Journal of Environmental and Tourism Analyses
Vol. 13. 1 (2025) 28-48, https://doi.org/10.5719/JETA/13.1/2.

A Sustainable Market-Oriented Approach: Permanent and Second Home Residents' Perceptions in A Nature-Based Destination

Nuria RECUERO VIRTO [a1], Pablo GRRIDO PINTADO [a]

[a1] *Marketing Department, Faculty of Commerce and Tourism, Universidad Complutense de Madrid, 28003, Av. de Filipinas, 3, Madrid, Spain*. ORCID: https://orcid.org/ 0000-0002-5346-9502

[a] *Marketing Department, Faculty of Commerce and Tourism, Universidad Complutense de Madrid, 28003, Av. de Filipinas, 3 Madrid, Spain.* ORCID: https://orcid.org/0000-0002-6111-6715

Abstract: This research was performed due to the need of adopting a sustainable market-oriented approach in tourism resources. Drawing on the fact that residents' perceptions are considered crucial to achieve sustainable tourism, little research has been conducted regarding permanent and second home residents. Hence, this research aimed to explore the effects of their attitudes on sustainability, understood within a market-oriented perspective. In view of the dissimilarities of results obtained in literature regarding the hypotheses proposed, the findings offer revealing contributions. The data analysis showed that the most significant effects were related to the impact of residents' perceived benefits on sustainability and support for tourism, presenting significant differences among the two sample groups. Although in both samples the effects were positive and meaningful, the permanent sample disclosed a stronger effect than the second homeowners' group. This study offers interesting insights for scholars and managers by shedding light on the understanding of tourism.

Key words: *Sustainable tourism, permanent residents, second homeowners, support for tourism, community involvement, perceived benefits*

1.Introduction

Sustainable tourism implies the embracement of long-term welfare that aims to maintain the same capabilities so future generations can fulfil their needs too (Cotterell et al., 2020). Sustainable development requires changes from the different agents involved in the tourism value chain, as all of them must reduce its negative impacts and protect nature because of the social interaction and stakeholder collaboration (Eyisi et al., 2021). Locals have been pinpointed as critical agents as their involvement, and thus their perceptions of the financial and non-financial benefits they get from the activity, can be imperative in achieving this sustainable development (Lee, 2013). Scholars have indicated the need of adopting a sustainable market orientation approach, precisely in nature-based destinations (Insch, 2020; Mitchell et al., 2013).

Prior research has suggested different theoretical models to explain residents' support for tourism development which have mainly analysed it in the bidimensional benefit-cost approach, concluding that perceived costs are adversely related to tourism development (Wang et al., 2020), or considering a three-dimensional framework encompassing economic, social and environmental positive and negative impacts (Gursoy et al., 2019). Nonetheless, the current study has examined perceived benefits as a dimension that includes community benefits, destination profile and economics benefits, and amenities and facilities development benefits (Fredline & Faulkner, 2000),

[1] Corresponding author: Nuria RECUERO VIRTO, E-mail: nrecuero@ucm.es, Received in April 2025, Published in June 2025.

and the positive and significant effect on not only support for tourism development, but, also, on the development of sustainable tourism, which encompasses economic, social and market sustainability. Nature-based tourism, defined as any type of leisure activity that occurs in natural areas, is becoming a growing trend, and thus, tourism activity has ended up converting as the most meaningful commercial use of many protected areas (Spenceley, 2016; Thapa et al., 2022). The relationship between community members' perceived benefits and support for tourism has been exhaustively examined in different natured-based locations, such as Kana National Geopark (China) where the results did not reveal a significant and positive effect or Gunung Ciremai National Park (Indonesia) which findings exposed a positive and significant influence (Nugroho and Novata, 2020; Wang and Luan, 2021). However, it yet to be analysed the impact of locals' perceived benefits on sustainability, understood as a dimension that comprehends the three-fold equilibrium of economic, social and market welfare.

Residents' perceived benefits of natural parks have been widely studied, but in some studies the samples to examine have been local visitors (Croy et al., 2020; Esfandiar et al., 2022) or even comparisons of samples between local and nonlocal visitors (Li and Wu, 2019) rather than really inhabitants of the area. Although it has been discussed that permanent and second home residents' attitudes are different towards sustainable tourism (Hao et al., 2014), up to date, no research has been found that analyses the differences among these two groups in relation to different linkages such as the effect of community involvement on support for tourism, or the impact of perceived benefits on sustainable market-oriented approach.

Given the purposes, the next effects were tested as hypotheses: (1) community involvement on (a) perceived benefits, (b) support for tourism, and (c) sustainable market-oriented approach; (2) perceived benefits on (a) support for tourism, and (b) sustainable market-oriented approach; (3) support for tourism on sustainable market-oriented approach. The results were obtained by means of using Partial Least Squares Structural Equation Modelling (PLS-SEM) analysis and the multigroup analysis (MGA), to compare the permanent and second home residents' perceptions. The research context was Arribes del Duero Natural Park (ADNP) (between Spain and Portugal), which provides a new insight by describing residents' attitudes towards a nature-based location that was facing development phase of the tourism life cycle.

2. 2. Theoretical framework

2.1 Community involvement on perceived benefits, support for tourism and sustainable market-oriented approach

Community involvement enrols members of a destination in the activities that affect their daily lives, and their active participation makes them feel in control of tourism development as well as they get to know all the benefits that emerge from this progress (Blasco et al., 2018; Wang and Luan, 2021). Community involvement is defined by the level of collaboration of its members in the tourism activities that benefit all the community and are of common concern (Blasco et al., 2018; Moghavvemi et al., 2020). Therefore, community involvement entails collaborative decision making and co-ownership of responsibility and benefits (Moghavvemi et al., 2020). This level of enrolment can have a significant direct effect on tourists' experiences, and hence it can be a critical factor in the tourism development and in the image of the place (Blasco et al., 2018; Orgaz-Agüera et al., 2020).

Even though it seems reasonable that engaging residents in the decision-making and management processes can persuade them of the opportunities of the tourism advancement, it

remains unclear (Wang and Luan, 2021). Several scholars (Choi and Murray, 2010; Wang and Luan, 2021) concluded that community involvement has a negative influence on perceived benefits. Nicholas et al. (2009) determined that community involvement had no influence on perceived benefits. In contrast, other studies have identified a positive influence of community involvement on perceived benefits (Blasco et al., 2018; Lee, 2013; Nugroho and Numata, 2020) and no impact on perceived costs (Lee, 2013; Nugroho and Numata, 2020).

It has been argued that residents' participation and collaboration in tourism activities can improve their awareness in relation to the pros and cons of tourism development, as well as it can have an effect on their support for the development of tourism (Nguyen et al., 2019; Orgaz-Agüera et al., 2020; Rasoolimanesh et al., 2017). The community involvement has been identified as being the basis of sustainable tourism development (Nicholas et al., 2009; Rasoolimanesh et al., 2017). This bond that can emerge from residents' engagement in tourism activities can motivate their support for tourism development (Lee, 2013). Although it seems that residents that are involved in tourism activities will likely support its development, in Nicholas et al. (2009) it was reported that there was no significant effect between community involvement and support for tourism. Contrary, Lee (2013) found this relationship significant and positive. Besides, Rasoolimanesh et al. (2017) revealed in a multi-group study that the effect of community involvement on support for tourism was not significant for the city of Lenggong, (Malaysia) whereas it was significant positive for the city of George Town (Malaysia).

Sustainable tourism is characterized by long-tern tourism prosperity that comprises the capabilities of future generations to fulfil their needs (Lee, 2013). This concept is defined by financial and non-financial dimensions, which have been specified in economic, market and social performance (Blasco et al., 2018; Camarero et al., 2015). Market performance ensures the long-term competitiveness of the destination as it guarantees its differentiation (Pulido-Fernández et al., 2015).

It has been argued that residents' involvement can make them act as social actors that are able to settle conflicts between residents that have different interests, and make decisions over activities that affect their lives and, consequently improve their quality of life and foster economic development (Orgaz-Agüera et al., 2020; Rasoolimanesh et al., 2017). Also, community involvement can increase locals respect for their values, traditions, which result in a successful positive effect on sustainable tourism (Blasco et al., 2018; Orgaz-Agüera et al., 2020; Rasoolimanesh et al., 2017). Given the previous discussion, it seems reasonable to believe that if residents feel involved in tourism activities, they will likely perceive benefits from it, support for tourism and enhance sustainable tourism. Thus, the next hypotheses are established:

H1: Community involvement has a positive and significant effect on (a) perceived benefits, (b) support for tourism and (c) sustainable market-oriented approach.

2.2 Perceived benefits impact on support for tourism and sustainable market-oriented approach

Social exchange theory (SET, in advance) is based on the idea that when residents perceive positive benefits from tourism activities, they are most predisposed to support tourism development (Alipour and Gavilyan, 2018). SET considers social relationships as an exchange interaction of activities or resources upon the expectation of obtaining benefits from it (Gursoy et al., 2019). This theory explains the effect of personal benefits towards support for tourism development (Hanafiah et al., 2021). Precisely, it pinpoints that residents tend to support tourism development if they

consider that it generates an economic opportunity for them (Lee, 2013; Hanafiah et al., 2021). On this matter, it has been argued that residents tend to consider the benefits they obtain from tourism development when they have to decide whether if they are going to support tourism development (Pereira and Gadotti, 2021). It is reasonable that residents that receive more benefits from tourism activities support in a higher-level tourism development than those locals that do not gather benefits or obtain few profits (Blasco et al., 2018). In this regard, many scholars have argued that those residents' who perceive opportunities from tourism flows tend to support tourism development (Lee, 2013; Park et al., 2015; Stydilis, 2014).

SET conceives that if locals perceive there is an improvement of the community's economic and community well-beings which benefits super passes their costs, they will tend to support tourism development (Gursoy et al., 2019; Rasoolimanesh et al., 2017; Zhang et al., 2019). However, tourism development can generate some unfavourable impacts, such as price inflation due to real estate pressures, increase costs of living, pollution, traffic congestion, among many others (Lee et al., 2020), which are often negatively related to tourism development (Nunkoo and Gursoy, 2012). Applying the theoretical basis of SET, rational humans tend to put all their efforts on maximizing benefits and minimizing costs, which will subsequently make them support any other effort that favours tourism development (Nugroho and Numata, 2020). This has defined the cornerstone of many research among residents' support suggesting that this a relation between benefits (positive) and costs (negative) factors that end up in a social behaviour and exchange paradigm that aims to achieve sustainable development (Qi et al., 2021). Thus, this point of view considers locals attitudes and behaviours a result of rational and self-interested actions (Wang et al., 2020).

Lee, Kim and Kim (2018) proved that perceived benefits, corporate social responsibility (CSR) and quality of life have a positive and significant effect on residents' support for tourism development. Also, Pereira and Gadotti dos Anjos (2021) incorporated CSR as a predictor of support for tourism development in their model, which included economic, social and environmental factors. Both studies proposed different integrative models to examine factors that determine residents' support for tourism development, which are related to sustainability such as CSR and their models do not include costs or impacts as a dimension.

Although the increasing attention sustainable development is gaining since the early 90s, scholars have widely studied community's perceptions and support for tourism employing SET as a basis for their proposed models and their findings have been used to propose contributions that improve sustainable tourism development (Lee et al., 2021). Despite its importance, few studies have been conducted that evaluates the influence of residents' perceptions on sustainable tourism development (Blasco et al., 2018). Thus, the following hypotheses are proposed:

H2: Perceived benefits have a positive and significant effect on (a) support for tourism and (b) sustainable market-oriented approach.

2.3. Support for tourism influence on sustainable market-oriented approach

Sustainable tourism ensues future generation capabilities of fulfilling their own needs (Lee, 2013). Sustainable tourism can be related to performance as these tourist products require a customer orientation so as to lead to positive results. In this regard, it has been argued that cultural assets' performance can be measured in economic, social and market terms (Camarero et al., 2015). Market sustainability is defined by the appealing differentiation the tourist asset has so as to endure its competitiveness (Pulido-Fernández et al., 2014). These three factors are continuously interacting, and therefore require of reorientation to be balanced so as to fulfil residents' preferences and needs

and thus, achieve the desired sustainable tourism development (Lee, 2013; Pulido-Fernández et al., 2014).

Nevertheless, it has been proved that perceived benefits are necessary so residents' support tourism development, few research has examined that this support will consequently enhance sustainable tourism development (Blasco et al., 2018). Prior studies have argued that a community-based approach is required to achieve sustainability (Woodley, 1993), as this perspective promotes community participation, considers residents' needs and offers them opportunities (Tolkach and King, 2015). Besides, Blasco, Recuero, Aldas and García-Madariaga (2018) demonstrated that there is a positive and significant effect on support for tourism development and sustainability, defined by these three factors (i.e., economic, social and market sustainability) in an archaeological site. It is reasonable to think that this relationship will be also positive and significant in a nature-based tourist resource. Hence, it is postulated:

H3: Support for tourism has a positive and significant effect on sustainable market-oriented approach.

3. 3.Methodology

3.1 Study setting

Residents' perceptions regarding tourism development depends on the context. Locals' attitudes and behaviours are influenced by their environment where the tourism development takes place. Thus, different contexts and situations of the life cycle of tourism development have to be evaluated to comprehend their role as agents of change in achieving tourism sustainability (Blasco et al., 2018). This study focused on ADNP a protected natural space that occupies an area of 170,000 hectares on the border line between the provinces of Zamora and Salamanca in Spain and the region of Tras Os Montes in Portugal (Ramírez-Rodríguez and Amich, 2014). For 120 kilometres, the Duero River and its tributaries (Tormes, Águeda, Huebra and Huces) flow through an extraordinary labyrinth of canyons and gorges (Sanz et al., 2013) with rocky cliffs that, at some points, are over 400 meters high (Antón et al., 2012). For this reason, this area is called Arribes (Marino-Alfonso et al., 2021). The territory has a north-south orientation, with elevations around 600 meters, while the average elevation in the rest of the plateau is 800 meters (Gavilán, 2005). Due to this difference in altitude, the climate is characterized by fairly mild annual temperatures and an almost total absence of frost (Martínez-Graña, Goy and Cimarra, 2015).

This heat regime has permitted the settlement of a thermophilic flora and the growth of orchards, olive trees, and vineyards on terraces carved into the steep hillsides (Marino-Alfonso et al., 2021). Likewise, as indicated by Alves et al. (2004) it is a region of great faunal value due to the large number of species, particularly sedentary and migratory birds that seek the area to nest. Landscape features provide support for the balance of the food chain of the various ecosystems.

The combination of these natural and landscape characteristics, all which stem from the Arribes' unique geomorphological configuration, justified its inclusion in the Plan for Protected Natural Areas of Castilla y León in 1991, as well as the subsequent declaration of the ADNP (2002). In addition, it is also catalogued as a Special Protection Area for Birds and a Special Conservation Area included within the European project Red Natura 2000. In addition, on June 9, 2015, both the Portuguese and Spanish areas were declared UNESCO cross-border biosphere reserve under the name Meseta Ibérica (Campos et al., 2021; Aparicio et al., 2022) next to the Lago de Sanabria Natural Park in Spanish territory and the Montesinho Natural Park in the Portuguese part.

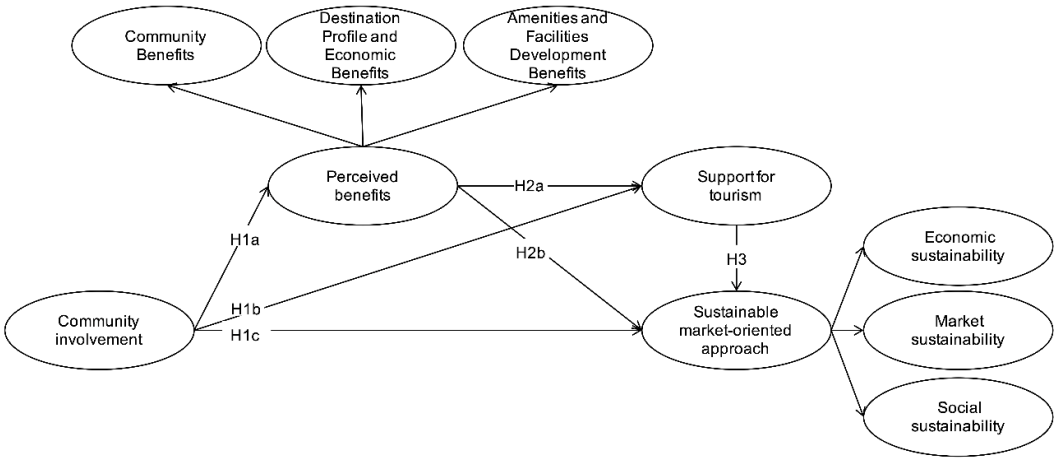
For González et al. (2013, p.616) "this area was granted its status as a Natural Park due to a number of geographic, historical, biological, and other factors, and it represents a harmonious integration of natural and human activities, allowing the existing biodiversity to be conserved and maintained". However, 20 years after the declaration of ADNP, there are no studies in relation to the perception of residents about tourism sustainability in the area. As aforementioned, there are different studies that have examined residents' perceptions regarding tourism development (Alcon, et al., 2019; Buongiorno & Intini, 2021; Cetin et al., 2018; Cetin and Sevik, 2016; Obradovic et al., 2021; Malik & Bhat, 2015).

3.2. Data collection and sample profile

The target population was Arribes del Duero residents, which are mostly affected by the tourism development of ADNP. It was no possible to estimate the representativeness nor the rate response of the sample as there is no census or related data of second home property owners, which also happened in similar studies (Hao et a., 2014). As a result, the convenience sampling method was then used since it was also employed in related-studies (Blasco et al., 2018; Kim, Gursoy, & Lee, 2006; Yuksel, Yuksel, & Bilim, 2010), it has been stated that it is very appropriate method to identify real and acceptable subjects for the sample (in this case, residents) and it boots achieving a high level of response rate (Kim and Li, 2009; Malhotra and Birks, 2007).

The information to test the proposed model presented in Figure 1 was collected by means of an online survey. Specifically, subjects were invited to fill out an online questionnaire, produced using the Google forms tool, which was available for approximately 52 days.

Figure 1. The proposed model



Link to the online survey, available only Spanish due to sample reasons, was published on a web (i.e., Pueblosdesayago.com) and local press and local digital media platforms (i.e., La Opinión de Zamora, Zamoranews.com, Zamora24horas and SalamancaRTValdia.com). The online survey included an introductory section explaining the research, and to warrant the quality of the research, participants were guaranteed that their answers would be anonymous, their data would only be used for research purposes, and that there were no right or wrong answers, so honest responses were expected. (Podsakoff et al., 2003).

From the 21st of July to the 12th of September 2023 the survey data was collected. A total of 301 usable questionnaires were received, 150 from permanent and 151 from second home residents Table1 displays information about the socio-demographic features of both samples.

Table 1. Profile of respondents

Characteristics		Permanent residents *(n=150)*		Second home residents *(n=151)*	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Gender	Female	78	52.0	70	46.4
	Male	72	48.0	81	53.6
Age	Under 24	21	14.0	13	8.6
	25 – 34	24	16.0	26	17.2
	35 – 44	37	24.7	39	25.8
	45 – 54	37	24.7	47	31.1
	55 – 64	21	14.0	20	13.3
	Over 65	10	6.6	6	4.0
Education	Without studies	2	1.3	0	0
	Primary studies	13	8.7	2	1.3
	Secondary studies	54	36.0	39	25.8
	University	81	54.0	110	72.9
Occupation	Employee	82	54.7	99	65.6
	Freelancer	0	0.0	3	2.0
	Housewife	4	2.7	1	0.7
	Retired	12	8.0	9	6.0
	Self-employed	32	21.3	15	9.9
	Student	13	8.7	16	10.6
	Unemployed	7	4.7	8	5.3
Household income per month	Under 1000 euros	25	16.7	11	7.3
	1,000-1,500 euros	54	36.0	24	15.9
	1,501-2,000 euros	26	17.3	39	25.8
	2,001-2,500 euros	22	14.7	21	13.9
	2,501-3,000 euros	9	6.0	18	11.9
	Over 3,000 euros	14	9.3	38	25.2
Home ownership	Homeowners	116	77.3	115	76.2
	Home renters	34	29.3	36	23.8
Number of years living in Arribes del Duero	11-20 years	25	16.7	16	10.6
	21-34 years	39	26.0	42	27.8
	3-5 years	6	4.0	4	2.6
	35-50 years	56	37.0	43	28.5
	51 years or more	16	10.7	23	15.2
	6-10 years	2	1.3	6	4.0
	Only summer for <5 years	1	0.7	7	4.6
	Less than 3 years	5	3.3	10	6.6
Household involvement with tourism-related activities (just one option)	Respondent of any informal tourism social groups	7	4.7	6	4.0
	Follower of online tourism-related social media	50	33.33	69	45.7
	Member of a tourism-related organization	18	12.0	7	4.6
	No connection with any tourism-related activity	44	29.33	49	32.4
	Related more than 1 of the tourism-related activities mentioned	29	19.33	19	12.6
	Subscriber to a tourism-related magazine	2	1.3	1	0.7

Table 2 presents the measurement model and the descriptive analysis. Briefly, the mean values denote that the permanent and second home residents value slightly different all the dimensions of the proposed model.

Table 2. Descriptive analysis. Some constructs adapted after Blasco et al., 2018; Blešić, et al., 2022

Con-struct	Associated Items	Permanent resident (n=150)		Second home resident (n=151)	
		Mean	Std. Dev.	Mean	Std. Dev.
Community involvement (CI)	I participate in tourism-related activities.	4.427	2.216	4.099	2.106
	I support research for the development of tourism in ADNP. [d]				
	I am involved in the planning and management of tourism in ADNP	2.807	2.039	2.444	1.774
	I am involved in the decision-making for tourism of ADNP.	2.267	1.780	2.086	1.715
Community Benefits (CBE)	The tourism promotion of ADNP increases the pride of local residents in their community.	5.507	1.900	6.305	1.332
	The tourism promotion of ADNP brings the community together.	4.993	1.951	5.901	1.530
	This tourism promotion makes ADNP a more interesting place to live in.	5.340	2.039	6.205	1.339
	This tourism promotion of ADNP enhances local residents' spirit of hospitality.	4.973	2.033	5.881	1.513
	This tourism promotion of ADNP leads to higher levels of service offered by local businesses.	5.013	2.040	5.960	1.539
	This tourism promotion of ADNP leads to a wider range of goods available in the shops.	4.887	2.064	5.874	1.661
	This tourism promotion of ADNP increases the awareness/recognition of the local culture.	5.187	2.060	6.119	1.474
	This tourism promotion of ADNP improves the understanding of different people and cultures by residents.	4.920	2.058	5.828	1.643
Destination Profile and Economic Benefits (DPB)	Belonging to ADNP promotes the area as a tourist destination.	5.413	1.884	6.338	1.041
	ADNP gives our area an international identity.	5.547	1.850	6.238	1.222
	The activities developed by ADNP give residents the opportunity to meet new people.	4.633	2.115	5.510	1.565
	ADNP provides employment opportunities in the community.	4.167	2.080	5.371	1.601
	ADNP increases trade for local businesses.	4.533	2.042	5.775	1.466
	ADNP increases personal income of local residents.	3.893	2.126	5.152	1.830
Amenities and Facilities Development	ADNP improves the appearance of the area.	4.667	2.141	5.854	1.541
	ADNP improves the quality of local services (e.g., police, medical and utilities) in the area.	3.487	2.265	4.748	2.072
	ADNP leads to the development of new facilities which can be used by local residents.	3.840	2.176	5.060	1.984
	ADNP increases the variety of entertainment in the destination.	4.333	2.074	5.404	1.838
Economic sustainability (ESU)	Because of tourism, during these last three years I think the income generated in the area has increased.	4.040	1.932	4.834	1.654
	... the number of visitors of the area has increased.	4.867	1.861	5.589	1.387
	... the area has completely fulfilled its financial objectives.	3.727	1.822	4.563	1.609

	... the area has diversified its financial lines (donations, public money, associations of friends, services, goods, shop…).	3.293	1.903	4.285	1.716
Market sustainability (MSU)	Because of tourism, during these last three years I think the area has improved its reputation and prestige.	4.740	1.892	5.490	1.337
	... I see that visitors of the area show their enthusiasm and satisfaction after their visit to ADNP.	5.460	1.828	6.073	1.128
	...I know many visitors have returned or have recommended the visit to others.	5.587	1.713	6.166	1.198
Social sustainability (SSU)	Because of tourism, during these last three years I know that ADNP has contributed in the improvement locals' standard of living.	3.713	2.031	4.669	1.737
	... I know that ADNP has contributed in increasing visitors' interest.	4.993	1.958	5.768	1.378
	… I think ADNP has completely fulfilled the objectives respecting the visitors it receives and the wines they sale.	4.407	1.873	5.152	1.577
	... has contributed in raising community's awareness about the importance of the natural resources in the region.	4.407	2.024	5.371	1.709
	... has transformed the area into an important natural landmark.	4.833	2.121	5.636	1.503
Support for Tourism (SFT)	Tourism is one of the most important industries for my community.	4.673	2.057	5.450	1.678
	Tourism helps my community grow in the right direction.	4.653	2.020	5.490	1.582
	I am proud that tourists are coming to my community.	5.887	1.667	6.377	1.008
	Tourism continues to play an important economic role in my community.	4.860	2.030	5.616	1.556
	I support the development of tourism as it is vital to my community.	5.413	1.826	6.053	1.200
	My community should attract more tourists.	5.880	1.701	6.258	1.136

NOTE: [d] Dropped during the estimation of the measurement model. Legend: Std. dev. - standard deviation

The scale items employed in this study were adopted from prior research and all of them were measured on a seven-point Likert scale. Community involvement was measured employing Lee's (2013) scale items. Perceived benefits were operationalised using the first-order dimensions: community benefits, destination profile and economic benefits, amenities and facilities development benefits developed by Qi et al. (2021). Sustainable market-oriented approach was assessed employing the first-order dimensions: economic, market and social sustainability adapted from Blasco et al.'s (2018) scale items. Finally, support for tourism were estimated using Nunkoo and So scale items (2016).

Table 3. Reliability and convergent validity of the final measurement model.

Factor	Indicator	Permanent resident						Second home resident					
		Standardized Loading	t-Value (bootstrap)	CA	rho_A	CR	AVE	Standardized Loading	t-Value (bootstrap)	CA	rho_A	CR	AVE
Amenities & facilities dev.	AFB1	0.869	39.485	0.923	0.926	0.946	0.813	0.797	22.820	0.913	0.915	0.940	0.797
	AFB2	0.865	27.914					0.901	44.876				
	AFB3	0.955	110.936					0.949	86.856				
	AFB4	0.916	49.542					0.915	38.507				
Community benefits	CBE1	0.867	28.374	0.965	0.965	0.970	0.802	0.751	10.150	0.949	0.952	0.958	0.741
	CBE2	0.898	40.950					0.845	22.241				
	CBE3	0.904	52.853					0.850	19.121				
	CBE4	0.872	29.043					0.887	32.283				
	CBE5	0.899	42.721					0.893	34.041				
	CBE6	0.883	35.844					0.835	21.881				
	CBE7	0.911	40.670					0.898	34.635				
	CBE8	0.927	68.133					0.915	47.800				
Comm. involv.	CI1	0.838	24.224	0.830	0.852	0.896	0.742	0.740	13.119	0.789	0.792	0.879	0.709
	CI3	0.894	30.798					0.909	40.382				
	CI4	0.850	24.200					0.867	24.736				
Destination profile & economic benefits	DPB1	0.843	26.132	0.938	0.938	0.951	0.764	0.643	8.005	0.879	0.890	0.909	0.629
	DPB2	0.842	35.255					0.737	12.320				
	DPB3	0.863	36.379					0.755	17.367				
	DPB4	0.894	47.807					0.858	29.889				
	DPB5	0.923	78.835					0.870	27.828				
	DPB6	0.876	47.050					0.867	32.442				
Economic sustain.	ESU1	0.907	47.853	0.916	0.922	0.941	0.801	0.907	54.058	0.909	0.924	0.936	0.785
	ESU2	0.841	29.515					0.811	17.065				
	ESU3	0.948	87.843					0.918	57.401				
	ESU4	0.880	38.709					0.904	51.732				
Market sustain.	MSU1	0.850	25.541	0.863	0.865	0.916	0.785	0.813	15.697	0.848	0.853	0.909	0.769
	MSU2	0.901	39.911					0.912	43.101				
	MSU3	0.905	37.247					0.902	32.577				
Support for tourism	SFT1	0.873	46.087	0.907	0.928	0.919	0.657	0.879	35.717	0.923	0.942	0.940	0.723
	SFT2	0.876	34.634					0.896	50.992				
	SFT3	0.783	16.358					0.697	9.252				
	SFT4	0.866	35.739					0.884	41.522				
	SFT5	0.919	50.863					0.850	17.779				
	SFT6	0.862	30.735					0.610	6.004				
Social sustainability	SSU1	0.853	34.270	0.940	0.940	0.954	0.806	0.837	29.025	0.915	0.918	0.936	0.746
	SSU2	0.903	50.637					0.815	17.890				
	SSU3	0.926	67.639					0.909	49.687				
	SSU4	0.891	36.095					0.892	35.706				
	SSU5	0.915	54.699					0.862	31.622				
Perceived benefits	Amenities & facilities dev. benefits	0.916	0.873	0.915	0.916	0.946	0.855	23.787	68.997	0.887	0.896	0.930	0.816
	Community benefits	0.911	0.897					41.834	61.195	0.789	0.792	0.879	0.709
	Destination profile & ec . benefits	0.947	0.938					87.732	86.973				
Sustainable market-oriented	Economic sustain.	0.919	0.891	0.911	0.914	0.944	0.849	46.501	77.661	0.856	0.887	0.912	0.776
	Market sustain.	0.907	0.819					20.712	52.499				
	Social sustain.	0.938	0.928					87.555	58.743				

3.3. Data analysis procedure

PLS-MGA was performed using SmartPLS (version 4.0.8.2; Ringle et al., 2022). PLS-SEM was preferred to execute the statistical evaluation as it is a multivariate method that assesses each of the linkages between the variables in a theoretical model, concerning measurement and structural components (Rasoolimanesh et al., 2016) and it is a nonparametric SEM method acceptable for MGA (Hair et al.,2014; Henseler et al., 2016; Sarstedt, Henseler, & Ringle, 2011). G*Power 3 examined the

power analysis (Faul et al., 2007) and the results reveal that both sample sizes ensured power for the R2 deviation from zero test as these were above 95 per cent (Figure 1) (Cohen, 1988).

4. Results

4.1. *Evaluation of measurement model and invariance measurement*

Measurement model's reliability and convergent validity tests were examined previously estimating the structural model. Table 3 presents the findings of the measurement model reliability and convergent validity tests.

Table 3. Reliability and convergent validity of the final measurement model.

Factor	Indicator	Permanent resident						Second home resident					
		Standardized Loading	t-Value (bootstrap)	CA	rho_A	CR	AVE	Standardized Loading	t-Value (bootstrap)	CA	rho_A	CR	AVE
Amenities and facilities	AFB1	0.869	39.485	0.923	0.926	0.946	0.813	0.797	22.820	0.913	0.915	0.940	0.797
	AFB2	0.865	27.914					0.901	44.876				
	AFB3	0.955	110.936					0.949	86.856				
	AFB4	0.916	49.542					0.915	38.507				
Community benefits	CBE1	0.867	28.374	0.965	0.965	0.970	0.802	0.751	10.150	0.949	0.952	0.958	0.741
	CBE2	0.898	40.950					0.845	22.241				
	CBE3	0.904	52.853					0.850	19.121				
	CBE4	0.872	29.043					0.887	32.283				
	CBE5	0.899	42.721					0.893	34.041				
	CBE6	0.883	35.844					0.835	21.881				
	CBE7	0.911	40.670					0.898	34.635				
	CBE8	0.927	68.133					0.915	47.800				
Community involve	CI1	0.838	24.224	0.830	0.852	0.896	0.742	0.740	13.119	0.789	0.792	0.879	0.709
	CI3	0.894	30.798					0.909	40.382				
	CI4	0.850	24.200					0.867	24.736				
Destination profile and economic	DPB1	0.843	26.132	0.938	0.938	0.951	0.764	0.643	8.005	0.879	0.890	0.909	0.629
	DPB2	0.842	35.255					0.737	12.320				
	DPB3	0.863	36.379					0.755	17.367				
	DPB4	0.894	47.807					0.858	29.889				
	DPB5	0.923	78.835					0.870	27.828				
	DPB6	0.876	47.050					0.867	32.442				
Economic sustainability	ESU1	0.907	47.853	0.916	0.922	0.941	0.801	0.907	54.058	0.909	0.924	0.936	0.785
	ESU2	0.841	29.515					0.811	17.065				
	ESU3	0.948	87.843					0.918	57.401				
	ESU4	0.880	38.709					0.904	51.732				
Market sustainability	MSU1	0.850	25.541	0.863	0.865	0.916	0.785	0.813	15.697	0.848	0.853	0.909	0.769
	MSU2	0.901	39.911					0.912	43.101				
	MSU3	0.905	37.247					0.902	32.577				
Support for tourism	SFT1	0.873	46.087	0.907	0.928	0.919	0.657	0.879	35.717	0.923	0.942	0.940	0.723
	SFT2	0.876	34.634					0.896	50.992				
	SFT3	0.783	16.358					0.697	9.252				
	SFT4	0.866	35.739					0.884	41.522				
	SFT5	0.919	50.863					0.850	17.779				
	SFT6	0.862	30.735					0.610	6.004				
Social sustainability	SSU1	0.853	34.270	0.940	0.940	0.954	0.806	0.837	29.025	0.915	0.918	0.936	0.746
	SSU2	0.903	50.637					0.815	17.890				
	SSU3	0.926	67.639					0.909	49.687				
	SSU4	0.891	36.095					0.892	35.706				
	SSU5	0.915	54.699					0.862	31.622				
Perceived benefits	Amenities and facilities development benefits	0.916	0.873	0.915	0.916	0.946	0.855	23.787	68.997	0.887	0.896	0.930	0.816
	Com. benefits	0.911	0.897					41.834	61.195	0.789	0.792	0.879	0.709
	Destination profile & ec.benefits	0.947	0.938					87.732	86.973				
Sustainable market-oriented	Economic sustainability	0.919	0.891	0.911	0.914	0.944	0.849	46.501	77.661	0.856	0.887	0.912	0.776
	Market sustain.	0.907	0.819					20.712	52.499				
	Social sustainability	0.938	0.928					87.555	58.743				

Note: All loadings are significant at p < .01 level, except NEI4 that is significant at p < .005. CA = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted.

All loading factors are accepted, except CI2 (i.e. community involvement, item 2) which was dropped as the value was not above 0.7 (Hair et al., 2011). Regarding construct reliability, Cronbach alpha coefficients are higher than the recommended 0.70 (Hair et al., 2006).

Composite reliability coefficients expose the shared variance among a set of observed items assessing a construct (Fornell and Larcker, 1981), and all of these are above 0.60 (Bagozzi and Yi, 1988). Composite reliability values were higher than 0.60, demonstrating that the shared variance among a set of observed items measured each construct (Fornell and Larcker, 1981). The evaluation of convergent validity and discriminant validity established the validity of the results (Hair, Ringle, & Sarstedt, 2011). Convergent validity was proved because the average variance extracted (AVE) value for each construct was above 0.50 (Fornell and Larcker, 1981).

Discriminant validity was evidenced by proving the shared variance between pairs of constructs and checking it was lower than the corresponding AVE (Fornell & Larcker, 1981), which confirmed the extent to which each construct differed from other latent variables in the measurement model (Hair, Sarstedt, Matthews, & Ringle, 2016). Besides, the heterotrait-monotrait (HTMT) ratio method (Henseler, Ringle, & Sarstedt, 2016) was examined and all values were below 0.90 (Teo et al., 2008).

Tables 4 and 5 show the discriminant validity indicators for each of two samples and taking into account the three second-order constructs of the model.

Table 4. Measurement Model Discriminant Validity for Higher-Order Constructs. Permanent residents

Factor		1	2	3	4	5
1	Community involvement	0.861	0.424	0.203	0.392	0.419
2	Perceived benefits	0.470	0.925	0.324	0.748	0.823
3	Support for tourism	0.424	0.808	0.180	0.864	0.709
4	Sustainable market-oriented approach	0.468	0.899	0.369	0.769	0.921

Note: Diagonal values are AVE square root.

Table 5. Measurement Model Discriminant Validity for Higher-Order Constructs. Second home residents

Factor		1	2	3	4	5
1	Community involvement	0.842	0.379	0.432	0.397	0.535
2	Perceived benefits	0.450	0.903	0.383	0.601	0.608
3	Support for tourism	0.450	0.663	0.285	0.811	0.599
4	Sustainable market-oriented approach	0.643	0.677	0.467	0.641	0.881

Note: Diagonal values are AVE square root.

The pertinence of the measurement models and invariances before performing MGA has been confirmed (Hair et al., 2016; Henseler et al., 2016; Rasoolimanesh, Ringle, Jaafar, & Ramayah, 2017; Sarstedt et al., 2011). The measurement invariance of composites (MICOM) to examine measurement invariance has been examined (Henseler et al., 2016). MICOM entails a three-stage procedure: (1) estimation of the configural invariance, (2) evaluation of compositional invariance and (3) examination of equal means and variances (Rasoolimanesh et al., 2017). Configural invariance requires three conditions: the measurement model of each sample has to use the same indicators, the indicators' data treatment has to be identical, and so the algorithm and optimization measures (Hair et al., 2018). Compositional invariance occurs if the correlation between the composite scores in each two groups is not meaningfully different from 1 confidence interval of the

empirical distribution of the permutation's correlations. These two circumstances determine partial metric invariance, and the standardized coefficient of the structural model can be compared across groups.

Tables 6 reveals that the latent means and variances were not equal across the groups. These results would not allow pooling of data, but do not affect multigroup examination viability, as abovementioned.

Table 6. Results of invariance measurement testing using permutation between permanent and second home residents.

Constructs	Configural invariance (Same algorithms for both groups)	Compositional invariance (Correlation = 1)		Partial measurement invariance established	Equal mean assessment				Equal variance assessment			
		C=1	5% quantile		Differences	Confidence interval		Equal	Differences	Confidence interval		Equal
Community involvement	Yes	0.995	0.987	Yes	0.175	-0.223	0.222	Yes	0.214	-0.270	0.263	Yes
Perceived benefits	Yes	1.000	0.999	Yes	0.000	-0.211	0.242	Yes	0.046	-0.357	0.337	Yes
Support for tourism	Yes	0.999	0.998	No	-0.452	-0.212	0.236	No	0.769	-0.429	0.418	No
Sustainable market-oriented approach	Yes	0.999	0.999	Yes	-0.000	-0.225	0.233	Yes	0.085	-0.325	0.308	Yes

4.2. Structural model and multi group analysis

R^2 was assessed to describe the model's explanatory power (Hair et al., 2014), exposing that all dependent constructs were above 0.10 (Falk and Miller, 1992). Also, positive Stone-Geisser's Q^2 were evaluated using blindfolding with an omission distance of D=7 (Henseler et al., 2009). Table 7 presents both indicators, proving the predictive relevance of the model for the two samples.

Table 7. Evaluation of the estimated models.

	Permanent residents		Second home residents	
Concept	R^2	Q^2	R^2	Q^2
Perceived benefits	0.180	0.157	0.144	0.133
Support for tourism	0.576	0.100	0.362	0.121
Sustainable market-oriented approach	0.710	0.189	0.485	0.248

Table 8 presents the results of the structural model analysis and hypotheses testing, by means of 5,000 bootstrap resamples and 5,000 permutations. Furthermore, the table indicates MGA outcomes of the two different nonparametric techniques: Henseler's MGA (Henseler et al., 2009) and the permutation test (Chin & Dibbern, 2010). Henseler's MGA compares group bootstrap indicators from each bootstrap sample, and the p-value that is below 0.05 or above 0.95 reveals significant differences at the 5% level between specific path coefficients across two groups (Henseler et al., 2009; Sarstedt et al., 2011). The permutation analysis identifies differences at the 5% level of significance if the p-value is below 0.05.

The results present that community involvement has a positive and significant effect on perceived benefits in both samples (H1a; permanent β=0.426 $p<0.01$; second home β=0.308 $p<0.01$). It has been found that community involvement has positive and significant effect on support for tourism in the two samples (H2b; permanent β=0.397 $p<0.01$; second home β=0.401 $p<0.01$). Also, it has been proved that community involvement has positive and significant effect on sustainable market-

oriented approach in the two groups (H2c; permanent β=0.368 p<0.01; second home β=0.295 p<0.01).

It has been confirmed that perceived benefits have a positive and significant effect on support for tourism in the permanent and second home samples (H2a; permanent β=0.707 p<0.01; second home β=0.524 p<0.01). Besides perceived benefits have a positive and significant effect on sustainable market-oriented approach in both cases (H2b; permanent β=0.814 p<0.01; second home β=0.582 p<0.01).

Finally, it has been found that support for tourism has a positive and significant on sustainable market-oriented approach in both groups (H3; permanent β=0.215 p<0.01; second home β=0.365 p<0.01).

The results of Henseler's MGA indicate a significant difference between the permanent and second home samples regarding the hypotheses tested between perceived benefits and sustainable market-oriented approach. Also, the permutation method reveals differences between the permanent and second home samples concerning H1c, H2a and H2b (i.e., H1c, community involvement and perceived benefits, H2a, perceived benefits and support for tourism and H2b, perceived benefits and sustainable market-oriented approach).

Table 8. Hypotheses testing between Permanent (P) and Second home resident (Shr)

Hypothesis	Relationship	Path coefficients		Confidence Interval (95%)				Path coef. Diff.	P-Value difference (one-tailed)	
		P	Shr	P		Shr			Henseler's MGA	Permutation Test
H1a	Community involvement->Perceived benefits	0.426	0.380	0.255	0.562	0.265	0.473	0.046	0.616	0.647
H1b	Community involvement->Support for tourism	0.397	0.401	0.252	0.513	0.282	0.499	-0.004	0.961	0.240
H1c	Community involvement->Sustainable market-oriented approach	0.368	0.295	0.231	0.485	0.201	0.370	0.073	0.346	0.006
H2a	Perceived benefits -> Support for tourism	0.707	0.524	0.602	0.793	0.346	0.663	0.183	0.056	0.034
H2b	Perceived benefits->Sustainable market-oriented approach	0.814	0.582	0.730	0.871	0.450	0.684	0.232	0.001	0.006
H3	Support for tourism->Sustainable market-oriented approach	0.215	0.365	0.065	0.366	0.198	0.518	-0.149	0.183	0.484

Note: In Hensler's MGA method, the p value lower than 0.05 or higher than 0.95 indicates at the 5% level significant differences between specific path coefficients across groups.
All hypotheses are significant at p < 0.01 level.

5. Discussion and implications

The present research makes significant scholar and managerial contributions. From the academic perspective, there are four main implications. First, this study advances knowledge concerning the adoption of a sustainable market-oriented approach in tourism resources, and precisely in natural protected areas. As natural areas become more popular their commercial use is increasing which is forcing the implementation of a customer positioning perspective (Insch, 2020; Mitchell et al., 2013; Spenceley, 2016; Thapa et al., 2022). It is crucial to identify residents' attitudes towards this sustainable development although apparently tourism activity has been considered as a silver bullet for residents (Blasco et al., 2018). Related studies have focused on the impact of homeowners' perceptions on their support for tourism development adopting SET as model foundation, and their contributions have been directed to offer insights so as to achieve sustainability (Lee et al., 2021). Therefore, this study measured the effect of perceived benefits on sustainability, understood in a market oriented perspective that includes economic, social and market performance.

Second, this research fills the gap of studies with respect to tourism sustainability as up to date almost no studies have been conducted that measure the effect of support for tourism on sustainable market-oriented approach (Blasco et al., 2018). Many scholars have suggested that support for tourism induces sustainable tourism development (Lee, 2013; Sebele, 2010), but it has not yet been consolidated in literature as a driver of sustainability. Third, there is a need of scholar advancement in the understanding of different linkages proposed as hypotheses of this research as there is no consensus regarding their significance. In this paradigm, it is expected that their attitudes toward tourism development are favourable, supportive and a guarantee of enhancing sustainability. Nonetheless, sustainable tourism requires balancing costs and benefits, at the same time that tourists' needs are satisfied and community members are empowered by involving them in the tourism decision-making processes (Goebel et al., 2020).

Notwithstanding it is presumed that the integration of community members in decision making process and participation of tourism related activities will result in an active support for tourism development (Nugroho and Novata, 2020), it has been proved that not in all cases. Dissimilar results were found in the relationship between community involvement and support for tourism, in some cases it was revealed as significant and positive (Lee, 2013) whereas in others its was concluded as not significant (Rasoolimanesh et al., 2017). Besides, the relationship between residents' perceived benefits and support for tourism has nonsignificant (Wang and Luan, 2021) and positive and significant findings (Nugroho and Novata, 2020). Interestingly, in this research all linkages were proved positive and significant. Moreover, another theoretical contribution of this study is that perceived benefits effects have been for first time analysed as a dimension defined by community benefits, destination profile and economics benefits and amenities and facilities development benefits.

Fourth, despite it has been indicated that the attitudes toward sustainable development between permanent and second home residents are different (Hao et al., 2014), no research has previously analysed the differences of the effects of community involvement on support for tourism, and perceived benefits on sustainable market-oriented approach among these two groups. Though all relationships of the proposed model were revealed as positive and significant, this study proved that there are significant differences among the samples concerning the relationships between community involvement and support for tourism; perceived benefits and support for tourism; and perceived benefits and support for tourism. The differences among the samples in the abovementioned relationships were found stronger in the permanent sample.

The challenge of tourism policymakers is dealing how to achieve a sustainable market-oriented performance for tourism resources. Firstly, it has been concluded that residents' attitudes influence positively and significantly sustainability as a market-oriented dimension. This finding is relevant for tourism managers and policymakers for two main reasons. It has been proved that residents have to be involved in tourism decision-making processes and activities and that there is a need of implementing market-oriented perspective in tourism planning and management. Even though it has been pinpointed that marketing strategies are needed to achieve an excellent performance (Font et al., 2021), this study is up to date the first to reveal the influence of residents' attitude on this sustainable market-oriented approach. Residents' opinions could be gathered periodically by means of a market research study, e.g., online survey, so as to make them feel their considerations are taken into account and, thus, include local representativeness during the tourism planning meetings and incorporate the findings of the research conducted in the managerial tourism decisions (Blasco et al., 2018; Stylidis et al., 2014).

Secondly, the findings of this research have exposed that perceived benefits effect on sustainable market-oriented approach and on support for tourism as the two most meaningful relationships. These results imply that policymakers are prompted to develop initiatives that boost locals' benefits, in all contexts: community, destination, economy, facilities and amenities. These proposals will require of a good communication strategy that is honest and transparent so that residents get informed and their trust on tourism management increases (Sebele, 2010; Nunkoo and Ramkisnsoon, 2011). Moreover, taking into account that the destination ADNP is now in the development phase of the tourism life cycle it is imperative to promote locals' perceived benefits and communicate them, so as to increase the likelihood of successful long-term destination development (Moghavvemi et al., 2020)

Thirdly, it has been proved that the effect of these two linkages is stronger in the permanent residents' sample than in the second homeowners' group. This is a significant contribution as it indicates the need of elaborating a census that includes second homeowners, so their opinions can be considered in the market research studies and, of course, in the managerial processes. Assessing and ensuring residents' support is a guarantee for the advancement of tourism development, thus all these actions will strengthen local culture and raise the feeling of belonging of all residents, permanent and second homeowners (Pereira and Gadotti, 2021).

5. Limitations and future research directions

Researchers are prompted to take into account the limitations of this study. First, it was not possible to avoid the convenience sampling method due to the absence of a census or related data of the second homeowners, likewise in related studies (Hao et al., 2014). The use of the technique might not represent a broad sample of the residents affected by ADNP's tourism development. Scholars are encouraged to conduct related studies within a broad sample of residents employing a probabilistic sampling method.

Second, the research was based on a concrete case of a nature-based destination located between Spain and Portugal, ADNP. Due to the aforementioned dissimilar effects in literature regarding the proposed hypotheses (e.g., Lee, 2013; Rasoolimanesh et al., 2017; Nugroho and Novata, 2020; Wang and Luan, 2021), it would be interesting that future studies test the model in other tourist contexts and check if there are some reasons why these variations happen. Third, new research could even add other constructs such as perceived costs (Wang et al., 2020), and check if there is a negative effect on the sustainable market-oriented approach. Fourth, it would be of interest determining the impact of other agents on the sustainable market-oriented approach, precisely tourism policymakers.

Acknowledgments

There are no conflicts of interest between the authors. Contributions by author: Nuria Recuero: conceptualization, methodology, software, writing- original draft preparation, writing- reviewing and editing, and Pablo Garrido: resources, supervision. The authors declare that there are no conflicts of interest regarding the publication of this research. This study was conducted independently, without any influence or support from commercial entities, funding bodies, or organizations that might have a vested interest in the findings. The motivation for this research stemmed solely from an academic interest in understanding and advancing sustainable tourism practices. All data were collected and analysed impartially, ensuring that the results presented reflect a genuine and unbiased exploration of the effects of residents' attitudes on tourism sustainability within a market-oriented perspective.

References

Alcon, F., Albaladejo-Garcia, J. A., Zabala, J. A., Marin-Minano, C., & Martinez Paz, J. M. (2019). Understanding social demand for sustainable nature conservation. The case of a protected natural space in South-Eastern Spain. *Journal for Nature Conservation*, 51, Article 125722. doi: 10.1016/j.jnc.2019.125722.

Alipour, H., & Gavilyan, Y. (2018). Different voices from community groups to support sustainable tourism development at Iranian World Heritage Sites: evidence from Bisotun. *Journal of Sustainable Tourism*, 26(10), 1728–1748. doi: 10.1080/09669582.2018.1511718.

Alves, M. I., Monteiro, A., Ferreira, N., Dias, G., Brilha, J. B., & Pereira, D. I. (2004). Landscape as a support for biodiversity: The Arribas do Douro case study (international Douro natural park, NE Portugal). In Parke, M.A (Ed.) *Natural and cultural landscapes - The Geological Foundation*, 65-68, Dublin: Royal Irish Academy.

Antón, L., Rodes, A., De Vicente, G., Pall as, R., Garcia-Castellanos, D., Stuart, F.M., Braucher, R., & Bourles, D. (2012). Quantification of fluvial incision in the Duero Basin (NWIberia) from longitudinal profile analysis and terrestrial cosmogenic nuclide concentrations. *Geomorphology*, 165–166, 50–61. doi: 10.1016/j.geomorph.2011.12.036.

Aparício, B. A., Santos, J. A., Freitas, T. R., Sá, A. C., Pereira, J. M., & Fernandes, P. M. (2022). Unravelling the Effect of Climate Change on Fire Danger and Fire Behaviour in the Transboundary Biosphere Reserve of Meseta Ibérica (Portugal-Spain). *Climatic Change*, 173, Article 5. doi:10.1007/s10584-022-03399-8.

Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74–94. doi: 10.1007/BF02723327.

Blasco López, M.F., Recuero-Virto, N., Aldas Manzano, J., & García-Madariaga, J. (2018). Residents' attitude as determinant of tourism sustainability: The case of Trujillo. *Journal of Hospitality and Tourism* Management, 35, 36–45. doi: 10.1016/j.jhtm.2018.02.002.

Blešić, I.,Pivac, T., Kovačić, S., Cimbaljević, M., Lukić, T., Bubalo Živković, M., Đerčan, B., Bjelajac, D. (2022). Place Attachment, Cultural Involvement, and Residents' Attitudes towards Tourism Development: The Case of Novi Sad, the European Capital of Culture, *Sustainability* 14, 9103. https://doi.org/10.3390/su14159103

Buongiorno, A., & Intini, M. (2021). Sustainable tourism and mobility development in natural protected areas: Evidence from Apulia. *Land Use Policy*, 101, Article 105220. doi: 10.1016/j.landusepol.2020.105220.

Camarero, C., Garrido, M. J., & Vicente, E. (2015). Achieving effective visitor orientation in European museums. Innovation versus custodial. *Journal of Cultural Heritage,* 16, 228–235. doi:10.1016/j.culher.2014.05.006.

Campos, J. C., Rodrigues, S., Freitas, T., Santos, J. A., Honrado, J. P., & Regos, A. (2021). Climatic variables and ecological modelling data for birds, amphibians and reptiles in the Transboundary Biosphere Reserve of Meseta Ibérica (Portugal-Spain). *Biodiversity Data Journal*, 9, 1–19. doi:.3897/BDJ.9.e66509.

Cetin, M., Sevik, H., 2016. Assessing potential areas of ecotourism through a case study in ilgaz Mountain National Park. In Butowski, L. (Ed.), *Tourism: From Empirical Research Towards Practical Application* (pp. 81–110). London: InTechOpen.

Cetin, M., Zeren, I., Sevik, H., Cakir, C., & Akpinar, H. (2018). A study on the determination of the natural park's sustainable tourism potential. *Environmental monitoring and assessme*nt, 190(3), 1–8. doi: 10.1007/s10661-018-6534-5.

Chin, W. W., & Dibbern, J. (2010). A permutation based procedure for multi-group PLS analysis: Results of tests of differences on simulated data and a cross-cultural analysis of the sourcing of information system services between Germany and the USA. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.). *Handbook of partial least squares: concepts, methods and applications* (pp. 171–193). Heidelberg: Springer.

Choi, H. C., & Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism*, 18(4), 575–594.doi: 10.1080/09669580903524852.

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Croy, W. G., Moyle, B. D., & Moyle, C. J. (2020). Perceived benefits of parks: The roles of information source exposure and park use. *Journal of Sustainable Tourism*, 28(11), 1–20. doi:10.1080/09669582.2020.1757683.

Cotterell, D., Ferreira, J.-A., Hales, R., & Arcodia, C. (2020). Cultivating conscientious tourism caretakers: a phenomenographic continuum towards stronger sustainability. *Current Issues in Tourism,* 23(8), 1004–1020. doi:10.1080/13683500.2019.1577369.

Esfandiar, K., Pearce, J., Dowling, R., & Goh, E. (2022). Pro-environmental behaviours in protected areas: a systematic literature review and future research directions*. Tourism Management Perspectives*, 41, Article 100943. doi:10.1016/j.tmp.2022.100943.

Eyisi, A., Lee, D., & Trees, K. (2021). Facilitating collaboration and community participation in tourism development: The case of South-Eastern Nigeria. *Tourism and Hospitality Research*, 21(3), 275–288. doi:10.1177/1467358420966035.

Falk, R. F., & Miller, N. B. (1992). *A primer for soft modelling. Akron*, OH: University of Akron Press.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*power 3: A flexible statistical power analysis program for the social. behavioural. And biomedical sciences. *Behaviour Research Methods*, 39, 175–191. doi:10.3758/BF03193146.

Font, X., English, R., Gkritzali, A., & Tian, W. (2021). Value co-creation in sustainable tourism: A service-dominant logic approach. *Tourism Management,* 82, Article 104200. doi: 10.1016/j.tourman.2020.104200.

Fornell, C., & Larcker, D. (1981). Structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50. doi: 10.2307/3150980.

Fredline, E., & Faulkner, B. (2000). Host community reactions: A cluster analysis. *Annals of Tourism Research*. 763-784.

Gavilán, R. G. (2005). The use of climatic parameters and indices in vegetation distribution. A case study in the Spanish Sistema Central. *International Journal of Biometeorology*, 50(2), 111–120. doi: 10.1007/s00484-005-0271-5.

Goebel, K., Camargo-Borges, C., & Eelderink, M. (2020). Exploring participatory action research as a driver for sustainable tourism. *International Journal of Tourism Research*, 22(4), 425–437. doi: 10.1002/jtr.2346.

González, J. A., García-Barriuso, M., Ramírez-Rodríguez, R., Bernardos, S., & Amich, F. (2013). Ethnobotanical Resources management in the Arribes del Duero Natural Park (Central Western Iberian Peninsula): relationships between plant use and plant diversity, ecological analysis, and conservation. *Human ecology,* 41(4), 615–630. doi: 10.1007/s10745-013-9603-y.

Gursoy, D., Ouyang, Z., Nunkoo, R., Wei, W., 2019. Residents' impact perceptions of and attitudes towards tourism development: a meta-analysis. *Journal of Hospitality Marketing & Management*, 28(3), 306–333. doi: 10.1080/19368623.2018.1516589.

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). Multivariate Data Analysis. Upper Saddle River: Pearson Prentice Hall.

Hair, J. F., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. doi: 10.2753/MTP1069-6679190202.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A *primer on partial least squares structural equation modelling (PLS-SEM).* Los Angeles, CA: Sage.

Hair, J. F., Sarstedt, M., Matthews, L., & Ringle, C. M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: Part I – method. *European Business Revie*w, 28(1), 63–76. doi:10.1108/EBR-09-2015-0094.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM).* Thousand Oaks, CA: Sage.

Hanafiah, M.H., Jamaluddin, M.R., & Riyadi, A. (2021). Local community support, attitude and perceived benefits in the UNESCO World Heritage Site. Journal of Cultural Heritage *Management and Sustainable Development*, 11(1), 95–108. doi:10.1108/JCHMSD-03-2020-0034.

Hao, H., Long, P., & Hoggard, W. (2014). Comparing property owners' perceptions of sustainable tourism in a coastal resort county. Journal of Policy Research in Tourism, *Leisure and Events*, 6(1), 31–51. doi: 10.1080/19407963.2013.823975.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modelling in international marketing. *Advances in International Marketing*, 20, 277–320. doi: 10.1108/S1474-7979(2009)0000020014.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. doi:1007/s11747-014-0403-8.

Henseler, J., Ringle, C., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405–431.https://doi.org/10.1108/IMR-09-2014-0304

Insch, A. (2020). The challenges of over-tourism facing New Zealand: risks and responses. *Journal of Destination Marketing & Management*, 15, Article 100378. doi: 10.1016/j.jdmm.2019.100378.

Kim, K., Gursoy, D., & Lee, S. B. (2006). The impact of the 2002 world cup on South Korea: Comparisons of pre- and post-games. *Tourism Management*, 27, 86–96. doi:10.1016/j.tourman.2004.07.010.

Kim, Y.G., & Li, G. (2009). Customer satisfaction with and loyalty towards online travel products: a transaction cost economics perspective. *Tourism Economics*, 15, 825–46. doi:10.5367/000000009789955125.

Lee, C. K., Kim, J., & Kim, J. S. (2018). Impact of a gaming company's CSR on residents' perceived benefits, quality of life, and support. Tourism Management, 64, 281–290. doi: 10.1016/j.tourman.2017.09.002.

Lee, T. H. (2013). Influence analysis of community resident support for sustainable tourism development. *Tourism Management*, 34, 37–46. doi: 10.1016/j.tourman.2012.03.007.

Lee, T. H., Jan, F.-H., & Lin, Y. H. (2021). How Authentic Experience Affects Traditional Religious Tourism Development: Evidence from the Dajia Mazu Pilgrimage, Taiwan. *Journal of Travel Research*, 60(5), 1140–1157. doi:10.1177/0047287520921240.

Li, Q. C., & Wu, M. Y. (2019). Rationality or morality? A comparative study of pro‐environmental intentions of local and nonlocal visitors in nature-based destinations. *Journal of Destination Marketing and Management,* 11, 130–139. doi:10.1016/j.jdmm.2019.01.003.

Malhotra, N., & Birks, D. (2007). Marketing Research. An Applied Approach. London: Pearson.

Malik, M. I., & Bhat, M. S. (2015). Sustainability of tourism development in Kashmir—Is paradise lost? *Tourism management perspectives*, 16, 11–21. doi: 10.1016/j.tmp.2015.05.006.

Marino-Alfonso, J. L., Poblete-Piedrabuena, M. Á., Beato-Bergua, S., & Herrera-Arenas, D. (2021). Geotourism itineraries and augmented reality in the geomorphosites of the Arribes del Duero Natural Park (Zamora Sector, Spain). *Geoheritag*e, 13(1), 16. doi: 10.1007/s12371-021-00539-x

Martinez-Grana, A. M., Goy, J. L., & Cimarra, C. (2015). 2D to 3D geologic mapping transformation using virtual globes and flight simulators and their applications in the analysis of geodiversity in natural areas. *Environmental earth sciences*, 73(12), 8023–8034. doi: 10.1007/s12665-014-3959-1.

Mitchell, R., Wooliscroft, B., & Higham, J. (2013). Applying sustainability in national park management: balancing public and private interests using a sustainable market orientation model. *Journal of Sustainable Tourism*, 21(5), 695–715. doi: 10.1080/09669582.2012.737799.

Moghavvemi, S., Woosnam, K.M., Hamzah, A., & Hassani, A. (2020). Considering residents' personality and community factors in explaining satisfaction with tourism and support for tourism development. *Tourism Planning & Development,* 18(3), 267–293. doi: 10.1080/21568316.2020.1768140.

Nguyen, T. Q. T., Young, T., Johnson, P., & Wearing, S. (2019). Conceptualising networks in sustainable tourism development. *Tourism Management Perspectives*, 32, Article 100575. doi:10.1016/j.tmp.2019.100575.

Nicholas, L. N., Thapa, B., & Ko, Y. J. (2009). Residents' perspectives of a world heritage site. The pitons management area, St. Lucia. *Annals of Tourism Research*, 36(3), 390–412. doi: 10.1016/j.annals.2009.03.005.

Nugroho, P., & Numata, S. (2020). Resident support of community-based tourism development: Evidence from Gunung Ciremai National Park, Indonesia, *Journal of Sustainable Tour*ism, 30(11), 2510–2525. doi: 10.1080/09669582.2020.1755675.

Nunkoo, R., & Ramkissoon, H. (2011). Developing a community support model for tourism. *Annals of Tourism Research*, 38(3), 964–988. doi: 10.1016/j.annals.2011.01.017.

Nunkoo, R., & Gursoy, D. (2012). Residents' support for tourism: An identity perspective. *Annals of Tourism Research,* 39(1), 243–268. doi: 10.1016/j.annals.2011.05.006.

Nunkoo, R., & So, K. K. F. (2016). Residents' Support for Tourism: Testing Alternative Structural Models. *Journal of Travel Research*, 55(7), 847–861. doi:10.1177/0047287515592972.

Obradović, S., Tešin, A., Božović, T., & Milošević, D. (2021). Residents' perceptions of and satisfaction with tourism development: A case study of the Uvac Special Nature Reserve, Serbia. *Tourism and Hospitality Research,* 21(1), 31–43. doi: 10.1177/1467358420946789.

Orgaz-Agüera, F., Castellanos-Verdugo, M., Acosta Guzmán, J. A., Coben, M., & Oviedo- García, M. D. L.´A. (2020). The mediating effects of community support for sustainable tourism, community attachment, involvement, and environmental attitudes. *Journal of Hospitality & Tourism Research*, 46(7), 1298–1321. doi:10.1177/1096348020980126.

Park, D. B., Nunkoo, R., & Yoon, Y. S. (2015). Rural residents' attitudes to tourism and the moderating effects of social capital. *Tourism Geographies*, 17(1), 112–133. doi:10.1080/14616688.2014.959993.

Pereira, T. & Gadotti dos Anjos, S. J. (2021). Corporate Social Responsibility as resource for tourism development support. *Tourism Planning & Development*. doi:10.1080/21568316.2021.1873834.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903, doi: 10.1037/0021-9010.88.5.879.

Pulido-Fernandez, J. P., Andrades-Caldito, L., & Sanchez- Rivero, M. (2015). Is sustainable tourism an obstacle to the economic performance of the tourism industry? Evidence from an international empirical study. *Journal of Sustainable Tourism*, 23(1), 47–64. doi:10.1080/09669582.2014.909447.

Qi, R., So, K. K. F., Cárdenas, D. A., & Hudson, S. (2023). The Missing Link in Resident Support for Tourism Events: The Role of Tolerance. *Journal of Hospitality & Tourism Research*, 47(2), 422–452. doi: 10.1177/10963480211031405.

Rasoolimanesh, S.M., Roldán, J.L., Jaafar, M. and Ramayah, T. (2016). Factors influencing residents' perceptions toward tourism development: differences across rural and urban world heritage sites. *Journal of Travel Research*, 56(6), 760–775, doi: 10.1177/ 0047287516662354.

Rasoolimanesh, S.M., Ringle, C., Jaafar, M., & Ramayah, T. (2017). Urban vs. rural destinations: Residents' perceptions. Community participation and support for tourism development. *Tourism Management*, 60, 147–158. doi:10.1016/j. tourman.2016.11.019.

Ramírez-Rodríguez, R., & Amich, F. (2014). Notes on rare and threatened flora in western-central Iberia. *Mediterranean Botany*, 35, 221.

Ringle, Christian M., Wende, Sven, & Becker, Jan-Michael. (2022). SmartPLS 4. Boenningstedt: SmartPLS. Retrieved from https://www.smartpls.com

Sanz, M. & Villar, L. (2013). Toponimia relacionada con sabinas y enebros (Gén. Juniperus) en la España peninsular: Primera aproximación. Ecología mediterranea: *Revue internationale d'écologie méditerranéenne= International Journal of Mediterranean Ecology*, 39(1), 137-153.

Sarstedt, M., Henseler, J., & Ringle, C. (2011). Multigroup analysis in partial least squares (PLS) path modelling: alternative methods and empirical results. *Advances in International Marketing*, 22 (1), 195–218. doi: 10.1108/S1474-7979(2011)0000022012.

Sebele, L. S. (2010). Community-based tourism ventures, benefits and challenges: Khama Rhino sanctuary trust, central district, Botswana. *Tourism Management*, 31, 134–146. doi: 10.1016/j.tourman.2009.01.005.

Spenceley A (2016) Tourism and protected areas: comparing the 2003 and 2014 IUCN World Parks Congress. *Tourism and Hospitality Research*, 17(1), 8–23. doi:10.1177/1467358415612515.

Stylidis, D. (2014). The role of place image dimensions in residents' support for tourism development. *International Journal of Tourism Research*, 18(2), 129–139. doi: 10.1002/jtr.2039.

Teo, T., Srivastava, S., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25, 99–132. doi:10.2753/MIS0742-1222250303

Thapa, K., King, D., Banhalmi-Zakar, Z., & Diedrich, A. (2022). Nature-based tourism in protected areas: a systematic review of socio-economic benefits and costs to local people. *International Journal of Sustainable Development & World Ecology*, 29(7), 625–640. Doi:10.1080/13504509.2022.2073616.

Tolkach, D., & King, B. (2015). Strengthening community-based tourism in a new resource-based island nation: Why and how? *Tourism Management,* 48, 386–398. doi: 10.1016/j.tourman.2014.12.013.

Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management,* 31(2), 274–284. doi:10.1016/j.tourman.2009.03.007.

Wang, F., & Luan, F. (2021) Structural equation model of residents' support of geological heritage protection area for geological tourism in Kanas National Geopark, China. *Geoheritage*, 13, Article 11. doi:10.1007/s12371-021-00634-z.

Wang, Y., Shen, H., Ye, S., & Zhou, L. (2020). Being rational or emotional: An integrated model of residents' _support of ethnic tourism development. *Journal of Hospitality and Tourism Management*, 44, 112–121. doi: 10.1016/j.jhtm.2020.05.008.

Woodley, A. (1993). Tourism and sustainable development: The community perspective. In J. G. Nelson, R. Butler, & G. Wall (Eds.), *Tourism and sustainable development: Monitoring, planning, managing* (135–146). Waterloo: Heritage Resources Centre, University of Waterloo.

Zhang, Y., Chan, J. H., Ji, Z., Sun, L., Lane, B., & Qi, X. (2019). The influence of community factors on local entrepreneurs' support for tourism. *Current Issues in Tourism*, 23(14), 1758–1772. doi: 10.1080/13683500.2019.1644300: 10.1080/13683500.2019.1644300 274e284.