**Differences in residents’ attitudes towards tourism among mass tourism destinations.**

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Differences in residents’ attitudes towards tourism among mass tourism destinations.

Abstract

This article contributes to extant knowledge by analysing differences in the attitudes towards tourism of residents living in several micro-destinations (cities) within a larger tourism destination, and by using a new approach, the Oaxaca-Blinder decomposition. Results show that a significant part of the gap in attitudes among cities is explained by residents’ perceived tourism impacts; the relevance of each of them in generating gaps is also identified and quantified. However, there is also a significant community adjustment to tourism impacts source of gap, different among cities.

Keywords: Resident’s attitude, Oaxaca-Blinder decomposition, attitude gaps, tourism impacts, tourism product, tourist types.
Introduction

Ensuring the sustainability of tourism has led to renewed interest in the impact of tourism on host communities (Choi and Murray, 2010; Easterling, 2004; Nunkoo, Smith & Ramkissoon, 2013; Sharpley, 2014; Zhang, Fan, Tse & King, 2016). The various negative effects of tourism on local residents and their communities is at the core of the issue, especially in mature mass tourism destinations which receive large numbers of tourists and where the benefits of tourism may not be perceived by locals as compensating its subsequent negative economic, social and environmental effects. Understanding host attitudes towards tourism is needed to generate strategies which provide not only further support for the industry (Choi and Murray, 2010; Faulkner & Tideswell, 1997), but also improve the well-being of the local residents (UNEP and UNWTO, 2005; World Charter for Sustainable Tourism +20, 2015).

Any plans and actions devoted to attracting tourists and increasing their loyalty and providing more satisfying experiences for them will not be effective if they cannot count on the participation of residents in their role as adequate hosts for tourists (Nunkoo, Smith & Ramkissoon, 2013; Pizam, 1978; Zhang et al., 2016). Therefore, an understanding of residents’ attitudes towards tourism is needed. By analysing a “typical” mainstream destination we contribute to extant knowledge by providing useful insights for other destinations (Sharpley, 2014). The context of our analysis is the Costa Brava, a well-known tourist destination located in the north-east of Spain. It is a mature, mass tourism destination whose offer since the 1960s has focused mainly on the so-called ‘sun and sand’ tourism, attracting many national as well as international tourists.
Despite its importance as one of the main tourist destinations in the Mediterranean, to the best of our knowledge no previous study has analysed locals’ perception of tourism.

As many other mainstream destinations, micro-destinations compose the larger tourism brand of study. They are offering different main tourism products and receive different types of tourists. As noted by Faulkner & Tideswell (1997), these are elements that have to be considered when analysing residents’ attitudes towards tourism, since they can generate different tourism impacts (positive and negative) and, as a consequence, influence the perceptions local residents may have of tourism. Therefore, to formulate efficient tourism policy-making, the differences in residents’ attitudes between cities within a mainstream tourism destination must be taken into consideration. Each city may need specific tailor-made policies and actions that reflect their unique situations. This is what our analysis first considers and then we move one step further by analysing and quantifying the differences or gaps (between the three cities) in the way their residents perceive tourism, and the impact of explanatory impacts found in those gaps.

The objectives of our research are as follows. First, to uncover which is residents’ attitude towards tourism and identify its determinants, in the case of the mainstream destination. This constitutes the first contribution of our research because, as noted by Sharpley (2014), very little research has been done for mainstream areas. To this end, our research is framed within the Social Exchange Model (Ap, 1990, 1992). The second objective, and also the second contribution and the main novelty to extant knowledge on residents’ perceptions of tourism, is to analyse and quantify the differences in attitudes towards tourism from the residents of the three different cities belonging to the same tourism brand and partially managed under the same tourism plans. The analysis allows
the relevant variables explaining observed differences in attitudes among the residents of the different cities to be identified and then to quantify their contribution to the explained differences. This study also quantifies “unexplained” differences, which are the differential “rewards” of tourism impacts, between the cities. This is done following the Oaxaca-Blinder decomposition method (Blinder, 1973; Oaxaca, 1973).

With this analysis, tourism policies and actions of micro-destinations can imbibe from that which can be learnt from other cities (explained gap), and highlights the need for specific policies to suit their residents’ specific requirements (unexplained gap or city adjustment to tourism). For academics, this research offers a new perspective as it concentrates on analysing differences between micro-destinations as to how residents perceive tourism by using a method which enables the main factors that explain observed differences to be identified, and its contribution quantified; and what part of those differences are a result of particularities in each specific destination.

**Research context: area and city descriptions**

The Costa Brava is located in the autonomous region of Catalonia in the north-east of Spain. Tourism management, branding and marketing is carried out by the regional Catalan authority, as well as by local city councils and regional Destination Marketing Organizations (DMOs). The three cities chosen for this analysis are Lloret de Mar, Figueres and Sant Feliu de Guíxols. These three micro-destinations are good examples of heterogeneity within the Costa Brava, in terms of their main tourism product and the types of tourists they receive. The three cities are all well-known destinations on the Costa Brava, are representative of the Costa Brava’s foremost tourism products and are
among those cities which receive the biggest number of tourists each year. Lloret de Mar is the most internationally renowned city on the Costa Brava and, as such, receives the largest number of international tourists. It is a seaside city of 40,837 inhabitants, with a territory that has beautiful scenery and outstanding beaches. It has around 34,000 accommodation beds (hotels and camping sites), which means that at 83.4% the ratio beds/inhabitants is high. Two of its most famous tourism offers are ‘sun and sand’ and ‘night-life’ tourism. This serves to attract many young tourists and teenagers, mainly foreigners, whose behaviour generates some of the coexistence problems locals have with tourists (Strategic Tourism Plans of Lloret de Mar, 2010 and 2016).

Figueres, on the other hand, is an inland city with a similar sized population, around 45,000 inhabitants, and it is reasonably dependent on tourism economically, although the number of beds in hotels and camping sites only represent 3.4% of the total population. The number of registered privately-owned apartments which are offered as tourism accommodation is also low, only seventy-one apartments; while there are 624 in Sant Feliu de Guíxols and 2,815 in Lloret de Mar (source: Catalan Statistical Office, Idescat, https://empresa.extranet.gencat.cat/rtcwebguies/, accessed 23rd December 2016). It receives many day trippers, nationals and foreigners, who go specially to visit the city’s main attraction, the Dali museum, and overnight in the surroundings. Others are travellers passing through on their way to cross the border with France, or day trippers from the south of France that go shopping or either day-trippers from other Catalan cities (source: DCB: Sectorial Action Plan: Tourism, April, 2014).

Finally, Sant Feliu de Guíxols is a seaside city with 22,000 inhabitants. Tourism is also a relevant economic activity there. The ratio beds/inhabitants is only 9.9%, but it has a
large number of national (Catalan) tourists who own a holiday home there and spend their vacation time and some weekends during the year there. Furthermore, these locally-owned holiday homes are also rented out to tourists. The city also receives many national and international day trippers as well.

To resume, we look at three cities (or micro-destinations) which come under the broader umbrella of the Costa Brava. Tourism has been one of their main economic activities since the 1960s and still is today. One of their main differences is the core tourism product they offer and, as a consequence of this, the type of tourist they receive is different. No more official records are available to show the different tourism product that each city offers and the type of tourists they receive; what do they consume, how much they spend, etc. There is some unofficial information which offers more insights in the type of tourism already mentioned. For example, a research in google maps for discos offers eighteen discos in Lloret de Mar, only three in Sant Feliu de Guíxols and also three in Figures.

**Literature review and hypothesis**

There is substantial literature on hosts’ attitudes towards (also referred to in many articles as ‘perceptions of’), tourism, but few studies have been carried out for the mature Mediterranean areas (Sharpley, 2014). Different approaches, analytical tools and theoretical models have been used, with the Social Exchange Theory (SET) and the Tourism Area Life Cycle (TALC) model (Butler, 1980) being the theoretical models most commonly used to frame empirical research (Easterling, 2004; Nunkoo et al., 2013; Sharpley, 2014).
Theoretical framework

The TALC model (Butler, 1980), and to a lesser extent the Irridex model (Doxey, 1975), have been the theoretical framework of many studies, but have been falling from popularity in recent years (Nunkoo et al., 2013). For the present research, one of the main relevant aspects of this model is the prediction that a high number of tourists, which is generally associated with the latter stages of tourism development, tend to generate non-positive or negative resident attitudes. An important limitation of these models is that they do not consider the heterogeneity of the residents within a destination (Faulkner & Tideswell, 1997; Sharpley, 2014), which the SET model (Ap 1990, 1992; Perdue, Long & Allen, 1990) does. It is the most commonly used in empirical analysis of residents’ attitudes towards tourism, as is reflected in the review work of Nunkoo et al. (2013) and Sharpley (2014). According to SET, residents will maintain a positive attitude towards tourism provided the perceived benefits received from the tourism activity outweigh the perceived costs. Negative host attitudes towards tourism may stem from negative effects from tourism (costs), such as agglomeration in public services, traffic congestion, crowding, litter, crime, noise, tourism-induced higher prices and tax increases. Positive attitudes derive from positive impacts (benefits), such as greater employment opportunities and economic growth for the community, being able to enjoy better local infrastructure, and increased recreational opportunities. Residents in the host community may be heterogeneous and have different perceptions of the benefits and costs of tourism.

Faulkner & Tideswell (1997) proposed a general framework that includes macro and micro theories, i.e. the TALC and the SET models with residents’ heterogeneity. This
framework considers that there are two dimensions that explain locals’ attitudes: extrinsic and intrinsic. The extrinsic dimension of the tourism/community interface refers to the characteristics of the destination and reflects the level and type of tourism activity (such as the stage of tourism development and the type of tourist that the destination receives). Intrinsic factors are the characteristics of residents (such as socio-economic characteristics and economic dependence on tourism) which make residents heterogeneous and generate variations in the impacts tourism has within the community.

**Tourism impacts and other explanatory variables**

The literature does not offer a unique list and a unique classification of tourism impacts and other explanatory factors of attitude towards tourism. As in Chuang (2013), it is quite common to analyse three types of tourism impacts: economic, socio-cultural and environmental, and include also other explaining factors such as spatial proximity to the tourism activity (Harrill, 2004).

A variation in the demographic profile of the resident community can determine a variation in the attitudes and perceptions towards tourism and tourism impacts (Brida et al., 2010). In empirical research, age, gender, income, occupational situation and level of education are frequently encountered, and results are not conclusive. For example, age was found to be significant in the work of Almeida et al. (2016), while in Fordham Research Services (1998) and in Nunkoo & Ramkissoon (2010) younger residents’ attitudes were more positive. Many studies found that females were less supportive of tourism development than males (Nunkoo & Ramkissoon, 2010), but this was not always the case (Faulkner & Tideswell, 1997). In terms of education, results are not
conclusive either (Almeida et al. 2016; Easterling, 2004). There seems to be a large amount of evidence supporting the fact that those residents whose occupations depend on tourism and those with higher personal economic reliance in tourism are more favourable towards tourism (Anderek et al., 2005; Andriotis, 2005; Choi & Murray, 2010; Easterling, 2004; Oviedo-Garcia, Castellanos-Verdugo and Martin-Ruiz, 2008).

Literature has also considered, as a potential variable that affects residents’ perceptions, the time the individual has been living in the place and their attachment to the community (Almeida et al., 2016; Faulkner & Tideswell, 1997; Jurowsky et al., 1997; Sharma & Dyer, 2009; Vargas –Sánchez et al., 2009). In this case, results are not conclusive either. For example, tourism may make newcomers fear losing the attributes they were looking for when they moved to the place (such as tranquillity) and therefore this can negatively affect their attitudes towards tourism, as in Faulkner & Tideswell (1997). In other studies, such as Cavus & Tanrisevdi (2003), results were the opposite.

Spatial factors and the relationship that locals have with tourists have also been considered in previous analyses. Greater contact with tourists can generate non-positive attitudes towards tourism. Residential proximity to tourism activity has been used as a contact variable in many studies: living in a tourist area, near tourist attractions, implies greater contact with tourists and greater suffering from the negative effects of tourism, such as noise pollution and traffic congestion (Jurowsky & Gursoy, 2004). Reviews on previous literature suggest that there is mixed evidence to support this (Deery et al., 2012; Easterling, 2004; Faulkner & Tideswell, 1997; Jurowski & Gursoy, 2004). A resume of the literature results concerning the effects of intrinsic variables is included in Table 1.

[Table 1 around here]
Tourism impacts can be divided into positive (benefits) and negative (costs). A review of previous studies provides enough evidence that, first, economic impacts are relevant for locals’ attitudes towards tourism; and, second, positive perceived impacts are positively related with positive attitude, while negative impacts have a negative relationship (Brida, Del Chiappa, Meleddu & Pulina, 2014; Easterling, 2004; Nunkoo et al. 2013; Pizam, 1978). However, there is mixed evidence on the relevance of each individual impact, as can be observed in those literature reviews carried out on the topic (Andriotis, 2005; Deery et al., 2012; Easterling, 2004; Harrill, 2004; Nunkoo et al., 2013; Sharpley, 2014).

Positive economic impacts from tourism arise when tourism is perceived as contributing to increasing the economic standard of living, generating employment and business opportunities, boosting tax collection which will allow for better public infrastructure in the transport, cultural and recreational spheres, etc. Negative economic effects associated to tourism can also appear that can negatively affect residents’ attitudes. This is the case with an increased cost of living for the host population with rises in prices of real estate as well as other goods and services (Faulkner & Tideswell, 1997), and a reduction in the quality and/or quantity of public services for the host population.

Tourism also affects residents in the environmental and socio-cultural spheres: air, noise and water pollution, traffic congestion, overcrowding, impacts generated by uncivil behaviour of some tourists, loose of cultural identity or greater residents’ cohesion are examples of tourism impacts analysed by literature.

Our analysis is framed in the SET theory. According to the SET model, by which residents’ attitude towards tourism depends on (perceived) positive and negative effects
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or impacts of tourism, and the previous literature review, the following hypotheses will be tested. The first two are related to residents’ perceptions of tourism. They will be tested with data for the mainstream destination, the Costa Brava (considering the three cities together as if they were the whole of the Costa Brava) by estimating a reduced linear equation with ordinary least squares. The hypotheses are as follows:

H1: The resident’s perceived positive effects or impacts of tourism (environmental, economic and social-cultural) positively influence their attitude towards tourism.

H2: The resident’s perceived negative effects of tourism (environmental, economic and social-cultural) negatively influence their attitude towards tourism.

The third and fourth hypotheses are related to the decomposition and quantification of the gaps in perceptions between the cities:

H3: Observed differences in the attitudes of residents towards tourism in different cities will be explained by the differences, between the cities, in tourism impacts.

Our analysis also draws on the Faulkner & Tideswell (1997) framework, since we are implicitly including the tourism product and the type of tourist at each destination. These are the main distinctive extrinsic tourism characteristics of the three microdestinations being researched. Seasonality, which is another extrinsic factor, is not included in the model because there is little difference between the three cities: all three have summer as their peak season. Another potentially relevant extrinsic factor, tourism stage of development, is neither included in the analysis because the three cities have in common that are mature, mass destinations. Faulkner and Tideswell (1997) and their literature review, as well as the literature review in Sharpley (2014) acknowledge that
the type of product and tourist type that each destination receives can generate different perceptions of tourism impacts. For example, it is expected that high numbers of international visitors accentuate residents’ concerns regarding cultural impacts of tourism; differences in cultural backgrounds and socio-economic status between the host and visiting population, and the pressure of tourists on locals, as well as tourist behaviours and consumption patterns can affect tourism impacts and their perceptions by residents. Therefore, if the level of for example, noise, is higher when tourists are younger, residents will perceive higher negative tourism impacts (negative externality-noise-). Therefore, the tourism product and tourist type that each city receives can be one of the main implicit factors explaining differences in tourism impact perceptions of residents in different cities.

Differences in tourism impacts are generating the “explained part” of the decomposition of differences in attitudes of residents from the three different cities towards tourism. However, residents in two cities may perceive similar tourism impacts (such as perceived noise levels) but the effect of that tourism impact on attitude towards tourism may differ between those two cities. In other words, a unit of noise may not have the same impact on attitudes towards tourism among residents living in different cities. This “unexplained part of the gap” of the Oaxaca decomposition is linked to communalities among residents in each city and differences among cities. It is recognised in the literature that community-level factors can affect differently attitudes towards tourism. Faulkner and Tideswell (1997) for example, suggest that the community as a whole adjusts to tourism and this adjustment may be different among communities; tourism impacts may be accommodated differently among communities. Following this, we
called the unexplained part of the gap, community (city) adjustment to tourism.

According to this, the fourth hypothesis is as follows:

H4: Part of the observed differences in attitudes among cities will be “unexplained” and specific to each city: community adjustment to tourism impacts are varied between cities.

If that is the case, tourism policy in one destination cannot simply learn from other destination’s experiences (for example, from the type of product that another destination is offering and its effect of perceived tourism impacts), but rather must also rely on further research into its residents and their perceptions and the differential effects that tourism impacts may produce on attitudes towards tourism depending on the city where the resident lives.

Most research has been focussed on a unique destination or location, although there is increasing interest in comparing destinations (Brida et al., 2014; Chuang, 2013; Diedrich & García-Buades, 2009). In this study, we analyse, decompose and quantify gaps in attitudes towards tourism in different locations. Since our main objective is to quantify gaps or differences, and distinguish between explained (by the model) and unexplained differences, the Oaxaca-Blinder decomposition is used. This decomposition is well-known in labour and discrimination literature and has been applied in tourism by Casado-Díaz & Simón (2016), Ferreira Freire and Silva (2016), Muñoz-Bullón (2009) and Santos & Varejao (2007) in their analyses of gaps and discrimination in the labour market in tourism, for example the gap between male and
female pay parity in the tourism industry. Raya (2013) also used it to analyse the value and role of brand between tourism destinations.
Method and data

First, resident attitude for the whole destination is analysed (as the three cities are representative of tourism types on the Costa Brava we consider, as a simplification, that the three cities together constitute the whole Costa Brava). To that end, the following reduced-form linear equation model is estimated:

\[ A_i = \beta_0 + \sum_{k=1}^{K} \beta_k X_{ik} + u_i \]  

(1)

where resident attitudes towards tourism \( A_i \) depend on \( X_{ik} \): the observable characteristics of the resident (socio-demographics, proximity of residence to the tourism area, and other intrinsic variables, see the data section), and on tourism impacts (such as noise, pollution or higher job opportunities); \( \beta_k \) is the effect of previous explanatory variables on attitude, \( \beta_0 \) is the constant (which can be interpreted as the mean attitude) and \( u_i \) is the disturbance term, which follows the usual assumptions.

Secondly, difference or gap in attitudes between cities is analysed. The estimated coefficients of model (1) are used in the conventional Oaxaca-Blinder (1973) decomposition method. It decomposes the average gap in residents’ attitude towards tourism between the cities, as follows:

\[ A_{sf} - A_o = (\bar{X}_{sf} - \bar{X}_o) \beta^* + [\bar{X}_o (\beta^* - \hat{\beta}_o) + \bar{X}_{sf} (\hat{\beta}_{sf} - \beta^*)] \]  

(2)

where \( A \) is residents’ attitude as defined in equation (1), \( \hat{\beta}_o \) and \( \hat{\beta}_{sf} \) are the least squares estimates obtained separately from the two group-specific samples (one for Sant...
Feliu (Asf) and the other for the other cities (Ao), and $\hat{\beta}^*$ is a “non-discriminatory” coefficients vector.

For convenience, Sant Feliu is taken as the reference city and with which the other two are compared to. The left-hand side measures the average estimated gap of attitudes between the residents from the two groups (Sant Feliu and Others - the other two cities or only one of them). The first term of the right-hand side represents the part of the tourism attitude differential that is “explained” by group differences in the predictors (a “quantity effect”). In other words, the part of the gap attributed to differences in the explanatory variables i.e. the observed individual characteristics (intrinsic factors that affect attitude towards tourism) and locals’ perceptions of tourism impacts. The second term is the “unexplained” part: it is the part of the gap in resident attitude which is not explained by differences in locals’ perceptions of tourism impacts in different cities, nor by their personal characteristics and other explanatory variables. It is an adjustment to tourism, different for each city.

This type of Oaxaca-Blinder decomposition is a two-fold decomposition, because the outcome difference (difference of attitudes towards tourism in our case) is divided into two parts. Two-fold decomposition is prominent in the literature on discrimination (for example, on salary discrimination) and stems from the concept that there is a “non-discriminatory” coefficients vector ($\hat{\beta}^*$) that should be used to determine the contribution of the differences in the predictors. The choice of the “non-discriminatory” structure ($\hat{\beta}^*$) is, therefore, an important issue. Several suggestions have been made in the literature. For example, there may be good reason to assume that “discrimination” is
directed towards one of the groups only, that is, $\hat{\beta}_o = \hat{\beta}^*$ or $\hat{\beta}_f = \hat{\beta}^*$. Reimers (1983) argued that there is no specific reason to assume that the coefficients of one or other of the groups are not discriminating, and proposed using the average coefficients. Cotton (1988) suggested weighting the coefficients by group size. Neumark (1988) and Oaxaca & Ransom (1994) advocated using the coefficients from a pooled regression over both groups as an estimate for $\hat{\beta}^*$. This latter approach is the one most currently used and it is also the one employed in this article.

Data

A probability sample stratified by municipality and day of the week was generated. 283 valid responses were collected (104 in Figueres, 105 in Lloret and 74 in Sant Feliu). The main reason for doing this was the need for the sample to be representative of all residents but also for residents of every municipality. We have also established minimum quotes for every age group in order to guarantee that the distribution of this sociodemographic characteristics of the individuals in the sample correspond to those of the universe according to other official figures (Idescat, Catalan Statistical Office, 2008). The number of inhabitants (older than 14 years) of municipalities are: 37,297 (Figueres), 31,745 (Lloret) and 18,236 (Sant Feliu). Taking into account these figures and the expected mean and standard deviation for the variable of interest (tourism attitude) the margin of error is 2.91%. For the subsample of every municipality, the error margin are: 4.80% (Figueres), 4.81% (Lloret), 5.68% (Sant Feliu).

Data was obtained from a survey conducted with citizens of each of the three towns analysed. They were randomly approached on the streets on various days of the week and different locations in different neighbourhoods were chosen. A previous form of
approach (at home) proved not to be feasible, since most residents did not want to be
disturbed at home to answer a questionnaire. Respondents were introduced to the
content of the study and asked for their anonymous participation by answering the
questions asked by the interviewers. The survey gathered information on the following
explanatory variables: residents’ socio-demographics, measures of resident contact with
tourism activity, economic dependence on tourism and their perceptions of tourism
impacts. The dependent variable was their attitude towards tourism. Items used in the
questionnaire were derived from the various related literature previously mentioned.

Socio-demographic explanatory variables and those related to contact with and
economic benefits from tourism are included in the empirical estimation in categorized
form and are as follows: age (under 36, 36 to 50, and 51 and over – the latter being the
reference category), years of residency in the town (five years or less and more than five
years – reference category); employment situation (employee or other – reference
category); nationality (Spanish or foreign – reference category), tourist area (whether
the resident thinks they live in a tourist area, the reference category being “no”), the
resident has a job or their economic activity is in the tourism sector (“no” being the
reference category), and whether the resident considers tourism to positively influence
their economic activity – reference category, or to negatively affect it, or not affect it).
The city where the resident lives is also included as an explanatory variable (Figueres,
Lloret de Mar and Sant Feliu de Guíxols – reference category).

The questionnaire also included more than twenty statements for tourism impacts, such
as “tourism generates increased job opportunities in the city” and respondents were

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1 The variable sex was included in the questionnaire, but it did not appear statistically significant in
previous estimations and due to degrees of freedom issues this variable has not been included in the final
analysis.
asked to answer according to a Likert scale where 0 meant “none” and 10 was the maximum value. Therefore, a value of for example, 8, indicates that the resident considers tourism generates high levels of noise, while a value of 3 indicates low levels.

To reduce information for estimating the model, the twenty statements were transformed into six new variables (Table 2). Chronbach’s alpha values for each of the six new variables show good internal reliability. They are as follows (alpha values in brackets): positive economic effects from tourism (0.77) which include tourism generating job opportunities and tourism generating higher economic activity in the town and higher incomes; negative economic effects (0.86) which include tourism increasing real estate prices, increasing the prices of other goods and services, and increasing tax levels for locals; positive effects of tourism on public services (0.70) which include tourism increasing the quality of public transport, of health services, of recreational and leisure infrastructures, of garbage collection services, of the maintenance of old city quarter, and of other public services; negative effects of tourism on public services (0.80); cultural effects (0.92) which include negative impacts of tourism on traditions and on the cultural identity of the city; and finally, negative externalities (0.80) which include the following negative effects: increased noise and/or air pollution, reduced citizen safety, greater traffic congestion and mobility problems, and dirtier streets.

Descriptive statistics for the sample data are shown in Table 2. For categorical variables, the mean values in the table are the proportion of residents within each of the categories (multiplying by 100 gives the information in percentages; for example, 26% of the sampled individuals were 50 years and older). The dependent variable is the
resident’s perception of tourism, obtained from a Likert scale of 0 to 10, with higher values indicating a more positive perception.

[TABLE 2 around here]

The analysis was performed in two stages. Firstly, residents’ attitudes in the Costa Brava were regressed on explanatory variables. This allows which explanatory variables are significant for explaining residents’ attitudes to be uncovered. A variable for each city was also included, which resumes city-specific effects. In the second stage of the analysis, an Oaxaca-Blinder decomposition was applied to decompose differences in resident attitudes towards tourism into two parts: the explained part (“endowments” in Oaxaca-Blinder terminology), which include differences in attitudes from the explanatory variables, and the unexplained (i.e. the “rewards”) component.

Results

Descriptive statistics show that despite TALC model prescriptions for mature and mass destinations which receive large numbers of tourists and suffer high seasonality, the perception of tourism is very positive in each city (8.14 on average; Sant Feliu with the highest values (9.57) and LLoret the lowest (7.31).

Table 3 reports results for the estimation of equation (1) for the full sample of observations, i.e. Figueres, Lloret de Mar and Sant Feliu de Guíxols together\(^2\). Two

\(^2\) Although the dependent variable is ordinal a linear regression model was used instead of an ordered model. This is due to the fact the Oaxaca decomposition is calculated through a linear model. However, similar results were obtained when using an ordered model. In fact, it is usual practice to use linear models to estimate ordered variables when the number of categories is ten or more.
estimations were done. The first one is a model without tourism impacts; only those variables that are easier to know by the policymaker are included in the estimation. These are residents’ individual variables: being an employee and working in the tourism sector increases the (positive) attitude towards tourism (by 0.66 and 0.81 points, respectively) and being Spanish (in contrast to being immigrant) decreases it by 0.80 points. No statistically significant effect has been found for the age of the resident, living in a tourist area, receiving personal economic benefit from tourism and community attachment. Their signs are as expected, however: less positive attitudes are obtained for older people, those living in a tourist area and those receiving less personal benefit. Resort dummies are negative and highly statistically significant. Thus, after controlling for individual’s explanatory variables, the residents of Figueres and Lloret are less likely to have a positive attitude towards tourism than residents of Sant Feliu de Guixols (1.79 and 2.75 points less, respectively).

The results obtained when tourism impacts are included as explanatory variables show that most individual variables have no statistically significant effect on resident’s perception of tourism. This is the case with age, nationality, attachment, effects of tourism on residents’ economic activity, and whether the resident lives in a tourist area. However, the signs of the coefficients indicate that younger residents, as well as those who do not live in a tourist area, foreigners and newcomers (have lived in the city for less than five years) have better perceptions of tourism. Being an employee and working in the tourism sector are statistically significant, and they increase the positive perception of tourism (by 0.49 and 0.53 points, respectively). With respect to tourism impacts, the sign of the estimated coefficients show that positive effects of tourism are associated with positive perceptions and negative effects with negative perceptions.
However, according to the t-statistics only three of the six impacts are statistically significant. These are: positive economic benefits from tourism and positive effects on public services (which increase the positive perception of tourism by 0.296 and 0.145 points, respectively), and negative cultural effects (which decrease it by 0.12 points). City dummies were also included in the regression analysis. It is found that after controlling for the other explanatory variables, there still remains a difference of perception to be explained; residents from Figueres and Lloret have a statistically significant lower positive perception of tourism than residents from Sant Feliu de Guíxols (2.30 and 2.336 points less, respectively).

Oaxaca-Blinder decompositions

The previous analysis with the estimated regression focused on the determinants of residents’ perceptions for the whole of the Costa Brava (in fact, for all three cities together). An analysis of the observed and statistically significant differences in attitudes towards tourism among residents from Figueres, Lloret and Sant Feliu de Guíxols is the objective of the next Oaxaca-Blinder (OB) decomposition (Equation 2 above). Before conducting the OB decomposition, a further test was performed to evaluate whether the observed differences in residents’ perceptions of tourism between the three cities were statistically significant. Table 4 shows the results of the test of mean differences. Mean differences are positive, that is, Sant Feliu residents’ (positive) perception of tourism is superior to that of Figueres’ and Lloret’s, and all differences
are statistically highly significant. The differences are 1.2 and 2 points with respect to Figueres and Lloret, respectively.

First, we estimate separately, for each city and hence without the town variable, the determinants of attitude towards tourism (“two towns together” in table 5). Secondly, Sant Feliu de Guíxols was taken as the reference category. It has been compared with the two other towns, Figueres and Lloret, each of them taken individually and also jointly. The results in this case are in table 5 under the headings “Figueres” and “Lloret de Mar”. In addition, in each case, an estimation with and without tourism impacts as explanatory variables is also included (“No TI” and “with TI” in table 4).

The results from the decomposition analysis (Table 5), are quite revealing. With respect to model which includes individuals’ variables as explanatory variables and does not include tourism impacts, estimates indicate that none of the gap in the tourism attitude between Sant Feliu de Guíxols and the other cities can be explained by differences in these observable individuals’ variables (the 2.58%, 10.49% and 12.83% obtained are not statistically significant).

In the model including tourism impacts, the explained part of residents’ attitude towards tourism increases significantly. This is due to the inclusion of the effects of tourism as explanatory variables. For example, 43.4% of the gap in attitude between residents in Sant Feliu and those in the two other resorts can be explained by differences in the explanatory variables included. Difference in attitudes towards tourism between
residents living in Sant Feliu and those living in Lloret de Mar, 73.7%, is explained by 
explanatory variables (individuals’ variables and tourism impacts). However, in the 
comparison between Sant Feliu and Figueres, the explained part collects only 39.7% of 
the difference; thus 60.3% remains unexplained. In the case of Figueres and Lloret 
analysed jointly, and compared to Sant Feliu, the explained part of the gap accounts for 
43.4% of the total gap. In all three cases explained components are statistically 
significant.

Table 6 presents the contribution of each explanatory variable to the explained gap 
between residents in Sant Feliu de Guíxols and residents of the other two resorts 
together (“two towns” in table 6). Also the one by one comparison among 
municipalities is included in Table 6. Only those variables with a statistically significant 
contribution in the Oaxaca decomposition are included in the table. As shown in the 
table, the explained part of the attitude gap is mainly attributable to the different values 
in each town of perceived impacts of tourism: negative externalities from tourism 
(40.6%), negative cultural impacts of tourism (22.62%), and the positive economic 
impacts of tourism (17.26%). The remaining 19.52% is attributable to the remaining 
statistically relevant variables. The small explained part in the case of Sant Feliu and 
Figueres is also explained by many variables, but the major contribution also comes 
from negative externalities (23.91%). In the case of Sant Feliu and Lloret de Mar, a 
large part of the explained part is explained by either negative externalities (35.60%) or 
negative cultural externalities (37.77%). Finally, the unexplained part is concentrated in 
positive economic impacts (especially in the case when comparing San Feliu with 
Figueres) and negative externalities (especially when comparing Sant Feliu with Lloret 
de Mar).
A significant part of the perception gap between residents in the three cities is unexplained. This accounts for 26.3% of the gap between Sant Feliu and Lloret de Mar, 60.3% between Sant Feliu and Figueres, and 56.6% between Sant Feliu and Lloret and Figueres together. This unexplained part of the gaps is not dependent on the perceived level of tourism impact in each city, but is due to the “returns” of explanatory variables. In other words, a hypothetical equal level of tourism impact (say, positive economic impact) generates different effects (returns) on attitudes towards tourism of the residents from each city; each city has its specific adjustment to tourism.

Discussion and Conclusions

The main objective of this research was to analyse gaps in residents’ attitudes towards tourism from residents living in cities (micro-destinations belonging to a larger macro-tourism destination tourism area), which are partially managed and branded under the same tourism plans and actions. The four generic hypotheses have been confirmed. Results have shown that there are significant differences in attitudes between the three cities. Lloret de Mar has the less favourable attitude towards tourism and a higher gap compared to the other two cities. Most of this gap is due to the perceived impacts of tourism: negative externalities from tourism, such as noise, pollution and congestion; to the positive impact of tourism on economic activity, and to the negative cultural effects of tourism. Lloret de Mar is the city which receives the largest number of international tourists, who overnight; and a large part of them are youngsters looking for night life
and beaches. This type of tourist is quite different from those the other two cities receive, which are more of a cultural-type day tripper in the case of Figueres, and second-home and more likely to be a national tourist in the case of Sant Feliu de Guixols. Results obtained in this analysis are in line with Faulkner and Tideswell (1997) suggestions on the relevance of the type of the tourism product and tourist type that each destination receives as being important determinants of residents’ attitudes towards tourism, as well as of gaps.

Moreover, results have also shown that there is an unexplained part of the gap in residents’ attitudes which is not attributable to tourist types, but has to do with the impact of the rewards of tourism on attitudes, a community adjustment to tourism. The gap between Sant Feliu and Figueres is an example. The attitudes of their residents are more similar than in the case of Lloret de Mar, and a large part of it is not explained by perceived tourism impacts and hence, by the tourism product or the type of tourists they receive, in as far as that is reflected in in perceived tourism impacts. Sant Feliu de Guixols’ residents appear to have higher perceptions of tourism for the same tourism impacts as Figueres’ residents do. This unexplained gap or community adjustment to tourism (Faulkner and Tideswell (1997) may be due to different factors, such as some kind of greater empathy for tourism on the part of Sant Feliu residents, or perhaps a better and more resident-needs-oriented tourism management in Sant Feliu. However, there is not enough information on the causes of that unexplained effect, and therefore it is an issue which deserves further attention in future research.

The statistically significant difference in attitudes towards tourism between the three cities, and its analysis of explained and unexplained components, point to the following
tourism management issue: the need to consider each city (micro-destination) individually when developing and elaborating tourism plans and tourism marketing for the macro-destination. The existence of heterogeneity between tourism products and the tourist types each city receives (the explained part of the gap), and relevant rewards’ differences or community adjustment to tourism (the unexplained part of the OB decomposition) call for specific actions for each city. The explained part of the OB decomposition is basically composed of perceived tourism impacts being different; a single city can learn from other cities on issues such as the expected effects on residents’ attitudes of the type of tourists attracted, the areas of action to improve residents’ attitude (such as reducing negative externalities and negative cultural impacts). The unexplained part of the decomposition contributes to policy-making by showing that there are specificities unique to each city which do also have to be considered and studied further. However, The OB decomposition method has been useful for the purpose of this analysis; its application can be of use for researchers facing analysis of differences in tourism research.

In addition to the gap analysis, the contribution of this article is its focus on a traditional, international, mature, mass seasonal tourism destination in the Mediterranean area and offer useful insights for destinations with similar characteristics. Host communities play an indubitable role in the future of tourism; the burden of sustaining and supporting tourism policies and strategies falls on them and they can directly affect the tourist experience at each respective destination. The preceding analysis has evidenced that, as in most previous research (Earling 2004; Nunkoo et al. 2013; Sharpley, 2014) perceived economic benefits from tourism are one of the notable tourism impacts that positively affect attitude. Negative tourism economic impacts, such
as price increases, were not statistically significant at 95% confidence, but their sign is 
the expected one, indicating a negative relationship with attitude towards tourism. 
Therefore, tourism managers and planners need to consider the economic sphere of 
tourism as a basis for obtaining residents’ complicity. Results also show that tending to 
residents by providing good public services and implementing actions that reduce 
negative cultural impacts and negative externalities, such as traffic congestion and 
noise, will increase their positive attitudes towards tourism. Concerning socio- 
demographic and tourism-individual variables, the analysis has found that living in a 
tourist area, as well as being from Spain, negatively affects the attitude of residents, 
whereas being a newcomer to the city and/or being younger has a positive effect. 
However, in all these cases the relationship is not statistically significant. Only 
individual-related variables in the economic sphere seem to have a significant impact, 
and positive, on residents’ attitude: being an employee and working in the tourism 
sector. This reinforces the relevance of the link between attitude towards tourism and 
the economic sphere of tourism; in this case, at the individual rather than at the 
community level. At the community level, the link was gathered through the economic 
impacts of tourism and, as was already mentioned, results were along the same lines, 
indicating a positive relationship between positive economic effects on the community, 
such as generating employment, and residents’ attitude towards tourism.

Finally, some research limitations must be mentioned. The first being the reduced 
sample size with which we had to work. This is a feature that this research shares in 
common with many more studies in this field (Sharpley, 2014). Nonetheless, further 
research would benefit from larger samples which would also allow a larger number of 
explanatory variables in the regressions to be included. In fact, any unobservable
relevant characteristic that has not been included in the analysis could explain part of
the variation in the unexplained part of the differences in attitude. In addition, future
research on other destinations would improve the extant knowledge on residents’
attitudes towards tourism and on gaps between cities or destinations, belonging or not to
a macro-destination.
References


Table 1. Intrinsic variables influence on perception

<table>
<thead>
<tr>
<th>Intrinsic (individual’s)variables</th>
<th>Influence on perception</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic profile: age, gender, Education</td>
<td>Not conclusive results but most studies conclude that such variables are not relevant (Sharpley, 2014)</td>
<td>Almeida et al., 2016; Fordham Research Services, 1998; Nunkoo &amp; Ramkissoon, 2010.</td>
</tr>
<tr>
<td>Economic and occupational reliance on tourism</td>
<td>Economic reliance on tourism generates more positive perceptions</td>
<td>Anderek et al., 2005; Andriotis, 2005; Choi &amp; Murray, 2010; Easterling, 2004; Oviedo-García et al., 2008.</td>
</tr>
<tr>
<td>Attachment to the community and time has been living in the place</td>
<td>Not conclusive results. In some studies newcomers have worst perceptions; in others the opposite result is obtained.</td>
<td>Almeida et al., 2016; Faulkner &amp; Tideswell, 1997; Jurowsky et al., 1997; Sharma &amp; Dyer, 2009; Vargas-Sánchez et al., 2009; Cavus &amp; Tanrisevsdi (2003).</td>
</tr>
<tr>
<td>Contact with tourists (e.g. residential proximity to the tourism activity)</td>
<td>There is mixed evidence to support that higher contact reduces positive perception</td>
<td>Jurowsky &amp; Gursoy, 2004; Deery et al., 2012; Easterling, 2004; Faulkner and Tideswell, 1997.</td>
</tr>
</tbody>
</table>
Table 2: Sample characteristics by city

<table>
<thead>
<tr>
<th>Variable</th>
<th>All sample</th>
<th>Figueres</th>
<th>Lloret</th>
<th>Sant Feliu de Guíxols</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td><strong>Tourism attitude</strong></td>
<td>8.14</td>
<td>2.21</td>
<td>7.95</td>
<td>2.45</td>
</tr>
<tr>
<td>Age (over 50)</td>
<td>0.26</td>
<td>0.44</td>
<td>0.22</td>
<td>0.42</td>
</tr>
<tr>
<td>&lt;36</td>
<td>0.45</td>
<td>0.50</td>
<td>0.51</td>
<td>0.50</td>
</tr>
<tr>
<td>36-50</td>
<td>0.29</td>
<td>0.46</td>
<td>0.27</td>
<td>0.45</td>
</tr>
<tr>
<td>Lives in tourist area (yes)</td>
<td>0.49</td>
<td>0.50</td>
<td>0.34</td>
<td>0.47</td>
</tr>
<tr>
<td>Employment situation (employee)</td>
<td>0.55</td>
<td>0.50</td>
<td>0.56</td>
<td>0.50</td>
</tr>
<tr>
<td>Works in tourism (yes)</td>
<td>0.23</td>
<td>0.42</td>
<td>0.15</td>
<td>0.36</td>
</tr>
<tr>
<td>Nationality (Spanish)</td>
<td>0.81</td>
<td>0.39</td>
<td>0.90</td>
<td>0.30</td>
</tr>
<tr>
<td>Attachment (&lt;5 years)</td>
<td>0.11</td>
<td>0.31</td>
<td>0.13</td>
<td>0.34</td>
</tr>
<tr>
<td>Effects on ec. activity of the resident (negative effect)</td>
<td>0.04</td>
<td>0.19</td>
<td>0.03</td>
<td>0.17</td>
</tr>
<tr>
<td><strong>Tourism impacts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive, economic</td>
<td>7.60</td>
<td>1.56</td>
<td>7.73</td>
<td>1.81</td>
</tr>
<tr>
<td>Negative, public services</td>
<td>4.45</td>
<td>1.74</td>
<td>3.98</td>
<td>1.61</td>
</tr>
<tr>
<td>Positive, public services</td>
<td>5.65</td>
<td>2.04</td>
<td>6.55</td>
<td>1.75</td>
</tr>
<tr>
<td>Negative externalities</td>
<td>5.94</td>
<td>1.63</td>
<td>5.49</td>
<td>1.73</td>
</tr>
<tr>
<td>Negative, cultural</td>
<td>3.44</td>
<td>2.32</td>
<td>2.96</td>
<td>2.28</td>
</tr>
<tr>
<td>Negative, economic</td>
<td>5.71</td>
<td>2.06</td>
<td>4.72</td>
<td>2.31</td>
</tr>
<tr>
<td>Sample size</td>
<td>284</td>
<td>104</td>
<td>105</td>
<td>74</td>
</tr>
</tbody>
</table>

http://mc.manuscriptcentral.com/jtr
Table 3: Linear regression model on tourism attitude

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Coefficient (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (ref.: over 50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;36</td>
<td>0.160 (0.29)</td>
<td>0.147 (0.30)</td>
</tr>
<tr>
<td>36-50</td>
<td>0.297 (0.30)</td>
<td>0.365 (0.32)</td>
</tr>
<tr>
<td>Lives in tourist area (ref. no)</td>
<td>-0.407* (0.24)</td>
<td>-0.291 (0.25)</td>
</tr>
<tr>
<td>Employment situation (ref. non-employee)</td>
<td>0.493** (0.23)</td>
<td>0.657** (0.24)</td>
</tr>
<tr>
<td>Works in tourism (ref. no)</td>
<td>0.535* (0.38)</td>
<td>0.807** (0.29)</td>
</tr>
<tr>
<td>Nationality (ref. foreigner)</td>
<td>-0.399 (0.33)</td>
<td>-0.796** (0.34)</td>
</tr>
<tr>
<td>Attachment (ref.&gt;5 years)</td>
<td>0.377 (0.37)</td>
<td>0.268 (0.39)</td>
</tr>
<tr>
<td>Effects on ec. activity of the resident (ref. positive)</td>
<td>0.364 (0.58)</td>
<td>0.151 (0.62)</td>
</tr>
<tr>
<td><strong>Tourism impacts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive economic effects</td>
<td>0.296*** (0.08)</td>
<td></td>
</tr>
<tr>
<td>Negative effects on public services</td>
<td>-0.060 (0.08)</td>
<td></td>
</tr>
<tr>
<td>Positive effects on public services</td>
<td>0.145** (0.07)</td>
<td></td>
</tr>
<tr>
<td>Negative externalities</td>
<td>-0.071 (0.10)</td>
<td></td>
</tr>
<tr>
<td>Negative cultural effects</td>
<td>-0.120** (0.06)</td>
<td></td>
</tr>
<tr>
<td>Negative economic effects</td>
<td>-0.119* (0.07)</td>
<td></td>
</tr>
<tr>
<td><strong>City</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figueres</td>
<td>-2.301*** (0.38)</td>
<td>-1.79*** (0.31)</td>
</tr>
<tr>
<td>Lloret de Mar</td>
<td>-2.336*** (0.43)</td>
<td>-2.75*** (0.34)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>8.471*** (0.90)</td>
<td>9.85*** (0.49)</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.35</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Number of observations: 284

*p < 0.1; **p < 0.05; ***p < 0.01.

Standard errors in parenthesis

(1) Only individual-related explanatory variables and city dummies are included. Tourism impacts are not included in the regression.
Table 4: Test of mean differences in tourism attitude

<table>
<thead>
<tr>
<th>Location</th>
<th>Mean</th>
<th>Diff.</th>
<th>t-stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sant Feliu de Guíxols</td>
<td>9.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figueres</td>
<td>8.02</td>
<td>1.02***</td>
<td>4.27</td>
</tr>
<tr>
<td>Lloret</td>
<td>7.22</td>
<td>2.00***</td>
<td>6.38</td>
</tr>
</tbody>
</table>

* *p < 0.1; **p < 0.05; ***p < 0.01
Table 5: Oaxaca-Blinder decomposition of tourism attitude differentials by city (reference municipality: Sant Feliu de Guixols)

<table>
<thead>
<tr>
<th></th>
<th>Two towns together</th>
<th>Figueres</th>
<th>Lloret de Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No TI</td>
<td>With TI</td>
<td>No TI</td>
</tr>
<tr>
<td>Coef.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap</td>
<td>1.94</td>
<td>1.62</td>
<td>2.26</td>
</tr>
<tr>
<td>Explained</td>
<td>0.05</td>
<td>0.84***</td>
<td>0.17</td>
</tr>
<tr>
<td>%</td>
<td>2.58%</td>
<td>43.4%</td>
<td>10.49%</td>
</tr>
<tr>
<td>Unexplained</td>
<td>1.89***</td>
<td>1.10***</td>
<td>1.45***</td>
</tr>
<tr>
<td>%</td>
<td>97.42%</td>
<td>56.6%</td>
<td>89.51%</td>
</tr>
</tbody>
</table>

*p < 0.1; **p < 0.05; ***p < 0.01.
Table 6: Oaxaca-Blinder decomposition of tourism attitude gap by variables

(reference municipality: Sant Feliu de Guixols)

<table>
<thead>
<tr>
<th></th>
<th>Explained</th>
<th></th>
<th>Unexplained</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two towns</td>
<td>Figueres</td>
<td>Lloret</td>
<td>Two towns</td>
</tr>
<tr>
<td>Positive Economic impacts</td>
<td>17.26%</td>
<td>9.69%</td>
<td>7.95%</td>
<td>36.31%</td>
</tr>
<tr>
<td>Negative Externalities</td>
<td>40.60%</td>
<td>23.91%</td>
<td>35.60%</td>
<td>25.18%</td>
</tr>
<tr>
<td>Negative cultural effects</td>
<td>22.62%</td>
<td>2.19%</td>
<td>37.77%</td>
<td>13.14%</td>
</tr>
<tr>
<td>Other</td>
<td>19.52%</td>
<td>64.22%</td>
<td>18.67%</td>
<td>25.36%</td>
</tr>
</tbody>
</table>
Annex: Robustness check:

We can also use Ñopo non-parametric approach. Relative to the more commonly used Blinder (1973) and Oaxaca (1973) decompositions, the advantage of Ñopo’s approach is that it controls for differences in common support among the characteristics of the two groups. Ñopo (2008) estimated the explained and unexplained gaps in the wages earned by men and women based only on those individuals who have identical combinations of characteristics, i.e., based on observations lying in the region of common support in the distributions of individual characteristics. By avoiding the problem of differences in supports, the approach estimates the explained and unexplained components of the differences in the dependent variable with more precision. Ñopo (2008) propose a matching method to addressing the issue of common support among groups for which we have implemented an Oaxaca analysis. This issue is important in our study because there are likely to be some part of the valuation that is typical for people from Sant Feliu but not for the other two municipalities and vice-versa. Ñopo’s non-parametric method separately identifies the unexplained part of differences in the tourism attitudes in the region of common support from the portion from outside the region. Following this method, we decompose the difference in the relative tourism attitude gap for people from Sant Feliu (SF) and for the other municipalities (M). This method recognizes that the regions of supports for the distributions of individual characteristics may differ for groups such as Sant Feliu and the other two municipalities. A matching produces is used to find the region of common support. To delimitate the common support we take into account differences in the distributions of both the individual characteristics and the tourism impacts. Specifically, we account for the SF/M categorization as though it were a treatment, and use a matching procedure to select sub-samples of SF and M such that there are no differences in observables between the matched groups. The explained and
unexplained portions of the tourism attitude gaps are calculated using only those
individuals whose combination of characteristics is also found among individuals from
the other group. In addition, the method also accounts for the part of the average
tourism attitude gap that is due to observations that are outside the region of common
support.

In this sense, we broke down the tourism attitude gap in four additive
components:

\[
\Delta = \Delta_{SF} + \Delta_{M} + \Delta_{X} + \Delta_{0} \tag{3}
\]

where \( \Delta_{X} \) is the part of the discount that can be explained by differences in the
distribution of individual characteristics of SF and M people over their common
support, and \( \Delta_{0} \) is the unexplained part. Thus, the interpretation of these components is
analogous to that of the components from the Oaxaca–Blinder decomposition. The
traditional explained and unexplained components of the gap are defined only over the
common support, i.e. they are calculated only based on those individuals whose
combinations of individual characteristics are found among both groups. \( \Delta_{SF} \) is the part
of the tourism attitude gap that can be attributed to the existence of profiles for which
there are people from SF but not from M (that is out of the common support), \( \Delta_{M} \) is the
part that is due to the existence of profiles for which there are M but no SF people (i.e
out of the common support). The \( \Delta_{SF} \) term thus accounts for the part of the tourism
attitude gap that exists because SF has a combination of individual characteristics or
tourism impacts which is absent among M. Similarly, the \( \Delta_{M} \) term accounts for
combinations of M characteristics for which there is no comparable group of SF. In this
sense, the value of N and M explain the difference within each group. Different value of
this represents the heterogeneity inside each group. That is to say, if we focus on tourism impacts, a high value of $\Delta_{SF}$ and $\Delta_{M}$ means higher differences in the valuation of the tourism impacts among SF and M, that is, the aforementioned municipality constant in terms of valuation is higher. On the contrary, a small value of $\Delta_{SF}$ and $\Delta_{M}$ means lower differences in the valuation of the tourism impacts among SF and M out of the common support, that is, the aforementioned municipality constant in terms of valuation is small.

The following table displays the results of the Ñopo estimation. Note that the gap is now expressed as the tourism attitude gap relative to tourism attitude of the reference municipality (Sant Feliu). Firstly, the unexplained part increases in all cases with respect to Oaxaca-Blinder approach when we only compare at the common support. Secondly, the order is similar to the one in Table 5 in the article. The unexplained part is more important for the comparison among Figueres and Sant Feliu. Finally, and the most important part regarding our robustness check, $\Delta_{SF}$ and $\Delta_{M}$ have always very small values with respect to the other component. To sum up, we can conclude that there are lower differences in the valuation of the tourism impacts among municipalities out of the common support, that is, the aforementioned municipality constant in terms of valuation is small.

To sum up, even when considering “unique” individuals, with the Ñopo method, it is obtained that they explain very little of the gaps in attitude towards tourism.
Table 7: Ñopo decomposition of relative tourism attitude differentials by city

(reference municipality: Sant Feliu de Guixols)

<table>
<thead>
<tr>
<th></th>
<th>Two municipalities</th>
<th>Figueres</th>
<th>Lloret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap</td>
<td>0.21</td>
<td>0.15</td>
<td>0.28</td>
</tr>
<tr>
<td>$\Delta X$</td>
<td>0.04</td>
<td>0.02</td>
<td>0.11</td>
</tr>
<tr>
<td>$\Delta_0$</td>
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<td>0.09</td>
<td>0.15</td>
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<tr>
<td>$\Delta_{SF}$</td>
<td>0.01</td>
<td>0.03</td>
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<tr>
<td>$\Delta_M$</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
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