second hypothesis: *It is possible to determine which socio-demographic variables and trip characteristics condition the willingness to pay of those taxes and/or fees that enjoy a greater acceptance from tourists and whose income will be used to improve sustainability and the tourism experience in the destination.*

The management implications derived from the results obtained suggest that the commitment to sustainability and the improvement of the experience by the tourist visiting Andalusia, expressed through a majority WTP, establishes an adequate starting point to begin real progress toward sustainable management of an unsustainable mass destination. However, it is also of interest, both from a management and research point of view, to understand the reason why other groups reject the establishment of taxes and/or fees linked to tourist activity, which allow for the improvement of sustainability and tourist experience in a destination. To do this, it would be beneficial to carry out awareness campaigns regarding the benefits derived from the implementation of taxes and/or fees, both for the resident population and tourists, as well as for the natural, cultural, and architectural heritage.

However, significant progress focused on sustainability requires making profound changes both in the attitudes and activities of the participating agents, as well as in the identity of the tourist destination

itself. This is to be done through the establishment of repositioning strategies through a commitment to innovation and differentiation of the offer, which subsequently translates into memorable experiences in the destination and generates greater socio-economic profitability for the destination whilst also consolidating leadership over time as a unique, differentiated, and responsible destination.

Additionally, it is necessary to address marketing strategies, prior to the establishment of taxes and/or fees linked to tourist activity, that shed light on why the tourist is going to pay more to enjoy the tourist destination. In this way, the tourists receive relevant and precise information that allows for both the improvement of their decision-making and the adequate generation of expectations about the destination. It is, therefore, necessary to avoid making the mistake of carrying out superficial transformations, supported by simple marketing strategies, which aim to present destinations as sustainable when in fact they do not have this consideration.

Finally, this study has certain limitations such as the fact that WTP is a dependent variable that reflects intentions and not actual payment behavior. This is even more so in the case of Andalusia, given that there is currently no example of tax or fees being linked to tourist activity. Additionally, an attempt was made to control conformity and social desirability bias, with the following considerations being kept in mind during the tourist interviews: a) the interviewer emphasized the search for completely sincere responses, b) questions were worded neutrally, with no type of orientation as to which response may be better or worse, c) the option of not responding was included in the case that the interviewee was uncomfortable with the question, d) the study considered the variable regarding the amount of payment, which played a controlling role on desirability, since assessing the amount of payment allowed us to quantify this desire and e) at all times, anonymity was guaranteed. Finally, another limitation was the lack of interviews conducted in exit points that are different from those analyzed, such as highway transport.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasheets were generated.

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REFERENCES

- Adedoyin, F. F., Seetaram, N., Disegna, M., & Filis, G. (2021). The effect of tourism taxation on international arrivals to a small tourism-dependent economy. *Journal of Travel Research*. <https://doi.org/10.1177/00472875211053658>
- Aguiló, E., Riera, A., & Rosselló, J. (2005). The short-term price effect of a tourist tax through a dynamic demand model. The case of the Balearic Islands. *Tourism Management*, 26, 359–365.
- Arguea, N. M., & Hawkins, R. R. (2015). The rate elasticity of Florida tourist development (aka bed) taxes. *Applied Economics*, 47(18), 1823–1832.
- Arcury, T. A., Scollay, S. J., & Johnson, T. P. (1987). Sex differences in environmental concern and knowledge: The case of acid rain. *Sex Roles*, 16, 463–472.
- Alves, B., Benavente, J., & Ferreira, O. (2014). Beach users' profile, perceptions and willingness to pay for beach management in Cadiz (SW Spain). *Journal of Coastal Research*, 70, 521–526.
- Baddeley, M. C. (2004). Are tourists willing to pay for aesthetic quality? An empirical assessment from Krabi Province, Thailand. *Tourism Economics*, 10, 45–61.
- Balmford, A., & Whitten, T. (2003). Who should pay for tropical conservation, and how could the costs be met? *Oryx*, 37(02), 238–250.
- Bonham, C., Fujii, E., Im, E., & Mak, J. (1992). The impact of the hotel room tax: An interrupted time series approach. *National Tax Journal*, 45, 433–441.
- Bonham, C., & Gangnes, B. (1996). Intervention analysis with cointegrated time series: The case of the Hawaii hotel room tax. *Applied Economics*, 28, 1281–1293.
- Bigné, J. E., Mattila, A. S., & Andreu, L. (2008). The impact of experiential consumption cognitions and emotions on behavioral intentions. *Journal of Services Marketing*, 22(4), 303–315.
- Bokobo, S. (1999). La fiscalidad de las prestaciones turísticas: la posibilidad de que las Comunidades Autónomas establezcan la tasa turística. *Revista de Derecho Financiero y Hacienda Pública*, 102, 243–260.
- Bowker, J. M., Cordell, H. K., & Johnson, C. Y. (1999). User fees for recreation service on public lands: A national assessment. *Journal of Park and Recreation Administration*, 17(3), 1–14.
- Brandão, F., Breda, Z., & Costa, C. (2019). Innovation and internationalization as development strategies for coastal tourism destinations: The role of organizational networks. *Journal of Hospitality and Tourism Management*, 41, 219–230.
- Brissoulis, H. (2002). Sustainable tourism and the question of the commons. *Annals of Tourism Research*, 29, 1065–1085.
- Bruce, D. (2001). Ecotourism as mass tourism: Contradiction or reality? *Cornell Hotel and Restaurant Administration Quarterly*, 42(2), 104–112.
- Buckley, R. (2003). Pay to play in parks: An Australian policy perspective on visitor fees in public protected areas. *Journal of Sustainable Tourism*, 11(1), 56–73.
- Budeanu, A. (2005). Impacts and responsibilities for sustainable tourism: A tour operator's perspective. *Journal of Cleaner Production*, 13, 89–97.
- Butler, R. (1999). Sustainable tourism: A state-of-the-art review. *Tourism Geographies*, 1(1), 7–25.
- Casey, J. F., Brown, C., & Schuhmann, P. (2010). Are tourists willing to pay additional fees to protect corals in Mexico? *Journal of Sustainable Tourism*, 18, 557–573.
- Cater, E. (1994). Ecotourism in the third world, problems and prospects for sustainability. In E. Cater & G. Lowman (Eds.), *Ecotourism: A sustainable option?*. Wiley.
- Chase, L. C., Lee, D. R., Shulze, W. D., & Anderson, D. J. (1998). Ecotourism demand and differential pricing of national park access in Costa Rica. *Land Economics*, 74(4), 466–482.
- Cheung, L. T., & Jim, C. Y. (2014). Expectations and willingness to pay for ecotourism services in Hong Kong's conservation areas. *International Journal of Sustainable Development*, 21, 149–159.
- Daniere, A. G., & Takahashi, L. M. (1999). Environmental behavior in Bangkok, Thailand: A portrait of attitudes, values and behavior. *Economic Development and Cultural Change*, 47, 552–557.
- Dharmaratne, G., Yee, F., & Walling, L. (2000). Tourism potentials for financing protected areas. *Annals of Tourism Research*, 27(3), 590–610.
- De Cantis, S., & Ferrante, M. (2011). The probabilities of selection of first and second stage units in the time location sampling (TLS) design on incoming tourism in Sicily and Sardinia. In V. Asero, R. D'Agata, & V.

- Tomaselli (Eds.), *Turisti per caso? Il turismo sul territorio: Motivazioni e comportamenti di spesa* (pp. 53–58). Bonanno editore.
- Depondt, F., & Green, E. (2006). Diving user fees and the financial sustainability of marine protected areas: Opportunities and impediments. *Ocean & Coastal Management*, 49(3–4), 188–202.
- Durán-Román, J. I., Pulido-Fernández, J. I., & Cárdenas-García, P. J. (2020). Delimitación de ingresos públicos aplicables en los destinos turísticos españoles. *Journal of Regional Research*, 47, 179–199.
- Durán-Román, J. L. (2020). Oportunidades para la aplicación de una nueva fiscalidad turística a nivel regional. El caso de Andalucía. Doctoral Thesis. University of Jaén.
- Durán-Román, J. L., Cárdenas-García, P. J., & Pulido-Fernández, J. I. (2021). Tourists' willingness to pay to improve sustainability and experience at destination. *Journal of Destination Marketing & Management*, 19, 100540.
- Durberry, R. (2008). Tourism taxes: Implications for tourism demand in the UK. *Review of Development Economics*, 12(1), 21–36.
- Eagles, P. F. J., McCool, S. F., & Haynes, C. D. (2002). *Sustainable tourism in protected areas: Guidelines for planning and management*. IUCN.
- Edwards, P. (2009). Sustainable financing for ocean and coastal management in Jamaica: The potential for revenues from tourist user fees. *Marine Policy*, 33, 376–385.
- Fujii, E., Khaled, M., & Mak, J. (1985). The exportability of hotel occupancy and other tourist taxes. *National Tax Journal*, 38, 169–177.
- Gago, A., Labandeira, X., Picos, F., & Rodríguez, M. (2009). Specific and general taxation of tourism activities. Evidence from Spain. *Tourism Management*, 30(3), 381–392.
- Gago, A., & Labandeira, X. (2001). Turismo y Fiscalidad Ambiental. *Papeles de Economía Española*, 87, 179–186.
- Gooroochurn, N., & Sinclair, M. T. (2003). *The welfare effects of tourism taxation*. University of Nottingham: Tourism and Travel Research Institute.
- Gooroochurn, N., & Sinclair, M. T. (2005). Economics of tourism taxation: Evidence from Mauritius. *Annals of Tourism Research*, 32(2), 478–798.
- Greene, W. (1997). *Econometric analysis*. Prentice Hall.
- Guzmán, T. (2004). *Environmental taxes in Spain. Research Papers n. 5/04*. Department of Social Sciences, Roskilde University.
- Halkos, G., & Matsiori, S. (2012). Determinants of willingness to pay for coastal zone quality improvement. *Journal of Socio-Economics*, 41, 391–399.
- Healy, R. (1994). The 'common pool' problem in tourism landscapes. *Annals of Tourism Research*, 21(3), 596–611.
- IECA—Instituto de Estadística y Cartografía de Andalucía. (2020). *Encuesta de coyuntura turística de Andalucía*. Retrieved 15.02.2020 from Junta de Andalucía. https://www.juntadeandalucia.es/institutodeestadisticaycartografia/badea/informe/anual?CodOper=b3_271&idNode=8181
- Ihalanayake, R. (2012). Economic effects of tourism tax changes in Australia: Empirical evidence from a computable general equilibrium model. *Tourism Economics*, 18(1), 181–202.
- Jensen, T. C., & Wanhill, S. (2002). Tourism's taxing times: Value added tax in Europe and Denmark. *Tourism Management*, 23, 67–79.
- Kaffashi, S., Radam, A., Nasir, M., Rusli, M., & Hanim, N. (2015). Ecological conservation, ecotourism, and sustainable management: The case of Penang National Park. *Forest*, 6, 2345–2370.
- Kostakis, I., & Sardanou, E. (2012). Which factors affect the willingness of tourists to pay for renewable energy? In *Renewable Energy* (pp. 38(1), 169–172).
- Kozak, M., & Rimmington, M. (1999). Measuring tourist destination competitiveness: Conceptual considerations and empirical findings. *International Journal of Hospitality Management*, 18, 273–283.
- Laarman, J., & Gregersen, H. (1996). Pricing policy in nature-based tourism. *Tourism Management*, 17(4), 247–254.
- Lindsey, G., & Holmes, A. (2010). Tourist support for marine protection in Nha Trang, Vietnam. *Journal of Environmental Planning and Management*, 45(4), 461–480.
- Liu, J., Liu, N., Zhang, Y., Qu, Z., & Yu, J. (2019). Evaluation of the non-use value of beach tourism resources: A case study of Qingdao coastal scenic area, China. *Ocean and Coastal Management*, 168, 63–71.
- López-Sánchez, Y., & Pulido-Fernández, J. I. (2014). Factors determining the willingness to pay for a more sustainable destination. The case of the Western Costa del Sol. *Cuadernos de Turismo*, 33, 389–391.
- López-Sánchez, Y., & Pulido-Fernández, J. I. (2017). Factors influencing the willingness to pay for sustainable tourism: A case of mass tourism destinations. *International Journal of Sustainable Development & World Ecology*, 24(3), 262–275.
- Mak, J., & Nishimura, E. (1979). The economics of a hotel room tax. *Journal of Travel Research*, 17(4), 2–6.
- Martínez-García, E. (2010). La Financiación pública en los destinos turísticos: Un análisis de la imposición en turismo. In *Turismo, Políticas e Desenvolvimento humano*, edited by Asterisco, *colecção tempo e espaço* (pp. 124–131). Asterisco.
- Mansourian, S., & Dudley, N. (2008). *Public funds to protected areas*. WWF International.
- Mazzocchi, C., Sali, G., & Ruggeri, G. (2019). Tourists' preferences for alpine pastures maintenance. *Landscape Online*, 68, 1–18.
- Mgxekeba, B., Scholtz, M., & Saayman, M. (2018). A typology of memorable experience at Nelson Mandela heritage sites. *Journal of Heritage Tourism*, 14(4), 325–339.
- Morar, C. (2012). Tourism development based on European and national funding programs in the Bihor County's disadvantaged mining areas. *Revista Română de Geografie Politică*, 14(1), 99–108.
- Moutinho, L. (2000). Trends in tourism. In L. Moutinho (Ed.), *Strategic management in tourism*. CAB International.
- Nunkoo, R., & Gursoy, D. (2012). Residents' support for tourism: An identity perspective. *Annals of Tourism Research*, 39(1), 243–268.
- Nunkoo, R., & Gursoy, D. (2017). Political trust and residents' support for alternative and mass tourism: An improved structural model. *Tourism Geographies*, 19, 318–339.
- OECD. (2014). *Tourism trends and policies 2014*. OECD Publishing.
- Palmer, T., & Riera, A. (2003). Tourism and environment taxes. With special reference to the Balearic ecotax. *Tourism Management*, 24, 665–674.
- Pedreño, A., & Monfort, V. (1996). *Introducción a la economía del turismo en España*. Civitas.
- Piriypada, S., & Wang, E. (2015). Modeling willingness to pay for coastal tourism resource protection in Ko Chang marine National Park, Thailand. *Asia Pacific Journal of Tourism Research*, 20(5), 515–540.
- Ponjan, P., & Thirawat, N. (2016). Impacts of Thailand's tourism tax cut: A CGE analysis. *Annals of Tourism Research*, 61(8), 45–62.
- Pulido, J. I., & Cárdenas, P. J. (2012). La política turística en el ámbito local: la gestión pública de destinos. In J. I. Pulido (Ed.), *Política Económica del Turismo* (pp. 213–232). Pirámide.
- Pulido-Fernández, J. I., & López-Sánchez, Y. (2016). Are tourists really willing to pay more for sustainable destinations? *Sustainability*, 8(12), 1240.
- Reiling, S. D., Criner, G. K., & Oltmanns, S. E. (1988). The influence of information on users' attitudes toward campground user fees. *Journal of Leisure Research*, 20(3), 208.
- Reynisdottir, M., Song, H., & Agrusa, J. (2008). Willingness to pay entrance fees to natural attractions: An Icelandic case study. *Tourism Management*, 29, 1076–1083.
- Ritchie, J. R. (1999). Policy formulation at the tourism/environment Interface: Insights and recommendations from the Banff-Bow Valley study. *Journal of Travel Research*, 38(2), 100–110.
- Rose, G. M., Kahle, L. R., & Shoham, A. (1995). The influence of employment-status and personal values on time related food

- consumption behaviour and opinion leadership. *Advances in Consumer Research*, 22, 367–372.
- Smith, S. (1997). Challenges to tourism in industrialized nations. In S. Wahab & J. Pigram (Eds.), *Tourism, development, and growth: The challenge of sustainability*. Routledge.
- Schuhmann, P., Skeete, R., Waite, R., Lorde, T., Bangwayo-Skeete, P., Oxenford, H., Gill, D., Moore, W., & Spencer, F. (2019). Visitors' willingness to pay marine conservation fees in Barbados. *Tourism Management*, 71, 315–326.
- Seetaram, N., Forsyth, P., & Dwyer, L. (2016). Measuring price elasticities of demand for outbound tourism using competitiveness indices. *Annals of Tourism Research*, 56(1), 65–79.
- Seetaram, N., Song, H., & Page, S. (2014). Air passenger duty and UK outbound tourism. *Journal of Travel Research*, 53(4), 476–487.
- Seetaram, N., Song, H., Ye, S., & Page, S. (2018). Estimating willingness to pay air passenger duty. *Annals of Tourism Research*, 72, 85–97.
- Song, H., Seetaram, N., & Ye, S. (2019). 'The effect of tourism taxation on tourists' budget allocation. *Journal of Destination Marketing and Management*, 11, 32–39.
- Tol, R. S. (2007). The impact of a carbon tax on international tourism. Transportation research part D. *Transport and Environment*, 12(2), 129–142.
- Tsvetanova, E., & Seetaram, N. (2019). Consumers' attitude to the air passenger duty in the UK—An exploratory study. *Journal of Air Transport Studies*, 9(2), 78–93.
- UNWTO—United Nations World Tourism Organization. (1998). *Tourism taxation. Striking a fair deal*. World Tourism Organization.
- UNWTO—United Nations World Tourism Organization. (2003). *Sustainable development of tourism: Concepts and definitions*. World Tourism Organization.
- Van Liere, K. D., & Dunlap, R. E. (1980). The social bases of environmental concern: A review of hypotheses, explanations and empirical evidence. *Public Opinion Quarterly*, 44, 181–197.
- Veréb, V. N., & Azevedo, A. (2019). A quasi-experiment to map innovation perception and pinpoint innovation opportunities along the tourism experience journey. *Journal of Hospitality and Tourism Management*, 41, 208–218.
- Wight, P. (1998). Tools for sustainability analysis in planning and managing tourism and recreation in the destination. In M. Hall & A. Lew (Eds.), *Sustainable tourism: A geographical perspective*. Addison Wesley Longman.
- Williams, D. R., Vogt, C. A., & Vittersø, J. (1999). Structural equation modeling of users' response to wilderness recreation fees. *Journal of Leisure Research*, 31(3), 245–268.
- Wilson, S., Fesenmaier, D. R., Fesenmaier, J., & Van Es, J. C. (2001). Factors for success in rural tourism development. *Journal of Travel Research*, 40, 132–138.
- Witt, B. (2019). Tourists' willingness to pay increased entrance fees at Mexican protected areas: A multi-site contingent valuation study. *Sustainability*, 11(11), 3041.
- Young, J., Kyle, G., Petrick, J., & Absher, J. (2011). Fairness of prices, user fee policy and willingness to pay among visitors to a national forest. *Tourism Management*, 32, 1038–1046.

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