

# Chapter 6

## Quality of Life and Perception of the Effects of Tourism: A Contingent Approach



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**Abstract** The relationship between the perception of the resident community as far as the effects of tourism and their quality of life is a subject that has recently sparked the interest of researchers. As currently there is no uniformity in either the approach adopted for measuring variables or the significance of their inter-relationships, our study will aim to contribute to the topic by introducing a series of new factors, among which we can highlight the methodology employed, the means of assessing quality of life on the basis of community satisfaction, the disaggregation of the effects of tourism according to typology and the nature of the relationship established between the two variables. Among the results obtained, and in contrast to those obtained from previous studies, the current research reveals that it is not possible to establish a unique relationship between community satisfaction and the effects of tourism as the satisfaction aspect studied as well as the nature and sign (positive or negative) of the effects taken into account condition both the nature and intensity of the relationship established between the two variables.

**Keywords** Tourism impacts · Residents' perceptions · Community satisfaction · Quality of Life

### 6.1 Introduction

While studies abound dealing with the resident community's perception of the impact of tourism and the corresponding repercussions on attitudes towards tourism development, far fewer studies have focussed on Quality of Life (QOL). However, it is important to point out that since the publication in 1999 of a special issue of the *Journal of Business Research* (vol. 44, issue 3) focussing on QOL for both tourists and residents, the number of publications dealing with this subject matter has

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increased significantly. In this regard, particularly noteworthy are the “Handbook of Tourism and Quality of Life Research: Enhancing the Lives of Tourists and Residents of Host Communities” (Uysal et al. 2012) and the review article “Quality of Life and Well-being Research in Tourism” (Uysal et al. 2016).

The fundamental difference between attitude/impact studies and QOL studies lies in the measurement methods employed (Andereck et al. 2007, p. 45): “Attitudes/impact studies largely focus on the way in which tourism is perceived to affect the communities and the environment, whereas quality of life studies are typically concerned with the way these impacts affect individual or family life satisfaction, including satisfaction with community, neighbourhoods and personal satisfaction”.

In this study we will focus on one of the dimensions of Quality of Life, namely, community satisfaction, and attempt to observe its influence on the perception of the positive and negative effects of tourism. Our main contributions to this line of research are the following:

1. Few studies have attempted to relate community satisfaction with the perception of the aforementioned effects.
2. Traditionally the relationship has been studied using the effects as the independent variable and community satisfaction as the dependent variable. In our study, and following the trend of more recent contributions, we will attempt to analyse the inverse relationship, where community satisfaction is the independent variable that influences the perception of the impacts.
3. Documented evidence to date groups the effects perceived in tourism into two blocks, positive impacts and negative impacts, while we propose combining this approach with one that disaggregates the effects according to their nature (economic, socio-cultural and environmental).
4. In contrast to other authors, who either measure community satisfaction on the basis of a single item, calculate overall satisfaction on the basis of a series of items, or construct it multi-dimensionally but as a single construct, our study disaggregates the variable into three dimensions.
5. With regard to methodology, in contrast to the majority of studies that use a covariance-based SEM (CBSEM) statistical technique, the exploratory nature of our study and the high number of indicators and latent variables present in our model has led us to opt for the Partial Least Squares method, or PLS (variance-based SEM).

## 6.2 Theoretical Framework

The article published by Uysal et al. (2016) constitutes the most recent and complete research carried out in an effort to summarise how tourism affects, or may affect, the quality of life of the residents in a tourism destination as well as the tourists themselves. Focussing attention on the residents, the authors review 36 articles and conclude that the most numerous studies are those that use a fundamentally quantitative analysis, use subjective indicators to measure QOL, identify the mediator variables between tourism impacts and QOL and measure satisfaction from an individual perspective.

Below (Table 6.1) is a list of studies that focus the attention on the relationship between perception of impacts derived from tourism and QOL.

QOL is a measurement concept which the authors have used a wide variety of indicators for. One of the components taken into account when analysing the QOL construct is community satisfaction, which will constitute the variable that is the focus of our study.

While QOL and Community Satisfaction are terms that are occasionally used interchangeably they present significant conceptual differences when it comes to research (Matarrita-Cascante 2010). QOL is a more extensive concept that can include community satisfaction. QOL refers to the overall human experience and the evaluation of this experience, while community satisfaction is concerned with an evaluative judgement of how responses are offered to meet the requirements of the community itself.

Along the lines of the above argument, Sirgy et al. (2000) proposed a Community QOL Model which, as seen in Table 6.2, establishes global life satisfaction being determined by satisfaction with the community, in addition to other domains. Simultaneously, satisfaction with the community is susceptible to influence by degree of satisfaction with government, business and non-profit services, which are in turn determined by other factors.

Very few studies exist analysing the relationship between the impacts of tourism as perceived by residents and their degree of satisfaction with their community (Ko and Stewart 2002; Nunkoo and Ramkissoon 2010, 2011; Vargas-Sánchez et al. 2009, 2011).

The studies are very diverse, a fact that is reflected in Table 6.3, in terms of both the nature of the tourism destination being studied (from coastal to interior) and the level of tourism development present at the destination.

All the studies are characterised by building Structural Equation Models in which both the perceived impacts and community satisfaction are measured through the aggregation of numerous items. In general, all of them take into consideration the positive and negative impacts derived from tourism, though these indicators are constructed from a wide variety of diverse items.

With regard to the community satisfaction variable there would appear to be greater standardisation, the six most employed items being: satisfaction with public services, satisfaction with formal education, satisfaction with the environment, satisfaction with leisure opportunities, satisfaction with the economy and citizen

**Table 6.1** Studies dealing with the relationship between the impacts of tourism and quality of life

Milman and Pizan (1988); Allen, Hafer, Long and Perdue (1993); Andereck and Vogt (2000); Nichols, Stitt and Giocopassi (2002); Ko and Stewart (2002); Gjerald (2005); Urtasum and Gutierrez (2006); Wheeler and Laing (2008); Yamada, Hen, King and Fu (2009); Vargas-Sanchez, Plaza-Mejía and Porras Bueno (2009); Matarrita-Cascante (2010); Andereck and Nyaupane (2011); Yu, Chancellor and Cole (2011); Aref (2011); Manap, Aman and rahmiau (2011); Nawijn and Mitas (2012); Khzindar (2012); Woo, Kim and Uysal (2015).
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Source: Own elaboration

**Table 6.2** Community QOL Model

Overall life domain	Community life domain	Community life subdomains	Community life sub-subdomains
Global life satisfaction	Global community satisfaction	Global government services satisfaction	Satisfaction with fire services
			Satisfaction with rescue services
			Satisfaction with police services
		Global business services satisfaction	Satisfaction with banking/savings
			Satisfaction with insurance
			Satisfaction with department store
		Global non-profit services satisfaction	Satisfaction with alcohol abuses services
			Satisfaction with adoption/foster care services
			Satisfaction with crisis intervention services
	Other life domains	Global job satisfaction	
Global family satisfaction			
Global financial satisfaction			

Source: Own elaboration, based on Sirgy et al. (2000)

**Table 6.3** Studies focussing on the relationship between tourism impacts and community satisfaction

Authors	Place studied	Level of tourism development	Sample size
Ko and Stewart (2002)	Cheju Island (Korea) natural scenery of mountains, cultural heritage and playing golf	The most popular destination in Korea. Tourism is the primary business sector of its economy	732 residents
Vargas-Sánchez et al. (2009)	Minas de Riotinto (Huelva, Spain)	For centuries almost totally dependent on open-cast mining. This mining activity stopped in 1986. Since then, its history and urban and natural environment are its main attractions. Low tourism development	359 residents
Nunkoo and Ramkissoon (2010)	Coastal village of Le Morne (Island of Mauritius)	Dependent on fishing, hunting and agriculture. Cultural and heritage attractions.	400 residents
Nunkoo and Ramkissoon (2011)	Coastal Village of grand-Baie (Island of Mauritius)	It has developed from agriculture to a mature and popular tourist resort	363 residents
Vargas-Sánchez et al. (2011)	Province of Huelva (South of Spain)	Tourism industry is a recent phenomenon. Not a mass destination. Medium tourism development	400 residents

Source: Own elaboration

involvement and social opportunities. On occasion the community satisfaction variable is either constructed on the basis of just one of the above items (such as satisfaction with public services in Vargas-Sánchez et al. 2011) or is calculated as an average of the six aforementioned items (Vargas-Sánchez et al. 2009).

The nature of the relationship between local residents' the perception and community satisfaction is the most important difference found in this group of five studies. Ko and Stewart (2002) and Vargas-Sánchez et al. (2009, 2011) suggest that the perception of tourism impacts is the independent variable that influences community satisfaction, which in turn is a mediator variable between the perceived impacts and the attitude towards tourism development (Kaplanidou et al. 2013). This supposes the acceptance of a unidirectional relationship by virtue of which the perception of impacts would affect QOL, which in turn would affect the attitude towards tourism. However, as other authors suggest, the existence of a more complex, reciprocal relationship between the perceived living conditions and the perceived impacts of tourism is a possibility (Vargas-Sánchez et al. 2009; Uysal et al. 2016).

Along the same lines, Nunkoo and Ramkissoon (2010, 2011) propose the opposite relationship. In other words, that it is community satisfaction as the independent variable that influences the perception of impacts and, as such, it is this perception of impacts that directly determines the attitude towards tourism.

In addition to this, the study published by Nunkoo and Ramkissoon in 2011 criticises the fact that previous studies consider community satisfaction as a uni- rather than multi-dimensional variable and, in consequence, disaggregates it into three distinct variables, in line with the approach of Sirgy et al. (2000) and his aforementioned definition of Global Community Satisfaction.

The following Tables (6.4 and 6.5) synthesise the structural relationships proposed in the model by the aforementioned authors, highlighting those studies in bold which the perception of impacts or the attitude towards tourism development and community satisfaction into account.

Finally, Table 6.6 presents the principal conclusions of each of the studies under scrutiny:

The global hypothesis for this research has been formulated based on the conclusions drawn from the studies carried out by Nunkoo and Ramkissoon (2010, 2011) Table 6.6, which can be summarised as follows: "The greater the resident's satisfaction with their community, the greater their perception of the positive effects of tourism and the lesser their perception of the negative effects, independently of the aspect of satisfaction analysed and of the nature of the effects of tourism studied". This global hypothesis will be broken down into a total of 21 hypotheses, due to the disaggregation of the satisfaction construct and the consideration of the different nature and sign of the perceived effects of tourism. This disaggregation will be undertaken and will be explained afterwards in the empirical part of this work.

**Table 6.4** Structural relationships

Hypothesis		Ko and Stewart (2002)	Vargas-Sánchez et al. (2009)	Vargas-Sánchez et al. (2011)	
PBTD	— (+)→	PPTI	Supported	Supported	Supported
PBTD	— (-)→	NPTI	Not supported	Not supported (*)	Not supported (*)
<b>PBTD</b>	— (+)→	<b>OCS</b>	<b>Not supported</b>	<b>Not supported (**)</b>	<b>Not supported (*)</b>
PBTD	— (+)→	AATD	Supported	Not supported (**)	Supported
PPTI	— (+)→	AATD	Supported	Supported	Supported
<b>PTI</b>	— (+)→	<b>OCS</b>	<b>Supported</b>	<b>Supported</b>	<b>Supported</b>
<b>OCS</b>	— (-)→	<b>AATD</b>	<b>Not supported</b>	<b>Supported</b>	<b>Not supported (**)</b>
<b>NPTI</b>	— (-)→	<b>OCS</b>	<b>Supported</b>	<b>Not supported (*)</b>	<b>Not supported (*)</b>
NPTI	— (-)→	AATD	Supported	Supported	Not supported (*)

Source: Own elaboration

*PBTD* Personal Benefit from Tourism Development, *PPTI* Positive Perception of Tourism Impacts, *NPTI* Negative Perception of Tourism Impacts, *OCS* Overall Community Satisfaction, *AATD* Attitude towards Additional Tourism Development

(\*) Non-significant relationship (critical ratio below 1.96)

(\*\*) Significant relationship (critical ratio over 1.96), but opposite sign

## 6.3 Method for Hypotheses Testing

### 6.3.1 Place Studied

As its territorial framework this study uses 15 municipalities in the province of Huelva, in south-west Spain. These municipalities are notably involved in mining and occupy one third of the area of the province, with a total of 55,244 inhabitants, approximately one tenth of the population of the province as a whole. Despite the enormous potential environmental value in terms of landscape and leisure opportunities that these interior municipalities possess (93% of the surface area is woodland), they are currently experiencing economic and social recession, with reduced population densities, population decrease, high rates of ageing of the population and unemployment as well as low levels of income and education, as compared with coastal areas in the same province.

The current tourism offering in these mining municipalities is characterised by a lack of diversity and can be essentially divided into two segments: rural/environmental tourism and industrial mining tourism, of which the Riotinto Mining Park

**Table 6.5** Structural relationships

Hypothesis			Nunkoo and Ramkissoon (2010)	Nunkoo and Ramkissoon (2011)
CS	— (+)→	PDB	<b>Supported</b>	–
CS	— (-)→	PDC	<b>Supported</b>	–
URB	— (+)→	PDB	Not supported	–
URB	— (-)→	PDC	Not supported	–
SLE	— (+)→	PDB	Supported	–
SLE	— (-)→	PDC	Supported	–
EA	— (-)→	PDB	Supported	–
EA	— (+)→	PDC	Supported	–
CSS	— (+)→	PDB	–	<b>Supported</b>
CSS	— (-)→	PDC	–	<b>Supported</b>
CC	— (+)→	PDB	–	<b>Not supported</b>
CC	— (-)→	PDC	–	<b>Not supported</b>
SNC	— (+)→	PDB	–	<b>Supported</b>
SNC	— (-)→	PDC		<b>Supported</b>
PDB	— (+)→	STD	Supported	Supported
PDC	— (-)→	STD	Supported	Supported

Source: Own elaboration

CS Community Satisfaction, URB Utilization of Resource Based, SLE State of the Local Economy, EA Environmental Attitudes, PDB Perceived Development Benefits, PDC Perceived Development Cost, STD Support for Tourism Development, CSS Community Services Satisfaction, CC Community Commitment, SNC Satisfaction with Neighbourhood Conditions

-receiving 89,235 visitors in 2016, with positive growth from 62,492 visitors in 2005- constitutes practically the only experience available.

The case of Riotinto is the best example of industrial tourism existing in the province of Huelva. It is the example par excellence, as far as tourism goes, of the economic diversification process in the Mining Area. This area was ravaged by the collapse of extraction activity at the end of the 1980s and start of the 1990s, which left the municipalities in it in serious economic depression. The search for alternatives for its development became an imperative need, one of these alternatives being to take advantage of its mining heritage for tourism.

In particular, 1987 represents a turning point for the Huelva Pyrite Belt. A region that would witness the closure of the copper line in the Riotinto mining company, resulting in one of the worst socioeconomic crises in the region. In this context of major crisis, all of the social agents (companies, unions, governments at different levels, etc.) reached an agreement to start a foundation which would gather all of the important historic capital of the company and which would at the same time be a driving force behind new alternative initiatives to mining. That is how “Fundación Riotinto para la Historia de la Minería y la Metalurgia” (Riotinto Foundation for the History of Mining and Metallurgy) came into being, with the following purpose:

**Table 6.6** Conclusions

Ko and Stewart (2002)	Personal benefits from tourism development do not contribute to attitude towards overall community satisfaction
	Perceived positive tourism impacts are positively correlated with overall community satisfaction
	Perceived negative tourism impacts are negatively correlated with overall community satisfaction
	Overall community satisfaction is not correlated with attitude for additional tourism development
Vargas-Sánchez et al. (2009)	Personal benefits from tourism development do not contribute to attitude towards overall community satisfaction
	Perceived positive tourism impacts are positively correlated to overall community satisfaction. A mutual interaction was found between the perceived positive tourism impacts and the overall community satisfaction, but the influence of PPTI over OCS is stronger than OCS over PPTI
	Perceived negative tourism impacts do not contribute to overall community satisfaction
	Overall community satisfaction is negatively correlated with attitude for additional tourism development
Vargas-Sánchez et al. (2011)	Personal benefits from tourism development do not contribute to attitude towards overall community satisfaction
	Perceived positive tourism impacts are positively related to overall community satisfaction
	Perceived negative tourism impacts do not contribute to overall community satisfaction
	Overall community satisfaction is related to attitude towards additional tourism development, but with a positive sign, not with the negative sign stated in the hypothesis. That is to say, the higher the satisfaction with the community, the more favourable attitude towards tourism
Nunkoo and Ramkissoon (2010)	There is a direct positive relationship between residents' overall community satisfaction and the perceived benefits of the development. Residents who were satisfied with community services were found to perceive that tourism will result in several benefits.
	There is a direct negative relationship between residents' overall community satisfaction and the perceived cost of the development. Residents who were dissatisfied with community perceived higher costs resulting from development
Nunkoo and Ramkissoon (2011)	There is a direct positive relationship between residents' degree of satisfaction with community services and their perceptions of positive impacts of tourism
	There is a direct negative relationship between residents' degree of satisfaction with community services and their perceptions of negative impacts of tourism
	There is a direct positive relationship between residents' degree of satisfaction with neighbourhood conditions and their perceptions of positive impacts of tourism
	There is a direct negative relationship between residents' degree of satisfaction with neighbourhood conditions and their perceptions of negative impacts of tourism
	There is no relationship between residents' degree of satisfaction with neighbourhood conditions and their perceptions of positive impacts of tourism
	There is no relationship between residents' degree of satisfaction with neighbourhood conditions and their perceptions of negative impacts of tourism

Source: Own elaboration



“the study and research of the History of Mining and Metallurgy, both as far as its technical as well as cultural, social and economic aspects; the preservation and restoration of the whole environment located at the end of Minas de Riotinto, province of Huelva, through establishing a mining park including the pre-existing archaeological areas, the assets of ethnography interest and the natural sites, gardens and parks which of significant historical, artistic, or anthropological interest and the sharing of the historic and artistic values which the area holds.”

The Riotinto Mining Park includes:

- Mining and Railway Museum, with a replica of a Roman mine.
- Tourist Mining Railroad.
- English neighbourhood of Bellavista (House 21).
- La Dehesa necropolis (\*).
- Open-pit mine of Corta Atalaya (\*).
- Open-pit mine (and inner tunnel) of Peña de Hierro.
- Mining facilities.
- Documentation Centre.

(\*) Not able to be visited at the time of the finishing of this chapter.

As stated by García-Delgado et al. (2013), “the isolated, scattered nature of the existing tourism initiatives and services clearly condition the destination’s low degree of competitiveness”, which has proven to be incapable of converting casual day-trippers into a tourists. This tourism activity is offered as an economic alternative to mining activity that for many years constituted the area’s main source of revenue but which has experienced a severe crisis over recent decades and has only recently appeared to show some semblance of recovery.

### 6.3.2 *Sample*

The sample taken consists of 381 residents from towns and villages with the highest rates of tourism activity in the area known as the Cuenca Minera de Huelva (Mining Area of Huelva). The sample is random and multi-stage in terms of gender, age and residence, thereby guaranteeing the statistical representativeness of the reference population with a margin of error of  $\pm 5\%$ , a  $2\sigma$  (95.5%) level of confidence, and a population variance of 50%. The 15 mining municipalities used for the study were Almonaster La Real, Alosno, Cala, Calañas, El Campillo, Campofrío, El Cerro de Andévalo, Cortegana, Minas de Riotinto, Nerva, Puebla de Guzmán, Santa Olalla del Cala, Valverde del Camino, Zalamea La Real and Zufre.

The questionnaires were administered by three interviewers, who were previously trained between September and October 2008. The effective response rate was 100%, and in 87% of the cases (332) the observations obtained were complete (including all of the variables considered).

For better understanding the population being studied, Table 6.7 shows the sociodemographic profile of the sample analysed.

**Table 6.7** Sociodemographic profile of the sample under study

<b>Gender</b>	Male: 49,3%	<b>Age</b>	From age 18 to 29: 17,1%
	Female: 50,7%		From age 30 to 44: 26,8%
<b>Marital status</b>	Married: 57,5%		From age 45 to 64: 29,4%
	Single: 22,8%		Age 65 and older: 26,8%
	Other: 19,7%		
<b>Level of education</b>	Without education: 21,8%	<b>Employment situation</b>	Employee: 30,7%
	Primary: 33,9%		Self-employed: 11,3%
	Secondary: 12,9%		Civil servant: 7,3%
	Professional training: 16,3%		Retired: 18,4%
	University (bachelor's degree or equivalent): 14,7%		Student: 6,0%
	University (master or doctorate): 0,5%		Housework: 19,4%
<b>Birth place</b>	The same as current place of residence: 36,0%	<b>Years of residence in locality</b>	Less than 18 years: 4,2%
	Other municipalities in the province of Huelva: 52,5%		Between 18 and 34: 28,9%
	Other Spanish provinces: 10,7%		Between 35 and 51: 29,1%
	Abroad: 0,8%		Between 52 and 68: 23,9%
<b>Is/has your job been associated with mining?</b>	Yes: 11,0%	<b>¿is/has your job been associated with the tourism sector?</b>	Yes: 29,1%
	No: 89,0%		No: 70,9%

Source: Own elaboration

### 6.3.3 Instrument of Measurement

The questionnaire consists of a total of 62 items structured into the following subject areas: social-demographic, economic dependency on tourism, environmental attitude, degree of acceptance by local residents, knowledge of current local and tourism-related reality, contact between tourists and residents and the evaluation of it, evaluation by the residents of the current degree of tourist development in the locality, attitude towards future tourism development, perception by the residents of the impacts of tourism development on their locality and residents' satisfaction with their community. Insofar as only the final two of the aforementioned subject areas have been used for the purposes of this study, we will limit more in-depth explanation to these specific areas (a key is provided in Table 6.8).

**Table 6.8** Items in the questionnaire grouped in their corresponding constructs and mean of each one of the observed variables

Constructs and items	Mean	Standard deviation
<b>PECTI: Perception of positive economic impacts</b>		
PECTI1: More development and better standard of living	3,74	1,01
PECTI2: Increased opportunities for employment	3,65	1,01
PECTI3: Increased availability of recreational activities	3,62	1,02
<b>PSCTI: Perception of positive social and cultural impacts</b>		
PSCTI1: Tourism turns this locality into a more attractive and interesting place to live in	3,60	1,02
PSCTI2: Better knowledge of other cultures/communities	3,55	1,05
PSCTI3: The inhabitants of the locality feel prouder about belonging to it	3,56	1,04
PSCTI4: Increase in the quality of public services and the quality of service in restaurants, shops and hotels in the area	3,58	1,02
PSCTI5: Increase in the degree of police and fire protection	3,53	1,04
PSCTI6: An incentive to preserve local culture	3,61	0,98
PSCTI7: Infrastructure improvement (roads, water supply, electricity, telephone, etc.)	3,56	1,01
<b>PENTI: Perception of positive environmental impacts</b>		
PENTI1: Entails an incentive to conserve natural resources	3,62	1,00
PENTI2: Entails an incentive to restore and maintain historic buildings	3,62	0,99
<b>NECTI: Perception of negative economic impacts</b>		
NECTI1: Increase in the cost of living (product and service prices, homes)	3,77	1,02
NECTI2: The profits produced by the tourism activity revert to companies and people outside of the locality	3,53	1,09
<b>NSDTI: Perception of social dysfunctionalities</b>		
NSDTI1: Increase in traffic and parking problems	3,53	0,99
NSDTI2: Increase in theft/vandalism, alcoholism, prostitution, and sexual permissiveness	3,39	1,08
NSDTI3: Local workers are exploited	3,27	1,13
<b>NSCTI: Perception of negative social and cultural impacts</b>		
NSCTI1: Change/loss in way of living and traditional culture	3,13	1,08
NSCTI2: Problems in so far as the social harmony between residents and tourists	2,97	1,11
NSCTI3: Loss of peacefulness in the area	3,29	1,08
<b>NENTI: Perception of negative environmental impacts</b>		
NENTI1: Harm to the natural environment and landscape and increase in pollution (waste, noise, etc.)	3,39	1,02
NENTI2: Uncontrolled growth of the urban areas and urban environment.	3,38	1,02
NENTI3: Decrease in quality and breakdowns in health services, public transport and other local services (long queues and waits in restaurants, shops and tourist attractions)	3,41	1,04
<b>ESS: Economic and sanitary satisfaction</b>		

(continued)

**Table 6.8** (continued)

Constructs and items	Mean	Standard deviation
ECS: Economic satisfaction (businesses, cost of living, homes – Price and availability, electricity, water, gas, employment opportunities)	2,25	0,93
SSS: Sanitary system satisfaction (health centres, number of doctors and nurses, speed and quality of service, etc.).	2,76	0,90
<b>SS: Social satisfaction</b>		
PSS: Public services satisfaction (fire protection, social and welfare services, public transport in the locality, public transport between localities, police protection, local government, roads, educational services)	3,03	0,94
ROS: Recreation opportunities satisfaction (cinemas, gyms, parks and open spaces, exhibition halls, museums)	2,66	0,99
CISOS: Citizen involvement and social opportunities (opportunities to be with friends and family members, participation in community decision making, opportunities to be with friends and family, participating in community decision making, organised religion (churches), opportunities to socialise with other neighbours in the locality.)	2,66	0,93
ENS: Environment satisfaction (physical geography, cleaning of natural environment (ground, water, air-, climate, general appearance of municipality)	2,95	0,92

Source: Own elaboration

- The residents’ perception of the impacts of tourism development on their locality: a total of 23 items measured using five-point Likert-type scales relating to the overall economic, socio-cultural, environmental (positive and negative) impacts linked to the development of said activity. A variable synthesis is also included using the same Likert scale, designed to aid our understanding of the residents’ perception as far as the extent to which the benefits derived from tourism development outweigh the costs, though this is not taken into account in our model.
- Residents’ satisfaction with their community: six items measured using a five-point Likert scale in order to gauge the degree of satisfaction with public services, sanitation systems, environment, leisure and entertainment opportunities, economy, citizen involvement and social opportunities.

Most of the items of the questionnaire have been extracted from the review of previous studies published by various authors, mainly those by Johnson et al. (1994), Williams and Lawson (2001), Ko and Stewart (2002), and Kuvan and Akan (2005).

### 6.3.4 Techniques Applied

For the development of the study we have used Structural Equation Modelling (SEM), which combines an econometric perspective (linear regression models) with a psychometric approach (factor analysis). Given the scarcity of previous studies

linking residents' satisfaction with their community to their perception of the effects of tourism, we have opted for a variance-based SEM statistical technique such as Partial Least Squares (PLS) as it would appear better suited than a covariance-based SEM (CBSEM) for an exploratory analysis such as the one we are concerned with here (Roldán and Sánchez-Franco 2012) and insofar as "for application and prediction, when the theoretical model or measures are not well formed, a PLS approach is often more suitable" (Chin and Newsted 1999). Another factor that led us to select this technique as opposed to CBSEM is the high number of indicators and latent variables present in our model (Chin 2010; Hair et al. 2011). The software used for the study was SPSS 13.0 and Smart PLS 3.2.2.

## 6.4 Results

### 6.4.1 *Descriptive Statistics*

The inhabitants living in the mining municipalities perceive both the favourable as well as unfavourable effects linked to tourist activity with limited intensity, which suggests that the mean of the 23 items measured, on a five point scale, moves between 2.97 ("social harmony problems between residents and tourists") and the 3.77 ("rise in the cost of living"), without in going over value 4 or considerably under 3 in none of the items (see Table 6.8). Always within this general trend of muted perception, the most strongly perceived impacts are economic in nature (both favourable and unfavourable), while to the contrary, the residents seem to show confusion or indetermination regarding the sociocultural damage of tourism.

As far as community satisfaction, residents only show a medium amount of satisfaction as far as public services and the environment (mean of 3 on a five point scale), with this being mid-low for the rest of the analysed aspects (economy, health care system, recreational activities and the involvement of citizens and social opportunities) (mean between 2 and 3).

### 6.4.2 *Measurement of Constructs and Hypothetical Approach*

In order to determine the suitability of the composition of the various constructs we have been aided by both existing relevant literature and performing two factorial analyses, one for the twenty-three items relating to the "perception of the impacts of tourism", the other for the six items that comprise "resident satisfaction with their community". It was established, in accordance with the combination of these two tools:

- The reflective definition of seven constructs for the “perceived effects of tourism”, depending on the varying nature and sign of these effects, and
- Three constructs for “community satisfaction”, one of which (“satisfaction with the environment”) is to be taken as a unidimensional construct as it consists of just one item.

Table 6.8, which we referred to earlier, shows the various items contained in each of the construct identified.

In the light of them, and in accordance with the global hypothesis formulated in the theoretical section, the 21 hypotheses (H) used for the purposes of contrast are as follows:

- H1: Environment Satisfaction is negatively related to Perception of Negative Economic Impacts.
- H2: Environment Satisfaction is negatively related to Perception of Negative Environmental Impacts.
- H3: Environment Satisfaction is negatively related to Perception of Negative Social and Cultural Impacts.
- H4: Environment Satisfaction is negatively related to Perception of Social Dysfunctionalities.
- H5: Environment Satisfaction is positively related to Perception of Positive Economic Impacts.
- H6: Environment Satisfaction is positively related to Perception of Positive Environmental Impacts.
- H7: Environment Satisfaction is positively related to Perception of Positive Social and Cultural Impacts.
- H8: Economic and Sanitary Satisfaction is negatively related to Perception of Negative Economic Impacts.
- H9: Economic and Sanitary Satisfaction is negatively related to Perception of Negative Environmental Impacts.
- H10: Economic and Sanitary Satisfaction is negatively related to Perception of Negative Social and Cultural Impacts.
- H11: Economic and Sanitary Satisfaction is negatively related to Perception of Social Dysfunctionalities.
- H12: Economic and Sanitary Satisfaction is positively related to Perception of Positive Economic Impacts.
- H13: Economic and Sanitary Satisfaction is positively related to Perception of Positive Environmental Impacts.
- H14: Economic and Sanitary Satisfaction is positively related to Perception of Positive Social and Cultural Impacts.
- H15: Social Satisfaction is negatively related to Perception of Negative Economic Impacts.
- H16: Social Satisfaction is negatively related to Perception of Negative Environmental Impacts.
- H17: Social Satisfaction is negatively related to Perception of Negative Social and Cultural Impacts.

H18: Social Satisfaction is negatively related to Perception of Social Dysfunctionalities.

H19: Social Satisfaction is positively related to Perception of Positive Economic Impacts.

H20: Social Satisfaction is positively related to Perception of Positive Environmental Impacts.

H21: Social Satisfaction is positively related to Perception of Positive Social and Cultural Impacts.

### **6.4.3 Measurement Model Assessment**

As shown in Table 6.9, all standardized loadings ( $\lambda$ ) are greater than 0.707, thereby demonstrating individual item reliability and rendering any “item filtering” unnecessary. With regard to the trustworthiness of the scale or the internal consistency of all the indicators at the time of measuring the construct, Table 6.10 shows that the composite reliabilities ( $\rho_c$ ) are greater than 0.7 for all ten constructs, thereby complying with the requirement, though Cronbach’s alpha coefficient is slightly below said value for the latent variable “Economic and Sanitary Satisfaction” (0.650), possibly due to the recent and pioneering means by which the concept of “community satisfaction” that concerns us here has been approached on a research level.

On the other hand (see Table 6.10), latent variables achieve convergent validity, as their average variance extracted (AVE) widely exceed the 0.5 threshold. Finally, it is worth pointing out that the ten constructs also demonstrate discriminant validity by two distinct methods: the first, the fact that the square root of the AVE for each construct is greater than the correlation of the construct with any other construct, and secondly because the table of cross loadings reveals that each indicator has a higher loading on its own construct than on the remaining latent variables, and that each construct has a higher loading on the indicators it has assigned than on the remaining items.

### **6.4.4 Structural Model Assessment**

To begin with, we should point out that as a measure of goodness of fit for the model we have used the SRMR indicator (Hu and Bentler 1999), the value of which (0.058), being notably inferior to the threshold of 0.08, reveals a good fit (see Fig. 6.1).

Bootstrapping (with 5000 resamples) was used to generate standard errors and t-statistics (Table 6.11). Just nine of the 21 hypotheses proposed have been supported (H5, H7, H8, H9, H10, H11, H19, H20 and H21), a further five were not accepted due to the fact that they revealed non-significant relationships (H1, H2, H3, H4 and H6), and the remaining seven (H12, H13, H14, H15, H16, H17 and H18) reveal significant relationships but of the opposite sign to those hypothesised.

**Table 6.9** Outer model loadings and cross loadings

	ENS	ESS	SS	NECTI	NENTI	NSCTI	NSDTI	PECTI	PENTI	PSCTI
ENS	<b>1.000</b>	0.366	0.313	-0.067	-0.068	0.018	-0.018	0.088	0.012	0.065
SSS	0.301	<b>0.720</b>	0.498	-0.085	-0.164	-0.100	-0.122	-0.119	-0.127	-0.107
ECS	0.333	<b>0.955</b>	0.344	-0.303	-0.327	-0.313	-0.123	-0.231	-0.240	-0.294
PSS	0.189	0.259	<b>0.936</b>	0.288	0.310	0.403	0.222	0.199	0.275	0.301
ROS	0.475	0.559	<b>0.759</b>	0.093	0.077	0.164	0.085	0.002	0.099	0.068
CISOS	0.307	0.528	<b>0.768</b>	0.137	0.134	0.220	0.109	0.049	0.109	0.096
NECTI1	-0.030	-0.261	0.180	<b>0.911</b>	0.613	0.506	0.339	0.482	0.627	0.530
NECTI2	-0.089	-0.238	0.274	<b>0.936</b>	0.586	0.649	0.359	0.458	0.571	0.521
NENTI1	-0.079	-0.297	0.151	0.518	<b>0.849</b>	0.511	0.578	0.449	0.473	0.514
NENTI2	-0.074	-0.279	0.238	0.611	<b>0.943</b>	0.663	0.575	0.442	0.521	0.513
NENTI3	-0.037	-0.283	0.301	0.621	<b>0.924</b>	0.695	0.536	0.471	0.534	0.560
NSCTI1	0.010	-0.335	0.245	0.603	0.628	<b>0.877</b>	0.409	0.462	0.469	0.501
NSCTI2	0.011	-0.219	0.341	0.607	0.661	<b>0.936</b>	0.513	0.494	0.471	0.530
NSCTI3	0.025	-0.212	0.397	0.504	0.596	<b>0.898</b>	0.556	0.449	0.440	0.537
NSDTI1	-0.005	-0.139	0.196	0.328	0.520	0.547	<b>0.904</b>	0.364	0.298	0.370
NSDTI2	-0.022	-0.066	0.227	0.339	0.513	0.464	<b>0.903</b>	0.345	0.325	0.352
NSDTI3	-0.022	-0.173	0.071	0.338	0.627	0.417	<b>0.833</b>	0.344	0.299	0.333
PECTI1	0.085	-0.158	0.135	0.379	0.415	0.431	0.338	<b>0.889</b>	0.545	0.702
PECTI2	0.077	-0.179	0.140	0.502	0.460	0.468	0.368	<b>0.941</b>	0.614	0.760
PECTI3	0.080	-0.261	0.129	0.501	0.492	0.513	0.384	<b>0.920</b>	0.595	0.766
PENTI1	-0.019	-0.245	0.204	0.645	0.542	0.487	0.339	0.606	<b>0.945</b>	0.663
PENTI2	0.042	-0.193	0.237	0.570	0.520	0.472	0.317	0.598	<b>0.941</b>	0.736
PSCTI1	0.073	-0.251	0.170	0.505	0.441	0.478	0.310	0.786	0.580	<b>0.832</b>
PSCTI2	0.091	-0.248	0.137	0.487	0.481	0.463	0.331	0.751	0.597	<b>0.845</b>
PSCTI3	0.069	-0.198	0.151	0.478	0.518	0.453	0.341	0.668	0.553	<b>0.831</b>
PSCTI4	0.059	-0.240	0.212	0.465	0.485	0.506	0.353	0.660	0.572	<b>0.854</b>
PSCTI5	0.013	-0.223	0.264	0.473	0.475	0.518	0.339	0.629	0.611	<b>0.860</b>
PSCTI6	0.067	-0.181	0.244	0.487	0.516	0.464	0.334	0.642	0.791	<b>0.810</b>
PSCTI7	0.022	-0.242	0.224	0.463	0.535	0.522	0.350	0.670	0.665	<b>0.867</b>

Source: Own elaboration

Thus it would appear that we can confirm that the aspect of community satisfaction studied does, in fact, affect the manner in which the effects derived from tourism are perceived, and as such:

- (a) Satisfaction with the environment would appear not to influence the manner in which the residents perceive the negative effects of tourism, but would appear to affect, and positively, though not to any great degree, the perception of favourable socio-cultural (0.114) and economic (0.147) effects.
- (b) Economic and Sanitary Satisfaction has a significant relationship, negative in sign and of notable magnitude, with the effects perceived in tourism, independently of its nature and sign, meaning that the greater the satisfaction of the residents with the economy and the sanitation system in their locality, the lesser the

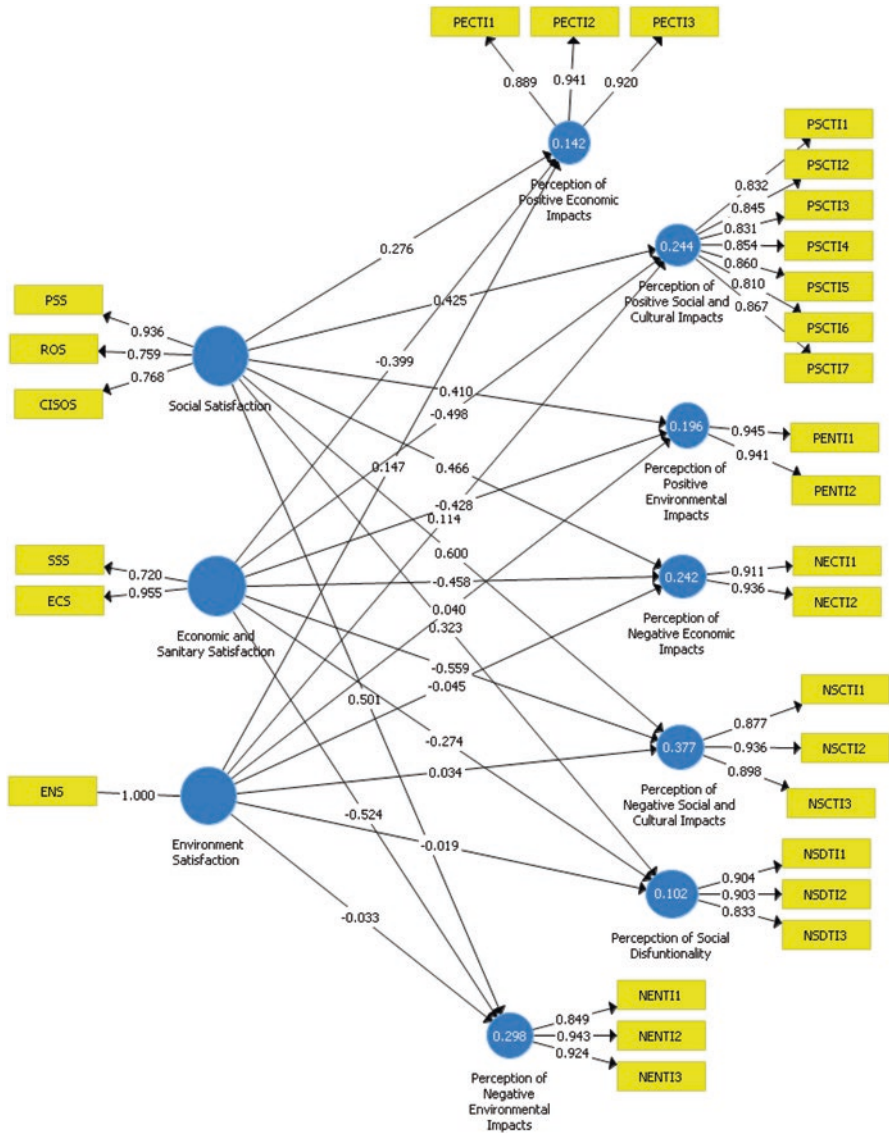


**Table 6.10** Construct reliability, convergent validity and discriminant validity

Composite Reliability	Cronbach's Alpha	AVE	ENS	ESS	NECTI	NENTI	NSCTI	NSDTI	PECTI	PENTI	PSCTI	SS
1.000	1.000	ENS	<b>1.000</b>									
0.831	0.650	ESS	0.366	<b>0.846</b>								
0.921	0.829	NECTI	-0.067	-0.269	<b>0.924</b>							
0.932	0.891	NENTI	-0.068	-0.315	0.647	<b>0.906</b>						
0.931	0.888	NSCTI	0.018	-0.282	0.630	0.694	<b>0.904</b>					
0.912	0.856	NSDTI	-0.018	-0.139	0.378	0.618	0.546	<b>0.880</b>				
0.940	0.906	PECTI	0.088	-0.223	0.508	0.501	0.518	0.398	<b>0.917</b>			
0.941	0.875	PENTI	0.012	-0.233	0.645	0.564	0.509	0.348	0.639	<b>0.943</b>		
0.945	0.932	PSCTI	0.065	-0.269	0.568	0.584	0.579	0.400	0.812	0.741	<b>0.843</b>	
0.863	0.796	SS	0.313	0.441	0.250	0.260	0.364	0.196	0.146	0.234	0.241	<b>0.825</b>

Source: Own elaboration

Note: Diagonal elements (bold) are the square root of variance shared between the constructs and their measures (AVE). Off-diagonal elements are the correlations among constructs. For discriminant validity, the diagonal elements should be larger than the off-diagonal elements



**Fig. 6.1** Path coefficients for the model. Indicator of goodness of fit: SRMR Composite Model = 0.058. (Source: own elaboration)

intensity with which they perceive the effects of tourism, be these favourable or unfavourable. The magnitude of this relationship is somewhat lower for favourable effects (from  $-0.399$  to  $-0.498$ ) than for unfavourable effects (from  $-0.458$  to  $-0.559$ ), with the exception of the influence on the social dysfunctionalities of tourism, an unfavourable effect with a magnitude notably inferior to that shown by the remaining damaging effects of tourism ( $-0.274$ ).

**Table 6.11** Structural model results. Path significance using percentile bootstrap 95% confidence interval

Hypothesis	Suggested effect	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	P Values	Support	Percentile bootstrap 95% confidence level		Support
								5.0%	95.0%	
ENS -> NECTI	-	-0.045	-0.046	0.050	0.900	0.184	No	-0.130	0.036	No
ENS -> NENTI	-	-0.033	-0.033	0.048	0.695	0.244	No	-0.110	0.045	No
ENS -> NSCTI	-	0.034	0.034	0.046	0.740	0.230	No	-0.042	0.110	No
ENS -> NSDTI	-	-0.019	-0.020	0.049	0.377	0.353	No	-0.102	0.060	No
ENS -> PECTI	+	0.147**	0.147	0.050	2.959	0.002	Yes	0.066	0.229	Yes
ENS -> PENTI	+	0.040	0.040	0.056	0.718	0.236	No	-0.051	0.132	No
ENS -> PSCTI	+	0.114*	0.114	0.051	2.216	0.013	Yes	0.031	0.198	Yes
ESS -> NECTI	-	-0.458***	-0.456	0.052	8.840	0.000	Yes	-0.541	-0.372	Yes
ESS -> NENTI	-	-0.524***	-0.521	0.055	9.506	0.000	Yes	-0.611	-0.428	Yes
ESS -> NSCTI	-	-0.559***	-0.555	0.050	11.222	0.000	Yes	-0.635	-0.474	Yes
ESS -> NSDTI	-	-0.274***	-0.274	0.074	3.726	0.000	Yes	-0.390	-0.148	Yes
ESS -> PECTI	+	-0.399***	-0.398	0.060	6.631	0.000	No	-0.495	-0.299	No
ESS -> PENTI	+	-0.428***	-0.427	0.056	7.713	0.000	No	-0.517	-0.336	No
ESS -> PSCTI	+	-0.498***	-0.497	0.056	8.926	0.000	No	-0.589	-0.405	No
SS -> NECTI	-	0.466***	0.464	0.054	8.653	0.000	No	0.374	0.551	No
SS -> NENTI	-	0.501***	0.499	0.053	9.467	0.000	No	0.410	0.584	No
SS -> NSCTI	-	0.600***	0.597	0.051	11.670	0.000	No	0.512	0.682	No
SS -> NSDTI	-	0.323***	0.325	0.063	5.104	0.000	No	0.220	0.430	No
SS -> PECTI	+	0.276***	0.275	0.057	4.840	0.000	Yes	0.182	0.368	Yes
SS -> PENTI	+	0.410***	0.408	0.056	7.364	0.000	Yes	0.316	0.499	Yes
SS -> PSCTI	+	0.425***	0.423	0.057	7.428	0.000	Yes	0.329	0.516	Yes

Source: Own elaboration

For n = 5000 subsamples: \*p < .05; \*\*p < .01; \*\*\*p < .001 (based on a one-tailed Student's t (4999) distribution); t(0.05; 4999) = 1645; t(0.01; 4999) = 2327; t(0.001; 4999) = 3092

Depending on its nature, the relationship appears to be the strongest for socio-cultural-type effects, where it reaches and even surpasses 0.5 in value.

- (c) Social Satisfaction enjoys a significant relationship of positive sign and generally notable magnitude with the effects perceived in tourism, once again independently of the sign and character of the effect under study. This relationship indicates that, as the residents' satisfaction with the social aspects of their community (public services, social and leisure opportunities and citizen involvement) increases, the intensity with which these residents perceive each and every one of the effects derived from tourism also increases. Once again, as in the previous case, the magnitude of the relationship is shown to be greater for unfavourable effects (from 0.323 to 0.600) than for favourable ones (0.276 to 0.425). Once again it is the socio-cultural effects linked to tourism that show the relationship of greatest magnitude (0.425 for favourable and 0.600 for unfavourable).

As shown in Table 6.12, figures of  $R^2$  are not excessively outstanding. While all the constructs exceed the minimum value of 0.10, only "Perception of Negative Social and Cultural Impacts" ( $R^2 = 0.377$ ) achieves a moderate level, though it is important to bear in mind that "Perception of Negative Environmental Impacts" ( $R^2 = 0.298$ ) also approaches this moderate level. In spite of this, cross-validated redundancy measures show that the theoretical/structural model has a predictive relevant ( $Q^2 > 0$ ). With regard to the  $f^2$  indicator (effect size), which measures the change in  $R^2$  when a specific exogenous construct is omitted from the model, its magnitude is insignificant for the latent variable "Environment Satisfaction", which only reveals a small impact influence on the dependent construct ("Perception of Positive Economic Impacts"). However, the remaining two exogenous latent variables ("Economic and Sanitary Satisfaction" and "Social Satisfaction") generally denote a medium (0.15) or even great (0.35) impact influence on the majority of dependent constructs, and are especially important for "Perception of Negative Social and Cultural Impacts" (0.376 and 0.451 respectively). An exception to the final affirmation is the reduced impact influence that these two types of satisfaction exert on the endogenous latent variable "Perception of Social Dysfunctionalities" (0.063 and 0.090 respectively).

Table 6.12 also displays the amount of variance that each antecedent variable explains on each endogenous construct. With regard to this, it is revealed that the exogenous latent variable "Environment Satisfaction" has insignificant participation when it comes to explaining the variance of any of the endogenous constructs (from 0.03% to 1.29%), while it is the remaining two exogenous latent variables ("Economic and Sanitary Satisfaction" and "Social Satisfaction") that explain almost all the variance of the construct "perception of the effects of tourism", sometimes with greater prominence than the former (in the case of "Perception of Positive Economic Impacts", where it explains double the percentage of variance), and sometimes with greater relevance to the latter (as in the case of "Perception of Social Dysfunctionalities"), but in general with very similar participations.

Finally we should point out that the fact that all Inner VIFs are inferior to 5 disproves the existence of indications of multi-collinearity between the antecedent

**Table 6.12** Effects on endogenous variables

	R <sup>2</sup>	Q <sup>2</sup>	f <sup>2</sup>	Direct effect	Correlation	Variance explained (%)
NECTI	0.242	0.198				24,3
SS			0.223	0.466	0.250	11,65
ESS			0.207	-0.458	-0.269	12,32
ENS			0.002	-0.045	-0.067	0,30
<b>NENTI</b>	<b>0.298</b>	<b>0.237</b>				<b>29,8</b>
SS			0.279	0.501	0.260	13,03
ESS			0.292	-0.524	-0.315	16,51
ENS			0.001	-0.033	-0.068	0,22
<b>NSCTI</b>	<b>0.377</b>	<b>0.302</b>				<b>37,7</b>
SS			0.451	0.600	0.364	21,84
ESS			0.376	-0.559	-0.282	15,76
ENS			0.002	0.034	0.018	0,06
<b>NSDTI</b>	<b>0.102</b>	<b>0.074</b>				<b>10,2</b>
SS			0.090	0.323	0.196	6,33
ESS			0.063	-0.274	-0.139	3,81
ENS			0.000	-0.019	-0.018	0,03
<b>PECTI</b>	<b>0.142</b>	<b>0.113</b>				<b>14,2</b>
SS			0.069	0.276	0.146	4,03
ESS			0.139	-0.399	-0.223	8,90
ENS			0.021	0.147	0.088	1,29
<b>PENTI</b>	<b>0.196</b>	<b>0.169</b>				<b>19,6</b>
SS			0.163	0.410	0.234	9,59
ESS			0.171	-0.428	-0.233	9,97
ENS			0.002	0.040	0.012	0,05
<b>PSCTI</b>	<b>0.244</b>	<b>0.170</b>				<b>24,4</b>
SS			0.186	0.425	0.241	10,24
ESS			0.245	-0.498	-0.269	13,40
ENS			0.014	0.114	0.065	0,74

Source: Own elaboration

variables of each of the endogenous structures: “Environment Satisfaction” (1.194), “Economic and Sanitary Satisfaction” (1.337) and “Social Satisfaction” (1.284).

## 6.5 Conclusions, Practical Implications and Recommendations

Few previous studies have analysed the relationship between community satisfaction and the perceived effects of tourism and those that have done so have not coincided in the means of measuring this variable, some considering it as an average of the constituent items (Vargas-Sánchez et al. 2009), some considering it on the basis

of a single item (Vargas-Sánchez et al. 2011), and in other cases it is delimited reflectively on the basis of a series of indicators (Nunkoo and Ramkissoon 2010). With regard to how the relationship between the two variables is approached, studies that do so by analysing the incidence of satisfaction on the perception of impacts of tourism usually conclude by recognising a positive sign relationship with respect to the benefits of tourism and a negative sign relationship with respect to the damaging effects of tourism (Nunkoo and Ramkissoon 2010). The implications of these results are clear: residents' satisfaction with their community is discerned as a variable which allows the attitude of the citizen to be predicted as far as major tourism development in their locality: those who are more satisfied with their community will perceive the favourable effects of tourism more and the unfavourable effects less, which means they will be favourable to tourism develop in the area continuing, while those who are unsatisfied with the community will perceive the favourable aspects of tourism development less and perceive the unfavourable ones more, developing an unfavourable attitude towards tourism in the area. Therefore, from this perspective, the message for government agencies should be the following: improve the satisfaction of residents as far as their community and you will get their attitudes to be more favourable towards increasing tourism development.

In order to add new insights, in our case we have approached the study in a contingent manner, disaggregating the effects of tourism not just according to their sign but also to their nature and disaggregating community satisfaction in three constructs (social satisfaction, economic and sanitary satisfaction and environment satisfaction).

The results obtained demonstrate that it is the aspect of community satisfaction analysed, and not the positive or negative character of the effect studied, that conditions the sign of the relationship between satisfaction and effects, so Social Satisfaction shows a significant relationship of positive sign and generally notable magnitude with the perceived effects of tourism, Economic and Sanitary Satisfaction shows a significant relationship of negative sign and notable magnitude with the perceived effects of tourism, and Environment Satisfaction does not appear to influence the manner in which the residents perceive the negative effects of tourism but does appear to influence, with a positive though weak sign, the perception of the favourable socio-cultural and economic effects.

In light of these results, it is impossible to attempt to predict the attitude of residents towards tourism based on the variable "satisfaction with their community", not even disaggregating the variable satisfaction according to its nature, since the residents who are most satisfied with the social aspects, will perceive the favourable effects of tourism with a high degree of intensity, yet also the negative ones, which prevents us from knowing the net or overall result of this perception, with something similar happening, although with the opposite sign, in the most satisfied citizens in economic and sanitary aspects, who will perceive the unfavourable aspects of tourism less, but also the more favourable ones. Not even satisfaction with the natural environment, where the relation with the effects is quite weak and occasionally inexistent, can be a predictor of the attitude towards tourism development.

The practical implications of this study demonstrate that it is not advisable to propose universal models that globally analyse the relationship between community satisfaction and the perceived effects of tourism, and which attempt to predict the residents' attitude towards tourism development based on this overall satisfaction variable. On the other hand, the results of our study lead us to recommend aiming at disaggregating community satisfaction into its various dimensions rather than treating it solely on an overall level and to not claim that the different dimensions of this satisfaction enabled us to anticipate the attitude of citizens in so far as tourism development. In fact, if we refer to this particular research case, we find a medium-low degree of community satisfaction in residents who generally show a low intensity perception in relation to the various effects of tourism (both the positive and negative ones) and yet however they show quite favourable attitudes towards increased tourism develop in their region (mean of 4.2 on a scale of 1 to 5) and towards an increased presence of tourists in the area (mean of 4.1). Other variables, such as the life cycle stage should be explored as moderators of these relationships.

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