EXTENDED ABSTRACT

LA GOMERA: THE USEFULNESS OF ESTIMATING AN INTEGRATIVE MODEL BETWEEN ITS TOURIST DEMAND AND ITS TOURIST ATTRIBUTES AND RESOURCES

Carlos Rodríguez Barroso
Universidad de Las Palmas de Gran Canaria
crbarroso3@gmail.com
https://orcid.org/0009-0003-8365-8712

1. INTRODUCTION/ METHODOLOGY

In order to develop this work, in this introduction, we broadly outline the methodology and general approaches of the same. Our first objective is, on the one hand, to quantify the success of tourism on the island of La Gomera in the last 30 years. And, on the other, to characterize the tourist demand in La Gomera. To this end, in the second section of the work and after this introduction, we are going to analyze the quantitative and qualitative information corresponding to the available data of travelers staying on the island over time, and those collected in the Survey on Tourist Expenditure carried out by the Canary Islands Institute of Statistics (Istac, 2019).

From these analyses, it can be seen, firstly, the significant growth that demand has experienced, confirming the success of La Gomera as a tourist destination. And, secondly, we go on to study and describe the main personal characteristics of the tourist demand in La Gomera. These characteristics give it, in some of them, certain peculiar connotations compared to the global demand of the archipelago, highlighting: the average age of these travelers, their employment situation, their educational level, income level, origin, main reason for the trip, the attributes of the destination considered as the most important for making the trip, the most practiced activities related to the previous attributes. Other aspects studied are the evaluation of the destination, the level of satisfaction obtained by tourists with their experience, and the response to the question of whether they would return to the island and recommend it, etc.

In the third section, after these analyses of the demand, we focus on the concept of satisfaction, basic to develop the model that we proposed to estimate. Next, and in this same section, we proceed to the justification of the chosen discrete choice model "the multinomial logistic regression", as well as to the development of its theoretical framework. A model that will allow us, through the level of satisfaction declared by those surveyed, to see the harmony or direct relationship between the profile of the tourists, the attributes and resources of the island and the activities carried out.

Following the proposed methodology, in the fourth section and with the resulting quantitative and qualitative information, we proceed to estimate the multinomial logit model with which we can identify which factors of all those studied affect or influence the high levels of satisfaction and, therefore, constitute the strong points that must be taken into account in decision-making and strategies for the future development of tourism on the island.

In the fifth section we address some conclusions related to the interest and usefulness that the estimated model may have as another management tool for decision-making that, in line with the sustainability objectives of different international and national institutions, allows for maintaining a balanced and lasting tourism development.

2. OBJECTIVES

– Demonstrate that the tourist development of La Gomera in the last thirty years, in terms of the number of tourists, has been successful.
– That this development has been due to the relationship between certain characteristics of its demand and the resources and attributes of the destination.
– Estimate a statistical model that demonstrates and quantifies this harmony through the levels of satisfaction that travelers obtain with their visit to the island.
– That the model and its results are useful as a management tool for decision-making and strategies that, in favor of sustainability, avoid and mitigate all types of negative impacts: economic, social and environmental, that the tourist activity itself produces in the destination.

4. RESULTS

Once the proposed analyses were carried out, the main result was, firstly, the significant growth that the island's tourist demand has experienced in the last thirty years, thus confirming its success as a tourist destination. And, secondly, with the data analysed from the Survey on Tourist Expenditure (2019), we observed some characteristics of the demand that are more oriented towards rest, tranquillity, outdoor activities and contact with nature, etc., which give it certain nuances or peculiarities compared to the global demand of the archipelago.

Once the "multinomial logit" model has been estimated, it provides us with information to understand what the response of tourists is based on or founded on, that is, their greater or lesser degree of satisfaction, based not only on the services and attributes of the destination but also on their expectations and certain aspects that are inherent to them: nationality, motivation, whether they are travelling with someone, their level of education, their income, etc.

Our dependent variable is multiclass, which arises as a result of the transformation we made of the question asked to tourists in the Survey on Tourist Expenditure (Istac, 2019). The question was intended to obtain information on the level of satisfaction obtained by tourists from their trip, for which an 11-point Likert scale was used as a response. In our

transformation we have eliminated those scores below 5 since none of the interviewees responded below this score, which is understood as dissatisfaction with the trip.

The results obtained correspond to the exploratory analysis carried out, multinomial logit model with the statistical package (SPSS-25), and after several tests including: variables inherent to the tourists themselves and their personal characteristics, variables for assessing attributes of the destination, variables related to the characteristics of the trip, variables related to the activities practiced, etc. Finally, a model was obtained, in which, in order to be more complete without losing validity as a whole, and to respond in some way to the needs of this work, not only the significant variables appear, but we have also decided to include some that were not statistically significant.

This final model includes some of the most representative aspects of the demand, such as: nationality, motivation for the trip, whether traveling as a couple, educational level, information channel used. It also includes some of those attributes of the destination to which tourists gave greater importance when making their trip, such as: the sea, the environment, authenticity, tranquility, climate, landscape, trails. Also appearing in our model are some of the activities most practiced by tourists during their visit: walking, the beach, gastronomy, nature, the pool.

Together, all of them explain with the resulting model the greater or lesser degree of satisfaction that the trip produces. The estimated model also includes, as significant explanatory variables, the possibility of both returning and recommending the destination, the responses to which were collected in the questionnaire using a Likert scale from zero to ten points.

Finally, we decided to introduce four variables that were not significant with the likelihood ratio test, but given the quantitative importance of their responses, the interest that they have in our opinion in the configuration of the model, and their contribution to the greater significance of the other variables, we decided to incorporate them. These are: a) The importance of the climate, to which 71.1 percent of those interviewed responded that it was very important when choosing the destination. b) The rating of the travel experience, which has to do with the expectations that travelers had before undertaking the visit. c) The number of nights that tourists spend on the island, which, as we have seen, is an important piece of information with respect to international tourism. d) And finally, the number of visits to the island, which, as we have also seen, is a relevant piece of information since the majority of respondents report previous visits.

All these variables contribute to explaining, to some extent, the probability of belonging to one of the three categories into which we have divided the dependent variable (satisfied, fairly satisfied and very satisfied), from which the group of "very satisfied" tourists was chosen as the reference group to estimate the model.

To assess the goodness of fit of our exploratory model, we analyzed the most commonly used statistics for this type of model. We started with Pearson's Chi-square test, whose significance is less than 0.05 and therefore there is not enough evidence to reject the model, in general and with the selected variables it fits well.

In addition, Pearson's goodness of fit and Deviance inform us that the values predicted by the model fit well with the observed values.

On the other hand, the pseudo R^2 of Cox and Snell, Nagelkerke and McFadden, whose values are: 0.482; 0.618 and 0.434 respectively, mean that the model explains around 50 percent of the total variation of the independent variables. And in accordance with the theory presented, they also reveal a good fit of the model.

And finally, we see that the predictive capacity of the global model is quite high, 81.3 percent. The same is true for the "satisfied" category of 100%, although we must take into account its low frequency, which only accounts for 2.6% of the responses. For the "quite satisfied" category, the prediction is 66.4%, with 35.1% of the responses. Finally, for the "very satisfied" category, the predictive capacity of the model is 88.9%, being the category that receives the most responses with 62.3% of the total respondents.

In this case, it can be said that the model presents a good fit since there is a high coincidence between observed and predicted values. In the estimation of the model, those tourists who responded to be "very satisfied" were chosen as the reference category. For the purpose of simplification, and due to the low frequency (2.6 percent) of tourists who responded to be "satisfied" with their trip, we will only analyze the group of tourists who are "quite satisfied" versus those who are "very satisfied" as a reference group. Since both represent 97.4% of the responses, they are the groups that have proven to be of interest for our analysis, being those that contribute to confirming the results obtained with both the previous quantitative and qualitative analysis.

As mentioned, those tourists who responded to be "very satisfied" were chosen as a reference. The variables that are not significant for the "quite satisfied" group were not considered. Of the 24 explanatory variables of the final model, those that best explain the level of satisfaction comparing both categories are the following 9: returning to the Canary Islands, recommending the Canary Islands, the number of nights, motivation, authenticity, gastronomy, tranquility, climate, experience. Although it is worth looking at the significance values and marginal percentages in relation to the importance of the trails and the educational level.

4. CONCLUSIONS

In conclusion, the importance of the estimated model as a whole lies in the fact that it informs us of a high percentage of tourists who are highly satisfied with their trip and, as we proposed, this helps us to explain the important harmony that exists between, on the one hand, who our tourists are, what they are like, and what they are looking for. And on the other, what the island offers them as a holiday destination. This important symbiosis between supply and demand in which both obtain mutual benefit and satisfaction is what contributes to explaining, as we have seen, the undoubted success of La Gomera as a tourist destination in the last thirty years. This information reported by the estimated model, which reflects all those aspects and strengths on which the island's tourist success is based, can constitute another reference or starting point for decision-making and the design of strategies that, implemented with a system of indicators such as those proposed in the "2022 Report on the Sustainability of Tourism in the Canary Islands" (Observatorio Turístico de Canarias, 2022), contribute to the sustainability of tourist activity on the island in line with the UN Sustainable Development Goals and the Canary Islands Agenda 2030.

It is about putting La Gomera on a path of balanced tourist development, anticipating environmental and overcrowding problems (Labandeira, X., León, C. J., and Vázquez, M. X., 201) - especially when after the COVID-19 pandemic, there is a greater trend in tourist demand that seeks contact with nature, rural tourism, outdoor experiences and the development of tourism in the Canary Islands. outdoors, etc. (UNWTO, 2023) -. Problems that would bring, among other negative effects, the consequent rejection of tourists by the resident population or, what may be more decisive, the "dissatisfaction" of travelers with their visit to the island. By exceeding the environmental, social and psychological carrying capacities (López-Bonilla and López-Bonilla, 2007). Just as it could be happening on the islands of Gran Canaria and Tenerife, as well as in other places in the country, where incipient mobilizations of discontent and rejection of tourism by the local population are already beginning to occur.