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OVERTOURISM: RESIDENTS' PERCEPTIONS OF TOURISM IMPACT AS AN INDICATOR OF RESIDENT SOCIAL CARRYING CAPACITY - CASE STUDY OF A SPANISH HERITAGE TOWN

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RESIDENTS' PERCEPTIONS OF TOURISM IMPACT AS AN INDICATOR OF RESIDENT SOCIAL CARRYING CAPACITY: CASE STUDY OF A SPANISH HERITAGE TOWN

Abstract:

Purpose: This study assesses the value of impact perceptions as an indicator of social carrying capacity in the heritage town of Besalú, Spain. Additionally, it assesses the impact tourism dependence and other socio-demographic variables have on this indicator.

Design and methodology: A literature review on social exchange theory (SET) and carrying capacity related to impact perceptions is presented. The method was a survey, with a questionnaire based on the literature review and in-depth interviews. The results have been analyzed statistically to determine the links between perceptions and socio-demographic variables. Using statistical tools, perceptions are compared to three indicators that have been used to determine capacity in literature: willingness to accept more tourism, tourism pressure and the tourist function index.

Findings: The willingness of residents to enter into, and remain, in an exchange relationship is affected primarily by tourism dependence, and to a lesser extent by gender and education. Additionally, impact perceptions do not correspond to a willingness to accept more tourists. The impacts of tourism on conservation show greater consensus, while impacts on the availability of space for residents shows links to other capacity indicators.

Originality/Value: This study enhances the body of knowledge on social carrying capacity in heritage towns, by focusing on a regionally prominent day-tripper heritage town facing high tourism pressure which is Besalú. From a theoretical perspective, this study attempts to merge carrying capacity and social exchange theory (SET), thus linking sustainability to social exchange. It also highlights the importance of a gender based perspective in sustainability.

Keywords: social carrying capacity; social exchange theory; sustainable tourism; heritage towns; Besalú; Catalonia; Spain

INTRODUCTION

Residents play a vital role in developing sustainable tourism as they are the cultural agents and the social group in which tourism is delivered. It has been acknowledged, therefore, that since local hospitality is a key element of the tourism product, some way of "repaying" or spreading the benefits to the community needs to be found (Glasson, Godfrey, & Goodey, 1997). Residents have gained importance in the tourism equation, as their perceptions indicate tourism's outlook regarding sustainability. Their goodwill is considered crucial to the success and sustainability of any tourism development (Bimonte & Punzo, 2016) .

This article specifically analyses the value of residents' perceptions of tourism as an indicator of social carrying capacity levels in a heritage town in Spain. Carrying capacity is multidimensional since environmental, economic, psychological and perceptual factors need to be considered, depending on the particular concerns of the stakeholders involved (Simón,

Narangajavana, & Marqués, 2004). Accordingly, studies have emerged which focus on 1) environmental and biophysical carrying capacity (R. Z. Liu & Borthwick, 2011; Simón et al., 2004; Zacarias, Williams, & Newton, 2011); 2) economic carrying capacity (Sowman, 1987) and 3) social carrying capacity (Graefe & Vaske, 1987; Navarro et al., 2012). The interconnectedness between these dimensions has been consistently acknowledged in literature as well as their relevance to any comprehensive assessment of capacity (Navarro et al., 2012; Simón et al., 2004). However, the focus of this study is specifically to gain depth in social carrying capacity in a heritage town and the value of residents' impact perception in its assessment.

Regardless of its definition, social carrying capacity is generally framed as making some type of reference to residents' impact perceptions. D'Amore (1983) and Madrigal (1993) define it as the level above which there is an imbalance between the rewards and benefits of tourism for residents. Navarro (2012) uses the term "resident social carrying capacity" (as opposed to "tourist social carrying capacity"), and measures the former through residents' perceptions. Even studies that take a broader perspective of social carrying capacity use resident impact perceptions in their assessment. Glasson (1994: 144), for example, defines capacity as "the number of visitors an art city can absorb without hindrance of the other social and economic urban functions it performs." The study includes residents' impact perceptions in the assessment. On the other hand, many residents' impacts perceptions studies make reference to social carrying capacity as a theoretical basis (Glasson, 1994; Haralambopoulos & Pizam, 1996; Johnson, Snepenger, & Akis, 1994; J. Liu, Sheldon, & Var, 1987; Vargas-Sánchez, Porras-Bueno, & Plaza-Mejía, 2011). These studies point out that negative results indicate a movement towards capacity levels (Vargas-Sánchez et al., 2011).

The aim of this article is to study residents' impact perceptions as an indicator of social carrying capacity. In order to assess its effectiveness, the tourist function index, tourism pressure and willingness to accept more tourism are valued. These three indicators have been used in previous studies to assess social carrying (J. Liu et al., 1987; Shelby & Haberlein, 1986). In this study, these indicators provide an important basis for the study of residents' impact perceptions in relation to capacity.

This study follows on from previous studies indicating that residents' perceptions are far from homogeneous, and that perceptions of tourism impacts change between segments of the population as they are influenced by many variables (K. L. Andereck & Vogt, 2000; Jurowski, Uysal, & Williams, 1997; Mason & Cheyne, 2000; Nunkoo & Ramkissoon, 2012). Therefore, a secondary aim is to study the impacts of different variables on residents' perceptions as an indicator of social carrying capacity. The sociodemographic variables examined are gender, education, and age. Taking a social exchange theory (SET) approach, four hypotheses are evaluated. The first hypothesis states that the variable willingness to accept more tourism will have values that indicate a movement towards capacity levels in the study area. The second hypothesis states that impact perceptions are linked to willingness to accept more tourism. The third hypothesis stems from a SET approach stating that residents who are employed in the tourism industry, or have close relatives employed there, welcome tourists more than those who are not. The fourth hypothesis is that employment in the tourism industry positively correlates with tourism impact perceptions. The first and second hypotheses are focused on assessing the social carrying capacity of the

study, and use indicators established in literature, and also assess whether they correlate with each other. The other two hypotheses focus on the importance of employment in tourism related to social carrying capacity. These hypotheses are supported by relevant literature and theory.

The implications of this study are significant as they enhance the understanding of capacity in small heritage towns. Even though they share common themes with other types of destination, "the impact of tourism on heritage cities is "inherently place specific" (Simpsion, 1999: 173). Since spatial constraints are a key issue in carrying capacity the characteristics of the study area are very relevant. Carrying capacity originated in studies of open outdoor natural spaces (R. Z. Liu & Borthwick, 2011; Simón et al., 2004; Zacarias et al., 2011). In contrast fortified colonial cities, European historic centers or Muslim medinas, tend to have narrow streets and are surrounded in many cases by ports, walls or rivers, a layout that is somewhat enclosed. Few studies have applied a method to determine carrying capacity to tourism spaces with dominant historic and heritage attractions (Garcia, De la Calle Vaquero, & Minguez Garcia, 2011). Four such studies have been identified. Glasson et. Al. (1997) studied twenty European cities under a carrying capacity perspective and made management recommendations. The study of Glasson (1994) in the city of Oxford explored visitors' and residents' perceptions on tourism impacts in the city of Oxford, and assessed capacity. Canestrelli & Costa (1991) also determined the carrying capacity of the city of Venice using a mathematical linear programming technique. The same technique was used with success in the cities of Rhodes, Cambridge and Vis (Van Der Borg, Costa, & Gotti, 1996).

CARRYING CAPACITY AND RESIDENTS' PERCEPTIONS

According to UNWTO, carrying capacity is "the maximum number of people that may visit a tourist destination at the same time without causing destruction of the physical, economic or socio-cultural environment and an unacceptable decrease in tourist satisfaction" (1997:5). It is, thus, a turning point when tourism is no longer healthy for any given stakeholder. In the 60's, carrying capacity was used as a theoretical approach to centre discussion on the negative impacts of tourism. This approach, however, was to be replaced by sustainable tourism as a theoretical tool (Saarinen, 2006). Some authors wonder whether this really is a replacement, as both ideas are very similar (Butler, 1999; Saarinen, 2006). Both theories are based on a threshold of tourism growth.

The literature in the field outlines that there are various conceptual bases for carrying capacity, these are social, economic and ecological (Simón et al., 2004). These bases are studied separately, or integrated in comprehensive frameworks to assess carrying capacity in general (Navarro et al., 2012; Papageorgiou & Brotherton, 1999; Shelby & Haberlein, 1986). Navarro et. al. (2012), for example, studied social carrying capacity together with 23 additional indicators in a methodology to assess carrying capacity. In carrying capacity studies, the perspective of the local community is generally measured through resident attitudes (under the name of perceptions, attitudes or opinions), or through a direct observation of their behavior in relation to tourism impacts. Thus, residents' perceptions of impacts are taken as an important indicator of social carrying capacity. Local attitudes and the resulting levels of hospitality towards visitors have been identified as a factor shaping

the attractiveness of a destination, and negative attitudes could constitute a key threshold in determining the capacity of an area to absorb tourism (Getz, 1994).

Although carrying capacity is recognized as a useful approach to manage tourism growth, it has been challenged, and its applications somewhat modified. Some authors have stated that focusing on tourism numbers may be misleading, since no specific impacts can be associated with a particular number of tourists(Glasson et al., 1997; Manning, Wang, Valliere, Lawson, & Newman, 2002; Martin, 1994). Numbers are much less important than other factors associated with the visit, such as timing, location, type of use, and visitor behavior (Lindberg, McCool, & Stankey, 1997). In response to this, alternative models have been proposed, for instance, the Limits of Acceptable Change Model (LAC) (Martin, 1994). In the LAC model, the intentions are as follows: to assess the likely impact of an activity on the destination; to agree in advance the degree of change that will be tolerated; to monitor the industry on a regular and systematic basis; and to decide what actions will be taken if these 'quality standards' are exceeded (Glasson, et.al, 1997:56). This shift, from visitor numbers to impacts, has its correlate in empirical research, since most studies use questionnaires phrased in terms of the impacts of tourism, instead of, or in addition to tourism numbers (K. L. Andereck & Vogt, 2000; Kathleen L. Andereck & Nyaupane, 2011; Boley, McGehee, Perdue, & Long, 2014; Glasson, 1994; Gursoy, Jurowski, & Uysal, 2002). Notwithstanding these challenges, carrying capacity continues to be used as a tool in understanding the impacts of tourism in a destination.

A key perception studied in carrying capacity is the perception of crowding. Even though some authors link crowding to a negative state of mind, early works disagree that crowding is necessarily a negative state of experience (Choi, Mirjafari, & Weaver, 1976; Hall, 1994). The cognitive perception of crowding is a necessary, but not a sufficient condition for the person to want to leave the place (Neuts & Nijkamp, 2012). Thus, the perception of crowding may be thought of as an attitude in which a perception of an excessive use level of tourism which may (or may not) lead to a negative state, and a change in behaviour. In their seminal work, Shelby and Haberlein (1986) used crowding perception to determine carrying capacity. Their rule is: "if more than two-thirds of the visitors say that they are crowded it is likely that the capacity has been exceeded. If less than one-third senses the overcrowding, the area is probably below the load capacity" (Shelby and Haberlein, 1986:62). Their study, however, focused on the perceptions of tourists, not residents. In 2013, Shelby & Haberlein's rule was used in another study of tourists' perceptions by Navarro et. al. who assessed carrying capacity in La Costa del Sol (Navarro, Damian, & Fernández-Morales, 2013). While more recent articles have used the rule and propose it as a viable method (Navarro et al., 2012, 2013; Vaske & Shelby, 2008), the study areas are natural areas and the type of tourism is nature-based. One study applying the rule set out by Shelby and Haberlein (1986) was found regarding residents in a heritage city context. Glasson (1994) used this to study residents' perceptions in the city of Oxford, England. The study concluded that "there is some evidence to suggest that tourism in Oxford may be near its capacity: 56% of the respondents felt that the number of tourists was too high, 41% about right, and almost no one felt it was too low" (Glasson, 1994:141).

Social Carrying Capacity and its Relationship with Social Exchange Theory (SET)

Various theoretical frameworks have been used to study residents' perceptions of tourism impacts. This study draws from both carrying capacity and SET. A combination of multiple theories and approaches is common in tourism studies, as they are not considered mutually exclusive, but rather, complementary in giving insight into the variety of factors that affect resident's attitudes towards tourism (Hernandez, Cohen, & Garcia, 1996; Vargas-Sánchez et al., 2011).

Studies of residents' attitudes to tourism have most often employed SET as their theoretical framework (K. L. Andereck & Vogt, 2000). More than simply a theoretical framework, SET is a "frame of reference that takes the movement of valued things (resources) through social process as its focus" (Emerson, 1976:359). Therefore, exchanges should be understood as a longitudinal process over time, where the unit of analysis is not the individuals, but the relationships. For example, "instead of speaking of the power of persons we speak of the power-dependence relations" (Emerson, 1976). Although SET draws much from economics, it is much broader. Social exchange theorists are fundamentally concerned with the implications of the exchange for the sociability of the group and the relations of trust, cooperation and obligation that emerge (Uehara, 1990). In the field of tourism, SET suggests that expressed support for tourism development is considered as a willingness to enter into an exchange (Ap, 1992; Jurowski et al., 1997). People select exchanges after assessing the benefits and costs (Homans, 1961). Consequently, individuals who evaluate the exchange as beneficial perceive the same impact differently to someone who evaluates the exchange as harmful (Abdollahzadeh & Sharifzadeh, 2012). Many studies do not explicitly refer to SET but use a cost-benefit approach to residents and tourism (Canestrelli & Costa, 1991; King, Pizam, & Milman, 1993). There is a concern whether the environmental and social costs of tourism development outweigh economic benefits (Krippendorf, 1982; J. Liu et al., 1987). The point where there is an imbalance between the rewards and costs indicate an approach to social carrying capacity limits.

Review of Residents' Attitudes and Tourism Impacts

Residents' perceptions of tourism impacts are heterogeneous. The aim of studies on resident attitudes is, generally speaking, to explore the relationship between independent variables and perceptions. Table 1 shows a list of articles on residents' perceptions of tourism impacts, indicating which of them take a SET or a carrying capacity approach.
Table1. Residents' Tourism Impacts Perceptions Studies

Regarding the relation between gender and impact perception, the study by Harvey et al. (1995) compared three rural communities in the United States, with high, moderate and low dependence on tourism. The aim was to analyze the relationship between gender and perceived impacts. Factor analysis showed no differences by gender, while individual analysis showed few differences. Women felt that tourism had a negative impact on recreational opportunities, but at the same time it also increased the options for recreation. They also felt that the community could live without tourism and they felt worse about non-residents developing tourism businesses. The authors concluded that overall the results suggested that women and men perceived tourism in much the same way. Ritchie & Inkari (2006) found that there were few significant differences in impact perception according to gender, but in the Lewes District (UK), men were less supportive of increasing tourism than

women. William & Lawson (2001) found that in small towns in New Zealand, females had more negative attitudes towards tourism than men. Also in New Zealand, Cheyne & Mayson, (2000) found that perceptions were partly gender based. Women tended to oppose the establishment of a café/bar more than men, and were more concerned about drinking and road safety. In this study, "it appeared that women were generally more opposed than men to the development on the grounds of perceived negative impacts." (Cheyne & Mason, 2000:408). The authors suggested that differences in perception could be linked to both genders having different worldviews. In the historic city of Santa Martha, Belisle and Hoy (1980) found more concern among women regarding the "exposure to cultural differences" that tourism brings.

Several studies have focused on how age affects perceptions of tourism impacts. Williams and Lawson (2001) found that people who agreed with pro-tourism statements were wealthy, married, working and middle-aged. According to Husbands (1989), links were established between age and perceptions of tourism in Zambia in 1989, and several other studies found a relationship between age and perceptions of tourism impacts (Brougham & Butler, 1981; Perdue, Long, & Allen, 1990; Smith & Krannich, 1998). Ritchie & Inkari (2006) found some differences in attitude that could be linked to age, even though other variables, such as income showed a greater significance King. Pizam & Milman (1993) found that residents in the age group 51 to 61 had a more positive opinion of tourism than those in the age group 20 to 39. In their analysis, they linked this to the fact that the study area, the island of Samos, is a mass tourism destination. In historic cities, Ryan & Montgomery (1994) and Belisle & Hoy (1980) revealed no significant difference stemming from age. Davis et al. (1988) also revealed no difference related to age.

Regarding education, Kayat (2002) operationalized power through education to explore the its influence on perceptions of impacts. The assumption was that perceptions of power can generate positive perceptions of tourism impacts for two reasons: respondents either feel disempowered, and therefore support tourism because they feel weak and dependent on it; or, to the contrary, they feel empowered by tourism and, thus, can reap the benefits of it. Haralambopoulous and Pizam (1996) also studied the relationship between educational level and perception in Samos, Greece. They found that the higher educated residents' were, the more positive were their perceptions of impacts. In the city of Livingston, Husbands (1989) found that education emerged as the most important variable associated with perceptions of tourism, since it was closely linked to employment in the tourism industry.

Residents in the heritage town of Besalú have shown certain discomfort related to tourism. In December 2013, the municipal government halted tourism-related business permits pending a local participatory process to define future tourism growth. A consultancy firm assessed the situation in the city after collecting the citizens' views through focus groups. The results of the process show strong concern regarding space in the town's streets, visitor information, parking spaces and shops. In an attempt to de-seasonalize tourism, the city already offers several festivals of regional importance during the year. The location of this heritage town might exacerbate tourism impacts, given that it is located close to La Costa Brava. This is a sun and beach area, and a relatively important tourism destination in Spain, with 17,439 overnight stays in 2014 (IDESCAT, 2015).

Residents' attitudes towards tourism in heritage cities can vary according to the type of development undertaken in their city, and whether it is a day-tripper, short-stay or long-stay center (Murphy, 1981). There are two indicators used in this study to show capacity in relation to the development of tourism: the tourism intensity, and the tourist function index Tourism intensity is the visitor to resident ratio. This has been used to reveal pressure from tourism by comparing the coefficient among cities. "It is thus possible to perceive how the different cities bear varying dimensions of visitors impact" (Van Der Borg et al., 1996). The tourism intensity also relates to carrying capacity, as residents' perceptions of tourism are a function of this tourist-resident ratio. As the ratio increases, perceptions tend to become more negative, as does understanding the need to enhance the physical environment (J. Liu et al., 1987). In the case of Besalú, the tourism intensity for the town center is 164 tourists per local inhabitant, whereas it is 40 for the whole town. In a comparison, Van der Borg, Costa & Gotti (1996) found that the city with the highest tourism pressure was Venice, with an intensity of 89 visitors per local, followed by Salzburg, which had 36.

The tourist function index (ratio of tourism beds to residents) explains residents' attitudes to tourism by relating it to the level of tourism development (Vargas et.al.2011).The tourist function index is .001 for Besalú (.001 beds per inhabitant), which is comparatively low. In their study on Florence, Van der Borg, Costa and Gotti (1996) observe that the highest tourist function index was 15 beds per inhabitant in Florence. These indicators suggest that the heritage town of Besalú is closer to a day-tripper destination, as it has a high level of tourism intensity, but comes very low in the tourist function index. The results of these two indicators are used to validate the value of impact perceptions in relation to social carrying capacity. Therefore the first hypothesis is the following:

H1. The willingness to accept more tourism variable will confirm the results of the indicators of tourism function index, and the tourism intensity, suggesting arrival at social capacity levels.

If impact perceptions can serve as an indicator of social carrying capacity, it is expected that positive impact perceptions positively correlate with willingness to accept more tourists. The literature revision does not yield many studies under this hypothesis, since most studies refer to tourism development and not willingness to accept more tourism, or more similar indicators. Regarding tourism development, King, Pizam and Milman (1993) found that there was a correlation between perceptions and the overall opinion regarding tourism. However, feelings about the volume of tourists were not included in this overall opinion, as they did not correlate with the overall opinion of the tourism industry. Anderect & Vogt (2000) found that residents' perceptions of community benefits show a direct and positive link to supporting tourism development. The second hypothesis is as follows:

H2. Residents' impact perceptions relate to willingness to accept more tourism.

Taking a social exchange approach to the residents' relationship with tourism, employment in the tourism industry emerges as an important variable. Many tourism destinations place primary emphasis on employment as a pre-condition for the acceptance of tourism by residents. Attention must be paid to the variables used. Many studies refer to personal

dependence and perceived personal dependence, which are different from employment (the variable used here). Likewise, most studies refer to tourism development, which includes willingness to accept more tourists. Studies referring specifically to employment and increased tourism numbers include Ritchi & Inkari (2006), whose study did not confirm any significant results specifically relating this variable to increased tourism numbers. Also, Harambopoulus and Pizam (1996) found that those who were employed in tourism supported more arrivals and further development. In contrast, Teye, Sirakaya, & Sonmez (2002) considered that the deplorable working conditions of those employed in tourism explained the negative attitude towards it and industries related to it.

In terms of tourism dependence and tourism development, many studies confirm that personal benefits and perceived personal benefits from tourism development are positively related to an attitude which favors additional tourism development(Lankford & Howard, 1994; Perdue et al., 1990; Pizam, 1978; Ryan & Montgomery, 1994; Vargas-Sánchez et al., 2011). The third hypothesis is as follows:

H3. Residents who are employed in the tourism industry, or have close relatives employed there, welcome tourists more than those who are not.

Glasson (1994) studied residents' perceptions in the heritage city of Oxford, and found that perceptions of the advantages of tourism were more favorable for those who worked, or had a family member working in tourism-related jobs. Other studies have also confirmed this hypothesis(Brent & Incari, 2006; Gursoy et al., 2002; Haralambopoulos & Pizam, 1996; Perdue et al., 1990; Williams & Lawson, 2001). Mikko & Incari (2006) found better perceptions of impacts, but only with residents employed in the cultural or creative sector, not in tourism. Again, the distinction is made between employment and personal benefits, or perceived personal benefits. Other studies have focused on the latter. For example, Andereck & Nyaupane (2011) found that employment was the strongest predictor of perceived personal benefit, while personal benefit positively correlated with the perception that tourism can play a more important economic role. Some studies have confirmed that residents who personally benefit from tourism perceive negative impacts less (Getz, 1994). This, however, has not been confirmed in other studies (Brent & Incari, 2006; King et al., 1993; Sheldon, Var, & Var, 1984; Williams & Lawson, 2001). In these studies, there appears to be no difference between the assessment of negative impacts between the two groups. Liu, Sheldon & Var (1987) concluded that since tourism was at the forefront of public discussion and media, general knowledge of the negative impacts had grown.

In the same way that relationship between employment in tourism and a better perception of impacts has been explored, so has the relationship between non-employment and a worse perception. Some studies confirm that residents who are not employed in tourism still have positive impact perceptions of tourism (Haralambopoulos & Pizam, 1996; Ryan & Montgomery, 1994). Ryan and Montgomery (1994) found that there was no relationship between personal benefits from tourism and positive perceptions of tourism impacts in the city of Bakewell, as respondents not employed in the industry still appreciated the economic benefits. Taking a social exchange approach, they suggested that the appreciation of economic benefits by non-dependents was based on perceived intangible economic return. The authors also questioned the rationality principle of social exchange based on self-

interest, since respondents were concerned with impacts on the general public, such as property prices for the younger generation. Finally the fourth hypothesis is described as:

H4. Employment in the tourism industry positively correlates with tourism impact perceptions.

Method and Data Collection

The hypotheses were tested using a questionnaire which was administered in the heritage town of Besalú in Catalonia, Spain (see map 1). Besalú has a population of 2,406 inhabitants and several relatively important national monuments. It has been listed as an ensemble in the national inventory of heritage of Spain since 1966, and also contains several monuments individually listed: the Churches of San Pedro, San Vicente and Santa Maria; Besalú bridge; Besalú castle, and the city walls. Besalú also has one of the most important ensembles of Jewish monumental heritage in Spain, as it was the home to a well-established and relatively powerful Jewish community for almost five centuries. It is part of the network of Jewish heritage sites in Spain, and has a 12th century *micvé* and the remains of a 13th century synagogue. This predominantly Jewish heritage attracted 105,617 visitors to the town in 2015, as recorded by the tourist information office. The first three source countries were France, Russia and Israel.

Map 1. Location of the study site (map of Spain)

To determine the sample size, the universe was the adult population (over 18) of the town centre. The necessary sample size for a finite population of 420 inhabitants with a sampling error of ±5% and confidence level at 95% is 219 individuals. Data collection was carried out between June 2015 and January 2016 through a survey conducted by interviewers in the streets of the town. Since the old centre of Besalú is small, it was possible to distribute the survey in the 14 streets and three squares at different times over a period of eight months. Using a map, the streets where surveys were carried out were rotated to cover all streets each survey day while the days of the week were changed to cover every week day from Monday to Sunday. Respondents were chosen from every four pedestrians. Then, with the aid of a map, they were first asked whether they lived in the town centre of Besalú for more than four months a year. If the answer was affirmative, the interview was conducted; if not, the next pedestrian was approached.

Concerning the sample profile, 47.5% of the sample were women, and 49.3% were men; a distribution similar to that of the town itself, which is made up of 53% women and 47% men (IDESCAT, 2015). The age distribution was as follows: 19-29 years (15.6%); 30-39 years (22.5%), 40-49 years (22%); 50-59 years (20.6%), and 60 or over (19.3%). Regarding length of residence, the highest percentage of respondents had been living in Besalú for more than 20 years (69.3%), while the rest 0-5 years (10.6%), 6-10 years (5%); 11-15 years (7.3%); 16-20 years (7.8%) and 20 years or more (69.3%). Regarding educational level, the highest proportion had primary education (46.3%), followed by university degree (25%) associate degree (17.6%), high school or secondary education (7.4%) and none (3.7%). A total of

76.7 % of respondents did not work in tourism, nor did they have any relatives working in the tourism industry, while 23.3 % did.

Questionnaire and Method

The questionnaire was designed to cover the relevant impacts of tourism. The answers were on a five-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree”(5). The questions in the survey were developed from previous studies using similar instruments (Belisle & Hoy, 1980; Getz, 1994; Glasson, 1994; Glasson et al., 1997). The questionnaire included the employment in tourism variable, and sociodemographic variables (age, gender, education). The respondents were also asked about their willingness to accept a higher number of tourists. Five in-depth interviews were conducted between January and March 2015. Interviewees included residents, business owners, and personnel from the Town Council and Tourist Office in order to focus on relevant local issues.

The first stage in analyzing the data collected in the survey was to create an index of consensus to establish unanimity, or lack thereof, on perceptions of impacts. This was done following the steps developed by Getz (1994): complete consensus in disagreement or agreement is indicated by a value of 1.0. Contingency tables were then drawn up, relating first the independent variables, employment in tourism and socio-demographic variables, to impact perceptions and willingness to accept more tourists. The link between impact perceptions and willingness to accept more tourism were also analyzed, using ANOVA to measure the value of impact perceptions as an indicator of capacity. Chi square tests were performed to study the relationship between the variables in terms of their correlation with impact perceptions and willingness to accept more tourists. These tests revealed the power of "employment in tourism" (SET variable), when compared with the other socio-demographic variables (categorical variables). Chi-square tests were performed to study the relationship between those categorical variables, especially the impact perceptions and the willingness to accept more tourists; and the relationship between employment in tourism (SET) with the other socio-demographic variables. The link between impact perceptions (quantitative variable) and willingness to accept more tourism (categorical variable) were analyzed using analysis of variance (Anova test) to establish the utility of impact perceptions as an indicator of capacity.

RESULTS

Table 2 shows the results of the index of consensus. The statements with greatest consensus disagree on the negative impacts: “there is a higher crime rate because of tourism” and “tourism-related noise makes life in the town less pleasant” (index=.85). The third highest consensus agrees with the statement that shops are for tourists, which a priori, is considered negative for tourism (index=.74). The fourth highest consensus is a tie between two positive statements (that “tourism brings jobs and this is more important than the nuisances it brings” and that “thanks to tourism the cultural heritage is better preserved”). Both statements had an index of .63. The statement in the fifth position is also positive: “tourism brings more money than any other industry” (index=58) The sixth position agrees with a negative statement: “that tourism brings higher prices” (index=.53). The greatest consensus is on negative impacts while consensus on positive impacts is lower. In

general, the results show that residents do perceive both negative and positive impacts, and that there is a general view that tourism is not to blame for negative aspects of life in the town.

Table 2: Consensus Index of Perceptions of Tourism Impacts

Table 3 shows p-values disconfirming the hypothesis that employment in tourism is related to impact perceptions. In contrast, employment in tourism does affect the willingness to accept more tourists, as Table 4 shows. Respondents working in tourism had a greater willingness to accept more tourists, as 33.3% of them wanted more tourists, compared to16.2% of the total number of respondents. 82.9% of those not working in tourism wanted tourist numbers to remain the same, compared to 78.2% of the total number of respondents. 61.5% of respondents employed in tourism wanted tourism numbers to stay the same. This shows a tendency for those not employed to want tourism numbers to stay the same. There is a slight tendency for those not employed to want fewer tourists (5.7%) as opposed to 5.8% of the total sample. This tendency is not observed in residents employed in tourism, since 5.1% wanted fewer, as opposed to 5.8% of the total sample.

Table 3: Results Relating Employment in Tourism to Perceptions of Impacts

The results in Tables 3 and 4 suggest that perceptions of impacts do not correlate with social carrying capacity. Even though the consensus index shows that residents perceive both negative and positive impacts, 83.8% of respondents state that either the number of tourists is good, or that they want fewer tourists. Additionally, the results show that employment in tourism may affect impact perceptions.

Table 4. Contingency Table Relating Employment in Tourism and Willingness to Accept More Tourists

Table 5 shows contingency tables which cross willingness to accept more tourists with gender, education and age. It demonstrates that women are more willing to accept a higher number of tourists than men. It should be noted that women are also more frequently employed in the tourism industry, thus raising the question: which of these two variables helps explain willingness for more tourism better? In terms of education, respondents holding an associate degree are more willing to accept a higher number of tourists. Regarding age, the 50 to 59 age bracket shows a greater tendency to want tourist numbers to remain the same. Those aged between 40 and 49 show a tendency to want more tourists. The 30 to 39 bracket shows a tendency to want fewer tourists, and ages 19 to 29 want tourist numbers to remain the same.

Table 5: Contingency Tables Crossing Willingness to Accept more Tourists with Gender, Education and Age

The results of the Chi-square (X^2) tests are also shown in Table 5. Employment in tourism was most highly associated with willingness to accept more tourists, followed by gender and then age. Education was the least associated variable. These results confirm the high explanatory power of employment in tourism on willingness to accept more tourists

supporting a SET approach. They also validate the influence of socio-demographic variables, mainly gender.

Table 6 shows results of an ANOVA test, which was carried out to relate residents' impact perceptions to their willingness to accept more tourism. Among the impact perceptions, are the claims that tourists get in the way of residents, and that prices are higher in Besalú due to tourism. These are the only two perceptions with p-values <.05, and thus, the only perceptions to demonstrate a relationship with a capacity indicator such as willingness to accept tourism in Besalú.

Table 6: Results Relating Impact Perceptions and Willingness to Accept more Tourism

Impacts of Variables on Perceptions

Analysis of variance relating education to perceptions of tourism impacts are shown in Table 7. 95% of respondents with no education tended to agree that "tourism brings more leisure facilities". This figure was followed by those with a university degree. The other educational levels were closer to uncertainty, except for high school graduates, who were closer to disagreeing. The same result was found regarding the statement "noise resulting from tourism makes life in the town less pleasant": respondents with no education tended to disagree more (95% confidence), followed by respondents with university studies. Also, respondents with no education tended to believe that tourists got in their way. Regarding the statement "prices are higher in Besalú because of tourism" the result was the opposite: respondents with no education had the highest level of agreement (95% confidence). This was followed by those with primary education and respondents holding university degrees.

Table 7. Results Relating Education to Perception of Impacts

Regarding gender results, Table 8 shows significant differences. With a degree of confidence of 95%, gender was related to the perception that prices are higher because of tourism. Men agreed more to this. With a degree of confidence of 90% the statement that "tourism brings money and jobs and this is more important than any nuisance it might bring" generated agreement from men. Regarding the statement that "noise makes life less pleasurable in the town centre", men also disagreed more.

Table 8. Results relating Gender to Perception of Impacts

5. CONCLUSIONS & DISCUSSION

The main hypothesis in this paper is that, by applying Shelby and Haberlein's (1986) rule, an analysis of the variable of willingness to accept more tourism confirms an approximation to the limits of capacity, as is revealed by the other two indicators (tourism intensity and the tourist function index). Applying the rule, hypothesis 1 is confirmed. 5.7 % of the respondents stated that they wanted fewer tourists; and 82.9% stated that the current level is "good". The total of these two categories (an overwhelming 88.6%), somehow disagree with an increase in numbers, which suggests that they do sense overcrowding, and that an

increase in tourism could be negative for them. Even though the highest percentage of respondents do not want more tourists, this has not yet led to a general, negative perception of tourism impacts, as the consensus index shows. In terms of the economy, there is a strong appreciation of both positive and negative impacts. Impacts on conservation are also strongly appreciated, while there is uncertainty about other impacts. If more tourists were to come, it is not clear whether the residents would have a worse perception of tourism impacts, since some research suggests that residents find ways to accommodate and cope with the negative impacts (Getz, 1994; Rothman, 1978). Also, there is disagreement that crowding is a strictly negative experience (Choi et al., 1976). A lack of willingness to accept more tourism does not necessarily correspond with negative perceptions of tourism impacts. This result raises questions about the usefulness of perceptions of impacts as an indicator of capacity, as there is a split between perceptions of impacts and willingness to accept more tourism. Taking a social exchange perspective, it can be said that residents in the study area perceive certain benefits and costs, mainly the economic and conservation ones, while other benefits and costs are perceived in an uncertain manner. SET is about willingness to enter into exchange relations with tourists (Ap, 1992; Jurowski et al., 1997). It can be said that this willingness is present in the resident community of Besalú, but there is little willingness to take the exchange a step further. Therefore, the conditions affecting willingness need to be explored. The results of this study focus on the socio-demographic variables that could affect willingness, but there are other objective variables that can affect it, such as the type of tourism and traveller. As stated in the literature review, limits of carrying capacity not only refer to numbers, but also to other tourism conditions such as tourist type (Martin, 1994).

The economic aspects generated greater consensus: residents held a clearer and more unanimous position regarding these statements than others. This finding aligns with that of Brent & Mikko (2006) and Vargas Sánchez et.al. (2011) in that economic benefits are perceived more than any other benefits. Belisle and Hoy (1980) also found that respondents in Santa Marta perceived that tourism created employment. Other statements with high levels of consensus disagree with negative impacts. This finding was also confirmed in Hawaii, Istanbul and North Wales where “respondents tend not to blame tourism for adverse social and environmental impacts” (Liu et al., 1987). Apart from the economic impacts, the positive impact of tourism on heritage preservation also generated a high level of consensus. It is worth mentioning that the statement “tourism makes the town more interesting and attractive” generated a low level of consensus. In contrast, in Santa Marta, close to 50% of respondents in Belisle & Hoy’s study (1980) agreed that tourism gave them the opportunity to live, speak and think differently. The statements are not identical, but they both explore how residents see the cultural opportunities that tourism can bring. The difference could be place specific, however, as Colombians might be more open to interacting with tourists than Catalans.

The second hypothesis, that impact perceptions relate to willingness to accept tourism, was confirmed regarding only two perceptions: that tourists get in the way of residents and that prices are higher due to tourism. The first perception is related to lack of space in areas shared with tourists, and is a characteristic impact of tourism in heritage town centers. It is also worth noting that it emerges as one of the perceptions associated with a capacity

indicator. Residents who want more tourism tend to agree less on this being an impact, while residents who want less tourism tend to agree it is an impact.

The third hypothesis is that residents who are employed in the tourism industry, or have close relatives employed there, are more willing to accept more tourists than those who are not. This hypothesis was confirmed following the findings of other studies where support for additional tourism development was positively related to personal benefits (Getz, 1994; Long, Perdue, & Allen, 1990). Respondents who are not employed in tourism showed less willingness to accept more tourists. Overall, these findings would suggest that "residents weigh the benefits and costs through some informal cost-benefit analysis similar to that proposed by social exchange theory" (Ritchie & Inkari, 2006:38). However, there are also intangible returns and wider social benefits, as opposed to individual ones, which may override inexistent individual benefits in the case of residents who are not employed in tourism (Ryan & Montgomery, 1994). If these wider social benefits are taken as a potential explanation for willingness to accept tourism, we would need to focus on how these extended social benefits lead to a lower willingness to accept more tourists. Social exchange theory may serve as a theoretical framework to explain the results. While the tourism dependent population is prepared to endure costs in order to maximize benefits, the non-tourism dependent population will try to keep the carrying capacity at a level that does not compel it to bear unwanted costs (Canestrelli & Costa, 1991). The results of this study suggest a combination of self-interests and community interests as the rationale for resident's perceptions, for example, better leisure facilities or heritage conservation. The results also suggest that wider social interests are not enough to make respondents willing to endure costs. Indeed, the statements in the questionnaire all focused on community benefits, thus indicating that residents do perceive these general benefits.

The fourth hypothesis states that residents who are employed in the industry, or have close relatives employed there, perceive the positive impacts of tourism more and the negative impacts less than those who are not. This was not confirmed following the findings of Liu, Sheldon & Var (1987) in Hawaii, Istanbul and North Wales and also those of Ryan & Montgomery (1994) in the heritage city of Bakewell. Residents who work in tourism also perceive some of the negative impacts of tourism such as higher prices, that shops are for tourists and that tourists get in the way of residents. Those who do not work in tourism also perceive some positive impacts such as jobs and money, facilities, that tourists learn heritage preservation and that the city is more interesting and attractive because of tourism. Since employment in tourism is a variable that fits with SET, these results indicate that impact perceptions might escape the exchange context. An explanation can be the prevailing knowledge in Catalan society of tourism and its impacts (Liu, Sheldon & Var, 1986). However, education, another variable that also fits into a social exchange approach, did show meaningful impacts on perceptions. The results of this study show that respondents with both the highest and the lowest educational levels had a better perception of some tourism impacts, for instance, noise and leisure facilities. Respondents with no education, on the other hand, had the worst perception of high prices related to tourism. This result could support both interpretations of the relation between power (operationalized partly through education) and impact perceptions emerging from the literature review (Ap, 1992; Kayat, 2002). Respondents with no education might feel more

tourism dependent, while those who have a university education feel that education gives them the power to reap greater benefits from the industry.

Regarding the impact of sociodemographic variables on impact perception, the results of our study confirm the link between gender and willingness to accept more tourists. Taking a place specific perspective, women in the Lewes District (UK) were more supportive of an increase in tourism numbers than men (Brent & Incari, 2006). However, two studies in small towns in New Zealand found that women did not support an increase in tourism (Mason & Cheyne, 2000; Williams & Lawson, 2001). In their study, Cheyne & Mason (2000) suggested that this difference might be due to different worldviews which are strongly culturally oriented. The results in Besalú confirm that, more than gender, employment in tourism is linked to a willingness to accept a higher number of tourists. This result supports a SET approach to willingness to accept more tourists. Gender, however, emerges as the second variable, and has the most significant link to willingness to accept more tourists, thus confirming the findings in the Lewes district. Harvey et. al (1995) found similar results in rural towns in the US: although women perceived some tourism impacts differently, they were perceived in the same way overall. This study, however, had no questions regarding a willingness to accept more tourism. The conclusions questioned why women, regardless of being employed in tourism more than men, perceive tourism impacts in a very similar way to men. The authors ask: "Is there a problem with the survey questions - are they too global and general to differentiate more subtle gender-based differences in response to tourism development?" (Harvey, et. al 1995: 363). Perhaps they failed to uncover any difference because the focus was on impact perceptions alone. The findings in our study indicate that when questions on willingness to accept more tourism are posed, differences between genders emerge. Some studies show that job opportunities in tourism has led to greater independence and social opportunities for women (Harvey, Hunt, & Harris, 1995; Reynoso y Valle & DeRegt, 1979).

In order to further the growth and development of tourism in Besalú, tourism managers could benefit from a deeper understanding of residents' perceptions of tourism. SET still holds an explanatory value, thus tourism can be understood as an exchange relationship, even though impact perceptions, per se, may not be a valid indicator of the circumstances of the exchange. The conditions affecting the willingness of residents to enter into, and remain in this relationship, could be a criterion for choosing future development options for tourism; however, a more detailed understanding is needed. For example, the involvement of women and men in tourism could be guided by a gender based understanding of the issues making tourism more authentic, as this would lead to a more personalized experience for both residents and tourists.

Future studies

Three future lines of research emerge from the results of this study. The first refers to social carrying capacity in heritage towns and cities. This study has identified the impact of tourism on availability of space as a perception that links with other another indicator of capacity (willingness to accept more tourists). Additionally, the perception of positive impacts on heritage conservation generated a relatively high consensus. Future studies could focus on the importance of heritage conservation, in residents' assessment of the

tourism exchange. While a specific methodology for the assessment of carrying capacity in coastal areas is well under way (Navarro et al., 2012), the body of knowledge related to carrying capacity in heritage cities is much less developed. This methodology could be further developed to incorporate the findings of this study which relate to heritage conservation and space. A second impulse for future work could take a gender-based perspective of social carrying capacity. We have seen that gender is linked to a willingness to accept more tourists, and that studies in New Zealand show that women support tourism development less than men, whereas studies in Besalú and the UK show that women support tourism more than men. A comparative study of local cultural elements that might influence perceptions of tourism by gender could be carried out, and as Cheyne and Mason (2000) suggested, "different world views" might explain why women have different perceptions of future tourism development. A third future line of research relates to employment in the tourist industry. Regardless of their perceptions of the general benefits tourism brings, residents not employed in tourism were less willing to accept an increase in tourism. This suggests that the influence of personal benefits on people's willingness to accept tourism is greater than the influence of extended social benefits.

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Author	Year	Social Exchange or Carrying Capacity?/Destination Type
Boley, et al.	2014	Social Exchange, 3 counties, Virginia, USA
Bimonte & Faralla	2012	None/Follonica, Italy (coastal town)
Nunkoo & Gursoy	2012	Social Exchange Theory, Mauritius Island
Vargas et al.	2011	Social Exchange Theory, Carrying Capacity/Regional (Spain)
Brent & Inkari	2006	Social Exchange theory/Region Louise District (UK)
Williams & Lawson	2001	None/Ten Towns (New Zealand)
Mason & Cheyne	2000	None/Rural (New Zealand)
Bachleitner & Zins	1999	None/Region of Styria (Austria)
Smith & Krannich	1998	Social Exchange Theory/ Rural Communities Rocky Mountains (USA)
Haralambopolous & Pizam	1996	Carrying Capacity/Samos beach, Greece
Van der Borg, Costa & Gotti	1996	Carrying Capacity/Heritage Cities: Rhodes, Cambridge, and Vis
Harvey et al	1995	None/Rural USA
Glasson	1994	Carrying Capacity/Heritage City Oxford
Lankford & Howard	1994	Rural USA
Ryan & Montgomery	1994	Social Exchange/Heritage city of Bakewell
Getz	1994	Social exchange theory/ Rural Scotland
Johnson & Snepenger	1994	Carrying capacity/Rural U.S.A.
King, Pizam & Milman	1993	None/Small City, Fiji
Madrigal	1993	Social Exchange/Rural cities, Arizona (U.S.A.)
Canestrelli & Costa	1991	Carrying Capacity/Heritage City (Venice)
Perdue, Long & Allen	1990	Social Exchange Theory/5 Rural Communities, Colorado, U.S.A.
Husbands	1989	None/Livingston city (Zambia)
Liu, Sheldon & Var	1987	Carrying Capacity/ Three destinations: Wales, Hawaii and Istanbul
Sheldon & Var	1984	None/Regional, North Wales
Brougham & Butler	1981	None/Peninsula of Sleat, Scotland (U.K)
Belisle & Hoy	1980	None/Colonial Heritage City of Santa Martha, Columbia

Items	*Positive/Negative*	*Index*
Because of tourism there is more crime in the town centre	-	.85
Tourism related noise makes life in the town less pleasant	-	.74
Shops in the town are for tourists	-	.64
Tourism brings money and jobs, and that is more important than any inconvenience it might bring	+	.63
Because of tourism, heritage here is better cared for	+	.63
Tourism brings more money to Besalú than any other industry	+	.58
Prices are higher in Besalú because of tourism	-	.53
Tourists really learn and get to know the heritage of Besalú	+	.45
The fact that tourists from different nationalities come to Besalú makes it more interesting and attractive	+	.41
We have more leisure facilities because of tourism	+	.31
Tourists get in the way of residents in the town	-	.22
Tourists litter Besalú	-	.12

i= Index value out of 1.00

Item	Tourism Dependent	Tourism no dependent	p
Tourism brings more money than any other industry	3.81	3.82	
Tourism brings money and jobs; this is more important than any inconvenience it might bring	3.80	3.91	
Small shops are for tourists	2.17	2.07	
Prices are high because of tourism	2.90	2.61	
Tourists litter Besalú	3.71	3.79	
Tourists get in our way in the town	3.02	2.97	
Thanks to tourism we have more leisure facilities	3.59	3.36	
Tourists really learn about the town when the visit us	3.55	3.67	
Thanks to tourism our heritage is better cared for	4.17	4.01	
Because of tourism there is more crime	4.87	4.77	
Because of tourism the town is more interesting	3.56	3.68	
Tourism-related noise makes life in the town less pleasant	3.98	4.21	

	Number of tourists				X^2	V Cramer	p-value
	More	Current number is good	Fewer	Total			
Non-Tourism Dependent	11.4%	82.9%	5.7%	100%	10.825	.246	.004
Tourism Dependent	33.3%	61.5%	5.1%	100%			
	16.2%	78.2%	5.6%	100%			

	Number of Tourists				X^2	V Cramer	p-value
	More	Current # is good	Fewer	Total			
Women	21.2%	76.5%	2.4%	100%	6.062	.187	.048
Men	11.2%	79.8%	9.0%	100%			
Total	16.1%	78.2%	5.7%	100%			
Primary school	15.7%	77.5%	6.7%	100%	.314	0.030	.989
High School and Associate Degree	16.7%	78.6%	4.8%	100%			
University Degree	17.1%	78.0%	4.9%	100%			
Total	15.8%	78.5%	5.6%	100%			
19-29 years old	16.7%	3.3%	80.0%	100%	13.484	.194	.096
30-39 years old	10.5%	15.8%	73.7%	100%			
40-49 years old	24.4%	0%	75.6%	100%			
50-59 years old	11.4%	2.9%	85.7%	100%			
60 and more	17.1%	5.7%	77.1%	100%			
Total	16.2%	5.6%	78.2%	100%			

Item	More tourism	Current # is good	Fewer tourism	p-value
Tourism brings more money than any other industry	3.79	3.82	4.00	.809
Tourism brings money and jobs; this is more important than any inconvenience it might bring	3.89	3.99	3.56	.368
Small shops are for tourists	2.24	1.99	2.00	.390
Prices are high because of tourism	3.15	2.26	2.33	.004
Tourists litter Besalú	3.30	3.16	3.13	.848
Tourists get in our way in the town	3.35	2.44	2.40	.001
Thanks to tourism we have more leisure facilities	3.57	3.32	3.05	.512
Tourists really learn about the town when the visit us	3.72	3.71	3.38	.529
Thanks to tourism our heritage is better cared for	4.19	4.05	3.33	.093
Because of tourism there is more crime	4.65	4.64	4.71	.942
Because of tourism the town is more interesting	3.73	3.60	3.30	.504
Tourism-related noise makes life in the town less pleasant	3.90	4.19	4.50	.136

	Primary School	High School	Associate Degree	University Degree	No Formal education	p-value
Tourism brings more money than any other industry	3.82	3.92	3.53	3.94	4.00	.285
Tourism brings money and jobs and this is more important than any inconvenience it may cause	3.91	4.00	3.59	4.02	3.88	.303
Small shops here are for tourists	1.99	2.06	2.16	2.02	1.50	.471
Prices are higher here due to tourism	2.27	2.54	3.00	2.42	1.14	.002
Tourists litter Besalú	3.21	3.31	3.20	3.17	2.40	.617
Tourists get in my way	2.62	2.31	2.87	2.59	1.29	.024
Tourism brings more leisure facilities	3.49	2.57	3.32	3.59	3.67	.033
Tourists really learn about Besalú when they come here	3.66	3.62	3.54	3.64	3.83	.943
Thanks to tourism heritage is better preserved	4.04	4.27	3.91	4.12	4.00	.748
Because of tourism there is more crime here	4.64	4.64	4.53	4.62	4.71	.863
Tourism makes this town more interesting and diverse	3.58	3.62	3.83	3.68	3.25	.582
Tourism related noise makes life in the town less pleasurable	4.20	3.87	3.81	4.25	4.75	.022

	Male	Female	p-value
Tourism brings more money than any other industry	3.86	3.74	.340
Tourism brings money and Jobs and this is more important than any nuisance it may cause	3.97	3.74	.079
Small shops here are for tourists	1.91	2.13	.327
Prices are higher here due to tourism	2.18	2.65	.008
Tourists litter Besalú	3.25	3.12	.425
Tourists get in my way	2.54	2.64	.600
Tourism brings more leisurely facilities	3.50	3.35	.355
Tourists really learn about Besalú when they come here	3.69	3.65	.744
Thanks to tourism heritage is better preserved	4.08	4.01	.606
Because of tourism there is more crime here	4.62	4.60	.773
Tourism makes this town more interesting and diverse	3.61	3.68	.634
Tourism related noise makes life in the town less pleasurable	4.23	4.02	.093

Map 1. Location of the study site (map of Spain)