

**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,

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3 Narangajavana, & Marqués, 2004). Accordingly, studies have emerged which focus on 1)
4 environmental and biophysical carrying capacity (R. Z. Liu & Borthwick, 2011; Simón et al.,
5 2004; Zacarias, Williams, & Newton, 2011); 2) economic carrying capacity (Sowman, 1987)
6 and 3) social carrying capacity (Graefe & Vaske, 1987; Navarro et al., 2012). The
7 interconnectedness between these dimensions has been consistently acknowledged in
8 literature as well as their relevance to any comprehensive assessment of capacity (Navarro
9 et al., 2012; Simón et al., 2004). However, the focus of this study is specifically to gain depth
10 in social carrying capacity in a heritage town and the value of residents' impact perception
11 in its assessment.
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14 Regardless of its definition, social carrying capacity is generally framed as making some type
15 of reference to residents' impact perceptions. D'Amore (1983) and Madrigal (1993) define
16 it as the level above which there is an imbalance between the rewards and benefits of
17 tourism for residents. Navarro (2012) uses the term "resident social carrying capacity" (as
18 opposed to "tourist social carrying capacity"), and measures the former through residents'
19 perceptions. Even studies that take a broader perspective of social carrying capacity use
20 resident impact perceptions in their assessment. Glasson (1994: 144), for example, defines
21 capacity as "the number of visitors an art city can absorb without hindrance of the other
22 social and economic urban functions it performs." The study includes residents' impact
23 perceptions in the assessment. On the other hand, many residents' impacts perceptions
24 studies make reference to social carrying capacity as a theoretical basis (Glasson, 1994;
25 Haralambopoulos & Pizam, 1996; Johnson, Snepenger, & Akis, 1994; J. Liu, Sheldon, & Var,
26 1987; Vargas-Sánchez, Porrás-Bueno, & Plaza-Mejía, 2011). These studies point out that
27 negative results indicate a movement towards capacity levels (Vargas-Sánchez et al., 2011).
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31 The aim of this article is to study residents' impact perceptions as an indicator of social
32 carrying capacity. In order to assess its effectiveness, the tourist function index, tourism
33 pressure and willingness to accept more tourism are valued. These three indicators have
34 been used in previous studies to assess social carrying (J. Liu et al., 1987; Shelby &
35 Haberlein, 1986). In this study, these indicators provide an important basis for the study of
36 residents' impact perceptions in relation to capacity.
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39 This study follows on from previous studies indicating that residents' perceptions are far
40 from homogeneous, and that perceptions of tourism impacts change between segments of
41 the population as they are influenced by many variables (K. L. Andereck & Vogt, 2000;
42 Jurowski, Uysal, & Williams, 1997; Mason & Cheyne, 2000; Nunkoo & Ramkissoon, 2012).
43 Therefore, a secondary aim is to study the impacts of different variables on residents'
44 perceptions as an indicator of social carrying capacity. The sociodemographic variables
45 examined are gender, education, and age. Taking a social exchange theory (SET) approach,
46 four hypotheses are evaluated. The first hypothesis states that the variable willingness to
47 accept more tourism will have values that indicate a movement towards capacity levels in
48 the study area. The second hypothesis states that impact perceptions are linked to
49 willingness to accept more tourism. The third hypothesis stems from a SET approach stating
50 that residents who are employed in the tourism industry, or have close relatives employed
51 there, welcome tourists more than those who are not. The fourth hypothesis is that
52 employment in the tourism industry positively correlates with tourism impact perceptions.
53 The first and second hypotheses are focused on assessing the social carrying capacity of the
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3 study, and use indicators established in literature, and also assess whether they correlate
4 with each other. The other two hypotheses focus on the importance of employment in
5 tourism related to social carrying capacity. These hypotheses are supported by relevant
6 literature and theory.
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9 The implications of this study are significant as they enhance the understanding of capacity
10 in small heritage towns. Even though they share common themes with other types of
11 destination, “the impact of tourism on heritage cities is “inherently place specific”
12 (Simpson, 1999: 173). Since spatial constraints are a key issue in carrying capacity the
13 characteristics of the study area are very relevant. Carrying capacity originated in studies of
14 open outdoor natural spaces (R. Z. Liu & Borthwick, 2011; Simón et al., 2004; Zacarias et al.,
15 2011). In contrast fortified colonial cities, European historic centers or Muslim medinas,
16 tend to have narrow streets and are surrounded in many cases by ports, walls or rivers, a
17 layout that is somewhat enclosed. Few studies have applied a method to determine carrying
18 capacity to tourism spaces with dominant historic and heritage attractions (Garcia, De la
19 Calle Vaquero, & Minguez Garcia, 2011). Four such studies have been identified. Glasson et.
20 Al. (1997) studied twenty European cities under a carrying capacity perspective and made
21 management recommendations. The study of Glasson (1994) in the city of Oxford explored
22 visitors’ and residents’ perceptions on tourism impacts in the city of Oxford, and assessed
23 capacity. Canestrelli & Costa (1991) also determined the carrying capacity of the city of
24 Venice using a mathematical linear programming technique. The same technique was used
25 with success in the cities of Rhodes, Cambridge and Vis (Van Der Borg, Costa, & Gotti, 1996).
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29 CARRYING CAPACITY AND RESIDENTS’ PERCEPTIONS 30

31 According to UNWTO, carrying capacity is “the maximum number of people that may visit a
32 tourist destination at the same time without causing destruction of the physical, economic
33 or socio-cultural environment and an unacceptable decrease in tourist satisfaction”
34 (1997:5). It is, thus, a turning point when tourism is no longer healthy for any given
35 stakeholder. In the 60’s, carrying capacity was used as a theoretical approach to centre
36 discussion on the negative impacts of tourism. This approach, however, was to be replaced
37 by sustainable tourism as a theoretical tool (Saarinen, 2006). Some authors wonder whether
38 this really is a replacement, as both ideas are very similar (Butler, 1999; Saarinen, 2006).
39 Both theories are based on a threshold of tourism growth.
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43 The literature in the field outlines that there are various conceptual bases for carrying
44 capacity, these are social, economic and ecological (Simón et al., 2004). These bases are
45 studied separately, or integrated in comprehensive frameworks to assess carrying capacity
46 in general (Navarro et al., 2012; Papageorgiou & Brotherton, 1999; Shelby & Haberlein,
47 1986). Navarro et. al. (2012), for example, studied social carrying capacity together with 23
48 additional indicators in a methodology to assess carrying capacity. In carrying capacity
49 studies, the perspective of the local community is generally measured through resident
50 attitudes (under the name of perceptions, attitudes or opinions), or through a direct
51 observation of their behavior in relation to tourism impacts. Thus, residents’ perceptions of
52 impacts are taken as an important indicator of social carrying capacity. Local attitudes and
53 the resulting levels of hospitality towards visitors have been identified as a factor shaping
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3 the attractiveness of a destination, and negative attitudes could constitute a key threshold
4 in determining the capacity of an area to absorb tourism (Getz, 1994).
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6 Although carrying capacity is recognized as a useful approach to manage tourism growth, it
7 has been challenged, and its applications somewhat modified. Some authors have stated
8 that focusing on tourism numbers may be misleading, since no specific impacts can be
9 associated with a particular number of tourists (Glasson et al., 1997; Manning, Wang,
10 Valliere, Lawson, & Newman, 2002; Martin, 1994). Numbers are much less important than
11 other factors associated with the visit, such as timing, location, type of use, and visitor
12 behavior (Lindberg, McCool, & Stankey, 1997). In response to this, alternative models have
13 been proposed, for instance, the Limits of Acceptable Change Model (LAC) (Martin, 1994). In
14 the LAC model, the intentions are as follows: to assess the likely impact of an activity on the
15 destination; to agree in advance the degree of change that will be tolerated; to monitor the
16 industry on a regular and systematic basis; and to decide what actions will be taken if these
17 'quality standards' are exceeded (Glasson, et.al, 1997:56). This shift, from visitor numbers to
18 impacts, has its correlate in empirical research, since most studies use questionnaires
19 phrased in terms of the impacts of tourism, instead of, or in addition to tourism numbers (K.
20 L. Andereck & Vogt, 2000; Kathleen L. Andereck & Nyaupane, 2011; Boley, McGehee,
21 Perdue, & Long, 2014; Glasson, 1994; Gursoy, Jurovski, & Uysal, 2002). Notwithstanding
22 these challenges, carrying capacity continues to be used as a tool in understanding the
23 impacts of tourism in a destination.
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28 A key perception studied in carrying capacity is the perception of crowding. Even though
29 some authors link crowding to a negative state of mind, early works disagree that crowding
30 is necessarily a negative state of experience (Choi, Mirjafari, & Weaver, 1976; Hall, 1994).
31 The cognitive perception of crowding is a necessary, but not a sufficient condition for the
32 person to want to leave the place (Neuts & Nijkamp, 2012). Thus, the perception of
33 crowding may be thought of as an attitude in which a perception of an excessive use level of
34 tourism which may (or may not) lead to a negative state, and a change in behaviour. In their
35 seminal work, Shelby and Haberlein (1986) used crowding perception to determine carrying
36 capacity. Their rule is: "if more than two-thirds of the visitors say that they are crowded it is
37 likely that the capacity has been exceeded. If less than one-third senses the overcrowding,
38 the area is probably below the load capacity" (Shelby and Haberlein, 1986:62). Their study,
39 however, focused on the perceptions of tourists, not residents. In 2013, Shelby &
40 Haberlein's rule was used in another study of tourists' perceptions by Navarro et. al. who
41 assessed carrying capacity in La Costa del Sol (Navarro, Damian, & Fernández-Morales,
42 2013). While more recent articles have used the rule and propose it as a viable method
43 (Navarro et al., 2012, 2013; Vaske & Shelby, 2008), the study areas are natural areas and the
44 type of tourism is nature-based. One study applying the rule set out by Shelby and Haberlein
45 (1986) was found regarding residents in a heritage city context. Glasson (1994) used this to
46 study residents' perceptions in the city of Oxford, England. The study concluded that "there
47 is some evidence to suggest that tourism in Oxford may be near its capacity: 56% of the
48 respondents felt that the number of tourists was too high, 41% about right, and almost no
49 one felt it was too low" (Glasson, 1994:141).
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54 *Social Carrying Capacity and its Relationship with Social Exchange Theory (SET)*
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3 Various theoretical frameworks have been used to study residents' perceptions of tourism
4 impacts. This study draws from both carrying capacity and SET. A combination of multiple
5 theories and approaches is common in tourism studies, as they are not considered mutually
6 exclusive, but rather, complementary in giving insight into the variety of factors that affect
7 resident's attitudes towards tourism (Hernandez, Cohen, & Garcia, 1996; Vargas-Sánchez et
8 al., 2011).
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11 Studies of residents' attitudes to tourism have most often employed SET as their theoretical
12 framework (K. L. Andereck & Vogt, 2000). More than simply a theoretical framework, SET is
13 a "frame of reference that takes the movement of valued things (resources) through social
14 process as its focus" (Emerson, 1976:359). Therefore, exchanges should be understood as a
15 longitudinal process over time, where the unit of analysis is not the individuals, but the
16 relationships. For example, "instead of speaking of the power of persons we speak of the
17 power-dependence relations" (Emerson, 1976). Although SET draws much from economics,
18 it is much broader. Social exchange theorists are fundamentally concerned with the
19 implications of the exchange for the sociability of the group and the relations of trust,
20 cooperation and obligation that emerge (Uehara, 1990). In the field of tourism, SET suggests
21 that expressed support for tourism development is considered as a willingness to enter into
22 an exchange (Ap, 1992; Jurowski et al., 1997). People select exchanges after assessing the
23 benefits and costs (Homans, 1961). Consequently, individuals who evaluate the exchange as
24 beneficial perceive the same impact differently to someone who evaluates the exchange as
25 harmful (Abdollahzadeh & Sharifzadeh, 2012). Many studies do not explicitly refer to SET
26 but use a cost-benefit approach to residents and tourism (Canestrelli & Costa, 1991; King,
27 Pizam, & Milman, 1993). There is a concern whether the environmental and social costs of
28 tourism development outweigh economic benefits (Krippendorf, 1982; J. Liu et al., 1987).
29 The point where there is an imbalance between the rewards and costs indicate an approach
30 to social carrying capacity limits.
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34 35 *Review of Residents' Attitudes and Tourism Impacts*

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37 Residents' perceptions of tourism impacts are heterogeneous. The aim of studies on
38 resident attitudes is, generally speaking, to explore the relationship between independent
39 variables and perceptions. Table 1 shows a list of articles on residents' perceptions of
40 tourism impacts, indicating which of them take a SET or a carrying capacity approach.
41 Table1. Residents' Tourism Impacts Perceptions Studies
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44 Regarding the relation between gender and impact perception, the study by Harvey et al.
45 (1995) compared three rural communities in the United States, with high, moderate and low
46 dependence on tourism. The aim was to analyze the relationship between gender and
47 perceived impacts. Factor analysis showed no differences by gender, while individual
48 analysis showed few differences. Women felt that tourism had a negative impact on
49 recreational opportunities, but at the same time it also increased the options for recreation.
50 They also felt that the community could live without tourism and they felt worse about non-
51 residents developing tourism businesses. The authors concluded that overall the results
52 suggested that women and men perceived tourism in much the same way. Ritchie & Inkari
53 (2006) found that there were few significant differences in impact perception according to
54 gender, but in the Lewes District (UK), men were less supportive of increasing tourism than
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3 women. William & Lawson (2001) found that in small towns in New Zealand, females had
4 more negative attitudes towards tourism than men. Also in New Zealand, Cheyne &
5 Mayson, (2000) found that perceptions were partly gender based. Women tended to
6 oppose the establishment of a café/bar more than men, and were more concerned about
7 drinking and road safety. In this study, “it appeared that women were generally more
8 opposed than men to the development on the grounds of perceived negative impacts.”
9 (Cheyne & Mason, 2000:408). The authors suggested that differences in perception could be
10 linked to both genders having different worldviews. In the historic city of Santa Martha,
11 Belisle and Hoy (1980) found more concern among women regarding the “exposure to
12 cultural differences” that tourism brings.
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15 Several studies have focused on how age affects perceptions of tourism impacts. Williams
16 and Lawson (2001) found that people who agreed with pro-tourism statements were
17 wealthy, married, working and middle-aged. According to Husbands (1989), links were
18 established between age and perceptions of tourism in Zambia in 1989, and several other
19 studies found a relationship between age and perceptions of tourism impacts (Brougham &
20 Butler, 1981; Perdue, Long, & Allen, 1990; Smith & Krannich, 1998). Ritchie & Inkari (2006)
21 found some differences in attitude that could be linked to age, even though other variables,
22 such as income showed a greater significance King. Pizam & Milman (1993) found that
23 residents in the age group 51 to 61 had a more positive opinion of tourism than those in the
24 age group 20 to 39. In their analysis, they linked this to the fact that the study area, the
25 island of Samos, is a mass tourism destination. In historic cities, Ryan & Montgomery (1994)
26 and Belisle & Hoy (1980) revealed no significant difference stemming from age. Davis et al.
27 (1988) also revealed no difference related to age.
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31 Regarding education, Kayat (2002) operationalized power through education to explore the
32 its influence on perceptions of impacts. The assumption was that perceptions of power can
33 generate positive perceptions of tourism impacts for two reasons: respondents either feel
34 disempowered, and therefore support tourism because they feel weak and dependent on it;
35 or, to the contrary, they feel empowered by tourism and, thus, can reap the benefits of it.
36 Haralambopoulous and Pizam (1996) also studied the relationship between educational
37 level and perception in Samos, Greece. They found that the higher educated residents’
38 were, the more positive were their perceptions of impacts. In the city of Livingston,
39 Husbands (1989) found that education emerged as the most important variable associated
40 with perceptions of tourism, since it was closely linked to employment in the tourism
41 industry.
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45 Residents in the heritage town of Besalú have shown certain discomfort related to tourism.
46 In December 2013, the municipal government halted tourism-related business permits
47 pending a local participatory process to define future tourism growth. A consultancy firm
48 assessed the situation in the city after collecting the citizens’ views through focus groups.
49 The results of the process show strong concern regarding space in the town’s streets, visitor
50 information, parking spaces and shops. In an attempt to de-seasonalize tourism, the city
51 already offers several festivals of regional importance during the year. The location of this
52 heritage town might exacerbate tourism impacts, given that it is located close to La Costa
53 Brava. This is a sun and beach area, and a relatively important tourism destination in Spain,
54 with 17,439 overnight stays in 2014 (IDESCAT, 2015).
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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

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3 dependence and perceived personal dependence, which are different from employment
4 (the variable used here). Likewise, most studies refer to tourism development, which
5 includes willingness to accept more tourists. Studies referring specifically to employment
6 and increased tourism numbers include Ritchi & Inkari (2006), whose study did not confirm
7 any significant results specifically relating this variable to increased tourism numbers. Also,
8 Harambopoulos and Pizam (1996) found that those who were employed in tourism
9 supported more arrivals and further development. In contrast, Teye, Sirakaya, & Sonmez
10 (2002) considered that the deplorable working conditions of those employed in tourism
11 explained the negative attitude towards it and industries related to it.
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14 In terms of tourism dependence and tourism development, many studies confirm that
15 personal benefits and perceived personal benefits from tourism development are positively
16 related to an attitude which favors additional tourism development (Lankford & Howard,
17 1994; Perdue et al., 1990; Pizam, 1978; Ryan & Montgomery, 1994; Vargas-Sánchez et al.,
18 2011). The third hypothesis is as follows:
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21 **H3.** Residents who are employed in the tourism industry, or have close relatives employed
22 there, welcome tourists more than those who are not.
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24 Glasson (1994) studied residents' perceptions in the heritage city of Oxford, and found that
25 perceptions of the advantages of tourism were more favorable for those who worked, or
26 had a family member working in tourism-related jobs. Other studies have also confirmed
27 this hypothesis (Brent & Incari, 2006; Gursoy et al., 2002; Haralambopoulos & Pizam, 1996;
28 Perdue et al., 1990; Williams & Lawson, 2001). Mikko & Incari (2006) found better
29 perceptions of impacts, but only with residents employed in the cultural or creative sector,
30 not in tourism. Again, the distinction is made between employment and personal benefits,
31 or perceived personal benefits. Other studies have focused on the latter. For example,
32 Andereck & Nyaupane (2011) found that employment was the strongest predictor of
33 perceived personal benefit, while personal benefit positively correlated with the perception
34 that tourism can play a more important economic role. Some studies have confirmed that
35 residents who personally benefit from tourism perceive negative impacts less (Getz, 1994).
36 This, however, has not been confirmed in other studies (Brent & Incari, 2006; King et al.,
37 1993; Sheldon, Var, & Var, 1984; Williams & Lawson, 2001). In these studies, there appears
38 to be no difference between the assessment of negative impacts between the two groups.
39 Liu, Sheldon & Var (1987) concluded that since tourism was at the forefront of public
40 discussion and media, general knowledge of the negative impacts had grown.
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45 In the same way that relationship between employment in tourism and a better perception
46 of impacts has been explored, so has the relationship between non-employment and a
47 worse perception. Some studies confirm that residents who are not employed in tourism
48 still have positive impact perceptions of tourism (Haralambopoulos & Pizam, 1996; Ryan &
49 Montgomery, 1994). Ryan and Montgomery (1994) found that there was no relationship
50 between personal benefits from tourism and positive perceptions of tourism impacts in the
51 city of Bakewell, as respondents not employed in the industry still appreciated the economic
52 benefits. Taking a social exchange approach, they suggested that the appreciation of
53 economic benefits by non-dependents was based on perceived intangible economic return.
54 The authors also questioned the rationality principle of social exchange based on self-
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3 interest, since respondents were concerned with impacts on the general public, such as
4 property prices for the younger generation. Finally the fourth hypothesis is described as:

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6 **H4.** Employment in the tourism industry positively correlates with tourism impact
7 perceptions.
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9 *Method and Data Collection*

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12 The hypotheses were tested using a questionnaire which was administered in the heritage
13 town of Besalú in Catalonia, Spain (see map 1). Besalú has a population of 2,406 inhabitants
14 and several relatively important national monuments. It has been listed as an ensemble in
15 the national inventory of heritage of Spain since 1966, and also contains several monuments
16 individually listed: the Churches of San Pedro, San Vicente and Santa Maria; Besalú bridge;
17 Besalú castle, and the city walls. Besalú also has one of the most important ensembles of
18 Jewish monumental heritage in Spain, as it was the home to a well-established and
19 relatively powerful Jewish community for almost five centuries. It is part of the network of
20 Jewish heritage sites in Spain, and has a 12th century *micvé* and the remains of a 13th
21 century synagogue. This predominantly Jewish heritage attracted 105,617 visitors to the
22 town in 2015, as recorded by the tourist information office. The first three source countries
23 were France, Russia and Israel.
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27 Map 1. Location of the study site (map of Spain)
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32 To determine the sample size, the universe was the adult population (over 18) of the town
33 centre. The necessary sample size for a finite population of 420 inhabitants with a sampling
34 error of $\pm 5\%$ and confidence level at 95% is 219 individuals. Data collection was carried out
35 between June 2015 and January 2016 through a survey conducted by interviewers in the
36 streets of the town. Since the old centre of Besalú is small, it was possible to distribute the
37 survey in the 14 streets and three squares at different times over a period of eight months.
38 Using a map, the streets where surveys were carried out were rotated to cover all streets
39 each survey day while the days of the week were changed to cover every week day from
40 Monday to Sunday. Respondents were chosen from every four pedestrians. Then, with the
41 aid of a map, they were first asked whether they lived in the town centre of Besalú for more
42 than four months a year. If the answer was affirmative, the interview was conducted; if not,
43 the next pedestrian was approached.
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47 Concerning the sample profile, 47.5% of the sample were women, and 49.3% were men; a
48 distribution similar to that of the town itself, which is made up of 53% women and 47% men
49 (IDESCAT, 2015). The age distribution was as follows: 19-29 years (15.6%); 30-39 years
50 (22.5%), 40-49 years (22%); 50-59 years (20.6%), and 60 or over (19.3%). Regarding length of
51 residence, the highest percentage of respondents had been living in Besalú for more than 20
52 years (69.3%), while the rest 0-5 years (10.6%), 6-10 years (5%); 11-15 years (7.3%); 16-20
53 years (7.8%) and 20 years or more (69.3%). Regarding educational level, the highest
54 proportion had primary education (46.3%), followed by university degree (25%) associate
55 degree (17.6%), high school or secondary education (7.4%) and none (3.7%). A total of
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3 76.7 % of respondents did not work in tourism, nor did they have any relatives working in
4 the tourism industry, while 23.3 % did.
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6 *Questionnaire and Method* 7

8 The questionnaire was designed to cover the relevant impacts of tourism. The answers
9 were on a five-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree”(5).
10 The questions in the survey were developed from previous studies using similar instruments
11 (Belisle & Hoy, 1980; Getz, 1994; Glasson, 1994; Glasson et al., 1997). The questionnaire
12 included the employment in tourism variable, and sociodemographic variables (age, gender,
13 education). The respondents were also asked about their willingness to accept a higher
14 number of tourists. Five in-depth interviews were conducted between January and March
15 2015. Interviewees included residents, business owners, and personnel from the Town
16 Council and Tourist Office in order to focus on relevant local issues.
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20 The first stage in analyzing the data collected in the survey was to create an index of
21 consensus to establish unanimity, or lack thereof, on perceptions of impacts. This was done
22 following the steps developed by Getz (1994): complete consensus in disagreement or
23 agreement is indicated by a value of 1.0. Contingency tables were then drawn up, relating
24 first the independent variables, employment in tourism and socio-demographic variables, to
25 impact perceptions and willingness to accept more tourists. The link between impact
26 perceptions and willingness to accept more tourists were also analyzed, using ANOVA to
27 measure the value of impact perceptions as an indicator of capacity. Chi square tests were
28 performed to study the relationship between the variables in terms of their correlation with
29 impact perceptions and willingness to accept more tourists. These tests revealed the power
30 of "employment in tourism" (SET variable), when compared with the other socio-
31 demographic variables (categorical variables). Chi-square tests were performed to study the
32 relationship between those categorical variables, especially the impact perceptions and the
33 willingness to accept more tourists; and the relationship between employment in tourism
34 (SET) with the other socio-demographic variables. The link between impact perceptions
35 (quantitative variable) and willingness to accept more tourism (categorical variable) were
36 analyzed using analysis of variance (Anova test) to establish the utility of impact perceptions
37 as an indicator of capacity.
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41 RESULTS 42

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44 Table 2 shows the results of the index of consensus. The statements with greatest
45 consensus disagree on the negative impacts: “there is a higher crime rate because of
46 tourism” and “tourism-related noise makes life in the town less pleasant” (index=.85). The
47 third highest consensus agrees with the statement that shops are for tourists, which a priori,
48 is considered negative for tourism (index=.74). The fourth highest consensus is a tie
49 between two positive statements (that “tourism brings jobs and this is more important than
50 the nuisances it brings” and that “thanks to tourism the cultural heritage is better
51 preserved”). Both statements had an index of .63. The statement in the fifth position is also
52 positive: “tourism brings more money than any other industry” (index=.58) The sixth position
53 agrees with a negative statement: “that tourism brings higher prices” (index=.53). The
54 greatest consensus is on negative impacts while consensus on positive impacts is lower. In
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3 general, the results show that residents do perceive both negative and positive impacts, and
4 that there is a general view that tourism is not to blame for negative aspects of life in the
5 town.
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7 Table 2: Consensus Index of Perceptions of Tourism Impacts
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9 Table 3 shows p-values disconfirming the hypothesis that employment in tourism is related
10 to impact perceptions. In contrast, employment in tourism does affect the willingness to
11 accept more tourists, as Table 4 shows. Respondents working in tourism had a greater
12 willingness to accept more tourists, as 33.3% of them wanted more tourists, compared
13 to 16.2% of the total number of respondents. 82.9% of those not working in tourism wanted
14 tourist numbers to remain the same, compared to 78.2% of the total number of
15 respondents. 61.5% of respondents employed in tourism wanted tourism numbers to stay
16 the same. This shows a tendency for those not employed to want tourism numbers to stay
17 the same. There is a slight tendency for those not employed to want fewer tourists (5.7%) as
18 opposed to 5.8% of the total sample. This tendency is not observed in residents employed in
19 tourism, since 5.1% wanted fewer, as opposed to 5.8% of the total sample.
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23 Table 3: Results Relating Employment in Tourism to Perceptions of Impacts
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25 The results in Tables 3 and 4 suggest that perceptions of impacts do not correlate with social
26 carrying capacity. Even though the consensus index shows that residents perceive both
27 negative and positive impacts, 83.8% of respondents state that either the number of
28 tourists is good, or that they want fewer tourists. Additionally, the results show that
29 employment in tourism may affect impact perceptions.
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32 Table 4. Contingency Table Relating Employment in Tourism and Willingness to Accept
33 More Tourists
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36 Table 5 shows contingency tables which cross willingness to accept more tourists with
37 gender, education and age. It demonstrates that women are more willing to accept a higher
38 number of tourists than men. It should be noted that women are also more frequently
39 employed in the tourism industry, thus raising the question: which of these two variables
40 helps explain willingness for more tourism better? In terms of education, respondents
41 holding an associate degree are more willing to accept a higher number of tourists.
42 Regarding age, the 50 to 59 age bracket shows a greater tendency to want tourist numbers
43 to remain the same. Those aged between 40 and 49 show a tendency to want more tourists.
44 The 30 to 39 bracket shows a tendency to want fewer tourists, and ages 19 to 29 want
45 tourist numbers to remain the same.
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48 Table 5: Contingency Tables Crossing Willingness to Accept more Tourists with Gender,
49 Education and Age
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52 The results of the Chi-square (X^2) tests are also shown in Table 5. Employment in tourism
53 was most highly associated with willingness to accept more tourists, followed by gender and
54 then age. Education was the least associated variable. These results confirm the high
55 explanatory power of employment in tourism on willingness to accept more tourists
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3 supporting a SET approach. They also validate the influence of socio-demographic variables,
4 mainly gender.
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6 Table 6 shows results of an ANOVA test, which was carried out to relate residents' impact
7 perceptions to their willingness to accept more tourism. Among the impact perceptions, are
8 the claims that tourists get in the way of residents, and that prices are higher in Besalú due
9 to tourism. These are the only two perceptions with p-values <.05, and thus, the only
10 perceptions to demonstrate a relationship with a capacity indicator such as willingness to
11 accept tourism in Besalú.
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14 Table 6: Results Relating Impact Perceptions and Willingness to Accept more Tourism
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17 *Impacts of Variables on Perceptions* 18

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20 Analysis of variance relating education to perceptions of tourism impacts are shown in Table
21 7. 95% of respondents with no education tended to agree that "tourism brings more leisure
22 facilities". This figure was followed by those with a university degree. The other educational
23 levels were closer to uncertainty, except for high school graduates, who were closer to
24 disagreeing. The same result was found regarding the statement "noise resulting from
25 tourism makes life in the town less pleasant": respondents with no education tended to
26 disagree more (95% confidence), followed by respondents with university studies. Also,
27 respondents with no education tended to believe that tourists got in their way. Regarding
28 the statement "prices are higher in Besalú because of tourism" the result was the opposite:
29 respondents with no education had the highest level of agreement (95% confidence). This
30 was followed by those with primary education and respondents holding university degrees.
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34 Table 7. Results Relating Education to Perception of Impacts
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36 Regarding gender results, Table 8 shows significant differences. With a degree of
37 confidence of 95%, gender was related to the perception that prices are higher because of
38 tourism. Men agreed more to this. With a degree of confidence of 90% the statement that
39 "tourism brings money and jobs and this is more important than any nuisance it might
40 bring" generated agreement from men. Regarding the statement that "noise makes life less
41 pleasurable in the town centre", men also disagreed more.
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44 Table 8. Results relating Gender to Perception of Impacts
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46 5. CONCLUSIONS & DISCUSSION 47

48 The main hypothesis in this paper is that, by applying Shelby and Haberlein's (1986) rule, an
49 analysis of the variable of willingness to accept more tourism confirms an approximation to
50 the limits of capacity, as is revealed by the other two indicators (tourism intensity and the
51 tourist function index). Applying the rule, hypothesis 1 is confirmed. 5.7 % of the
52 respondents stated that they wanted fewer tourists; and 82.9% stated that the current level
53 is "good". The total of these two categories (an overwhelming 88.6%), somehow disagree
54 with an increase in numbers, which suggests that they do sense overcrowding, and that an
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3 increase in tourism could be negative for them. Even though the highest percentage of
4 respondents do not want more tourists, this has not yet led to a general, negative
5 perception of tourism impacts, as the consensus index shows. In terms of the economy,
6 there is a strong appreciation of both positive and negative impacts. Impacts on
7 conservation are also strongly appreciated, while there is uncertainty about other impacts.
8 If more tourists were to come, it is not clear whether the residents would have a worse
9 perception of tourism impacts, since some research suggests that residents find ways to
10 accommodate and cope with the negative impacts (Getz, 1994; Rothman, 1978). Also, there
11 is disagreement that crowding is a strictly negative experience (Choi et al., 1976). A lack of
12 willingness to accept more tourism does not necessarily correspond with negative
13 perceptions of tourism impacts. This result raises questions about the usefulness of
14 perceptions of impacts as an indicator of capacity, as there is a split between perceptions of
15 impacts and willingness to accept more tourism. Taking a social exchange perspective, it can
16 be said that residents in the study area perceive certain benefits and costs, mainly the
17 economic and conservation ones, while other benefits and costs are perceived in an
18 uncertain manner. SET is about willingness to enter into exchange relations with tourists
19 (Ap, 1992; Jurowski et al., 1997). It can be said that this willingness is present in the resident
20 community of Besalú, but there is little willingness to take the exchange a step further.
21 Therefore, the conditions affecting willingness need to be explored. The results of this study
22 focus on the socio-demographic variables that could affect willingness, but there are other
23 objective variables that can affect it, such as the type of tourism and traveller. As stated in
24 the literature review, limits of carrying capacity not only refer to numbers, but also to other
25 tourism conditions such as tourist type (Martin, 1994).
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30 The economic aspects generated greater consensus: residents held a clearer and more
31 unanimous position regarding these statements than others. This finding aligns with that of
32 Brent & Mikko (2006) and Vargas Sánchez et.al. (2011) in that economic benefits are
33 perceived more than any other benefits. Belisle and Hoy (1980) also found that respondents
34 in Santa Marta perceived that tourism created employment. Other statements with high
35 levels of consensus disagree with negative impacts. This finding was also confirmed in
36 Hawaii, Istanbul and North Wales where “respondents tend not to blame tourism for
37 adverse social and environmental impacts” (Liu et al., 1987). Apart from the economic
38 impacts, the positive impact of tourism on heritage preservation also generated a high level
39 of consensus. It is worth mentioning that the statement “tourism makes the town more
40 interesting and attractive” generated a low level of consensus. In contrast, in Santa Marta,
41 close to 50% of respondents in Belisle & Hoy’s study (1980) agreed that tourism gave them
42 the opportunity to live, speak and think differently. The statements are not identical, but
43 they both explore how residents see the cultural opportunities that tourism can bring. The
44 difference could be place specific, however, as Colombians might be more open to
45 interacting with tourists than Catalans.
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50 The second hypothesis, that impact perceptions relate to willingness to accept tourism, was
51 confirmed regarding only two perceptions: that tourists get in the way of residents and that
52 prices are higher due to tourism. The first perception is related to lack of space in areas
53 shared with tourists, and is a characteristic impact of tourism in heritage town centers. It is
54 also worth noting that it emerges as one of the perceptions associated with a capacity
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3 indicator. Residents who want more tourism tend to agree less on this being an impact,
4 while residents who want less tourism tend to agree it is an impact.
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6 The third hypothesis is that residents who are employed in the tourism industry, or have
7 close relatives employed there, are more willing to accept more tourists than those who are
8 not. This hypothesis was confirmed following the findings of other studies where support for
9 additional tourism development was positively related to personal benefits (Getz, 1994;
10 Long, Perdue, & Allen, 1990). Respondents who are not employed in tourism showed less
11 willingness to accept more tourists. Overall, these findings would suggest that “residents
12 weigh the benefits and costs through some informal cost-benefit analysis similar to that
13 proposed by social exchange theory” (Ritchie & Inkari, 2006:38). However, there are also
14 intangible returns and wider social benefits, as opposed to individual ones, which may
15 override inexistent individual benefits in the case of residents who are not employed in
16 tourism (Ryan & Montgomery, 1994). If these wider social benefits are taken as a potential
17 explanation for willingness to accept tourism, we would need to focus on how these
18 extended social benefits lead to a lower willingness to accept more tourists. Social exchange
19 theory may serve as a theoretical framework to explain the results. While the tourism
20 dependent population is prepared to endure costs in order to maximize benefits, the non-
21 tourism dependent population will try to keep the carrying capacity at a level that does not
22 compel it to bear unwanted costs (Canestrelli & Costa, 1991). The results of this study
23 suggest a combination of self-interests and community interests as the rationale for
24 resident’s perceptions, for example, better leisure facilities or heritage conservation. The
25 results also suggest that wider social interests are not enough to make respondents willing
26 to endure costs. Indeed, the statements in the questionnaire all focused on community
27 benefits, thus indicating that residents do perceive these general benefits.
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32 The fourth hypothesis states that residents who are employed in the industry, or have close
33 relatives employed there, perceive the positive impacts of tourism more and the negative
34 impacts less than those who are not. This was not confirmed following the findings of Liu,
35 Sheldon & Var (1987) in Hawaii, Istanbul and North Wales and also those of Ryan &
36 Montgomery (1994) in the heritage city of Bakewell. Residents who work in tourism also
37 perceive some of the negative impacts of tourism such as higher prices, that shops are for
38 tourists and that tourists get in the way of residents. Those who do not work in tourism also
39 perceive some positive impacts such as jobs and money, facilities, that tourists learn
40 heritage preservation and that the city is more interesting and attractive because of
41 tourism. Since employment in tourism is a variable that fits with SET, these results indicate
42 that impact perceptions might escape the exchange context. An explanation can be the
43 prevailing knowledge in Catalan society of tourism and its impacts (Liu, Sheldon & Var,
44 1986). However, education, another variable that also fits into a social exchange approach,
45 did show meaningful impacts on perceptions. The results of this study show that
46 respondents with both the highest and the lowest educational levels had a better
47 perception of some tourism impacts, for instance, noise and leisure facilities. Respondents
48 with no education, on the other hand, had the worst perception of high prices related to
49 tourism. This result could support both interpretations of the relation between power
50 (operationalized partly through education) and impact perceptions emerging from the
51 literature review (Ap, 1992; Kayat, 2002). Respondents with no education might feel more
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3 tourism dependent, while those who have a university education feel that education gives
4 them the power to reap greater benefits from the industry.
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6 Regarding the impact of sociodemographic variables on impact perception, the results of
7 our study confirm the link between gender and willingness to accept more tourists. Taking a
8 place specific perspective, women in the Lewes District (UK) were more supportive of an
9 increase in tourism numbers than men (Brent & Incari, 2006). However, two studies in small
10 towns in New Zealand found that women did not support an increase in tourism (Mason &
11 Cheyne, 2000; Williams & Lawson, 2001). In their study, Cheyne & Mason (2000) suggested
12 that this difference might be due to different worldviews which are strongly culturally
13 oriented. The results in Besalú confirm that, more than gender, employment in tourism is
14 linked to a willingness to accept a higher number of tourists. This result supports a SET
15 approach to willingness to accept more tourists. Gender, however, emerges as the second
16 variable, and has the most significant link to willingness to accept more tourists, thus
17 confirming the findings in the Lewes district. Harvey et. al (1995) found similar results in
18 rural towns in the US: although women perceived some tourism impacts differently, they
19 were perceived in the same way overall. This study, however, had no questions regarding a
20 willingness to accept more tourism. The conclusions questioned why women, regardless of
21 being employed in tourism more than men, perceive tourism impacts in a very similar way
22 to men. The authors ask: "Is there a problem with the survey questions - are they too global
23 and general to differentiate more subtle gender-based differences in response to tourism
24 development?" (Harvey, et. al 1995: 363). Perhaps they failed to uncover any difference
25 because the focus was on impact perceptions alone. The findings in our study indicate that
26 when questions on willingness to accept more tourism are posed, differences between
27 genders emerge. Some studies show that job opportunities in tourism has led to greater
28 independence and social opportunities for women (Harvey, Hunt, & Harris, 1995; Reynoso y
29 Valle & DeRegt, 1979).
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35 In order to further the growth and development of tourism in Besalú, tourism managers
36 could benefit from a deeper understanding of residents' perceptions of tourism. SET still
37 holds an explanatory value, thus tourism can be understood as an exchange relationship,
38 even though impact perceptions, per se, may not be a valid indicator of the circumstances
39 of the exchange. The conditions affecting the willingness of residents to enter into, and
40 remain in this relationship, could be a criterion for choosing future development options for
41 tourism; however, a more detailed understanding is needed. For example, the involvement
42 of women and men in tourism could be guided by a gender based understanding of the
43 issues making tourism more authentic, as this would lead to a more personalized experience
44 for both residents and tourists.
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47 *Future studies*

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49 Three future lines of research emerge from the results of this study. The first refers to social
50 carrying capacity in heritage towns and cities. This study has identified the impact of
51 tourism on availability of space as a perception that links with other another indicator of
52 capacity (willingness to accept more tourists). Additionally, the perception of positive
53 impacts on heritage conservation generated a relatively high consensus. Future studies
54 could focus on the importance of heritage conservation, in residents' assessment of the
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3 tourism exchange. While a specific methodology for the assessment of carrying capacity in
4 coastal areas is well under way (Navarro et al., 2012), the body of knowledge related to
5 carrying capacity in heritage cities is much less developed. This methodology could be
6 further developed to incorporate the findings of this study which relate to heritage
7 conservation and space. A second impulse for future work could take a gender-based
8 perspective of social carrying capacity. We have seen that gender is linked to a willingness
9 to accept more tourists, and that studies in New Zealand show that women support tourism
10 development less than men, whereas studies in Besalú and the UK show that women
11 support tourism more than men. A comparative study of local cultural elements that might
12 influence perceptions of tourism by gender could be carried out, and as Cheyne and Mason
13 (2000) suggested, “different world views” might explain why women have different
14 perceptions of future tourism development. A third future line of research relates to
15 employment in the tourist industry. Regardless of their perceptions of the general benefits
16 tourism brings, residents not employed in tourism were less willing to accept an increase in
17 tourism. This suggests that the influence of personal benefits on people’s willingness to
18 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

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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 they 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	

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	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%			

Tourism Review

	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 they 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

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	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

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



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