CONSUMER BEHAVIOUR IN RURAL TOURISM. CONJOINT ANALYSIS OF CHOICE ATTRIBUTES IN THE ITALIAN-SLOVENIAN CROSS-BOUNDARY AREA

JEL classification: Q01, Q26, Q56

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Abstract. Understanding consumer behaviour in rural tourism is a necessary condition for the successful diversification of any rural socio-economic system. This paper aims to analyse the consumer behaviour of tourists and residents in an Italian marginal rural area in order to verify the opportunities for sustainable local development through rural tourism activities.

First of all we give some conceptual consideration to the notion of rural tourism and the relationship with sustainable local development. Secondly, we examine the suitability of conjoint analysis for predicting consumer behaviour in relation to rural tourism. Finally, we report on a survey which we carried out in a rural area located in a region of North-Eastern Italy: the Natisone Valley. The results provided insights into how each type of characteristic of rural sites competes for the selection of destination. In particular, the most important attribute in selecting rural sites for tourism is the availability of information.

These results could provide useful insight for decision makers, in particular as regards local planning strategies. We discuss the results with emphasis on the implications for marketing of rural tourism. In fact, recommendations are made in view of the findings, specifically focusing on internal marketing strategies.

Keywords: consumer behaviour, rural tourism, conjoint analysis.

1. Introduction

Rural tourism offers opportunities for improving the socio-economic development of rural areas, in particular by emphasizing a bottom-up approach that involves local stakeholders and uses endogenous resources (Cawley and Gillmore, 2008; Kastenholz et al., 2012). Understanding consumer behaviour in rural tourism is necessary for the successful diversification of rural economic systems.

There are several studies about demand for rural tourism (Park and Yoon, 2009; Roberts and Hall, 2001). Nevertheless, studies on consumer behaviour are scarce. In general, they agree on the complexity of tourism experience (Kastenholz et al., 2012; Park and Yoon, 2009; Sharpley

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Consumer behaviour in rural tourism. Conjoint analysis of choice attributes in the Italian-Slovenian... Jepson, 2011; Uriely, 2005). In detail, demand for rural tourism seems to be influenced not only by demographic features but also by attitudes and motivational concepts.

How people make trade-offs among the various categories of rural destinations or assess their respective utilities still appears difficult to understand. In order to manage rural tourism destinations successfully, operators should provide consumers with alternatives more useful for competing by offering them the type of services they expect. As stated by Albaladejo and Díaz (2005), for strengthening rural tourism it is necessary to determine the tourist profile corresponding to different types of accommodation, existing or to be developed. In particular, purpose-designed products of rural tourism, tailored to the needs of consumers, should be identified in order to facilitate the formulation, promotion, and delivery of rural tourism products (Park and Yoon, 2009).

They would increase the probability of the specific rural destination being chosen. In fact, consumers select the alternative that maximizes their utility which is based upon the evaluation of services available and their corresponding quality.

In this study we have tried to give support to decisions by operators in rural tourism by examining consumer behaviour. The study presents findings of a research investigation aimed at understanding the factors that explain how consumers make choices between rural tourism destinations and analysing the characteristics considered in choosing a rural area. In particular, specific attention was paid to consumer behaviour in a cross-border rural area between the Friuli Venezia Giulia Region in Italy and Slovenia.

A conjoint analysis was carried out in order to predict consumer behaviour by considering the preferences of respondents for hypothetical alternative tourism destinations. We surveyed a sample of tourists.

The results of the study establish how each type of characteristic of the rural site competes for the selection of the destination.

The empirical results provide support for decision makers, in particular as regards local planning strategies. We discuss the results with an emphasis on the implications for marketing of rural tourism.

2. Literature Reviews

2.1 The concept of rural tourism

There is not a unique, clear and basic definition for rural tourism (Cawley and Gilmor, 2008; Lane, 1994; Sharpley and Roberts, 2004; Sznajder et al., 2009). Although a full review of the literature on rural tourism is beyond the scope of this paper, we carried out a wide-ranging examination of it that reveals the existence of numerous labels and definitions based on a variety of characteristics. Nevertheless, we can take, as a definition of rural tourism, a tourist activity developed in rural areas, where the main motivation of tourists is the contact with a rural way of life and/or landscape and environmental resources (Gannon, 1994; Lane, 1994; Sznajder et al., 2009).

In spite of the strong expansion of rural tourism in most Western countries, there is an absence of systematic sources of data regarding its diffusion, but it must be pointed out that there are several constraints on collecting accurate data: for example, neither the World Tourism Organization (WTO) nor OECD are able to use appropriate measures to quantify the diffusion of rural tourism.
It is should also be noted that there are many disparities between national definitions and
descriptions of this type of tourism: for example, on one hand you can consider only farm and
nature tourism, on the other, you can include many economic activities located outside of
urban areas. It must also be kept in mind that many rural tourists are excursionists, rather than
tourists making overnight stays. Moreover rural tourism is characterized by great diversity and
fragmentation: in fact there are many and varied private enterprises and, in some cases, also
public initiatives.

It seems, nevertheless, to be important to study rural tourism as it generates several benefits
first of all for the host community, i.e. creation of new businesses especially in the service sec-
tor, improvement of local infrastructures and public services, etc.; secondly, in favour of local
countryside capital (Garrod *et al.*, 2006), in particular landscape preservation and environmental
resource conservation, and last but not least it is of benefit to the tourist by improving his/her
physical and mental well-being or cultural exchange (San Martin and Herrero, 2012; Sharpley
and Jepson, 2011).

Due to these benefits there is a consensus about some key objectives in developing rural tour-
ism (Roberts and Hall, 2001). The first regards the economic field: development of rural tourism
could be considered as a way of helping to revitalize struggling rural areas. It could increase jobs,
thus stimulating socio-economic growth and arresting rural depopulation and degradation of the
local socio-economic system. It could also improve the standard of living of the local population
as it offers an opportunity for income generation and job creation. Rural tourism is therefore able
to help the provision of additional economic activity, but it could also replace traditional rural
economic activities now in decline, like agriculture.

The second key objective is the protection of landscape and environmental resources. In
fact, these resources are of strategic importance to rural tourism. To conserve these resources it
is consequently necessary to create appropriate legislation, and also a balanced approach to plan-
ing. Moreover the adoption of the best practice approach to running rural tourism enterprises
is fundamental in order to ensure that the environment will be protected.

The third strategic objective regards the legal framework. The provision of appropriate legis-
lation and rules is a necessary pre-condition for obtaining successful rural tourism development.
Moreover the support and involvement of a number of institutional decision makers seem to
be fundamental.

Another very important key objective regards the quality of life and is linked to the first key
objective we discussed. As previously stated, the presence of a flow of tourists into rural areas can
help the maintenance or the improvement of existing services, thereby contributing to raising the
quality of life of the local socio-economic system.

Last but not least, the conservation and protection of local culture and traditions are also key
objectives as they can play a significant role in ensuring satisfaction of the rural tourist.

Rural tourism includes several activities conducted in rural areas (Hall *et al.*, 2003; INEA,
2001; Marangon, 2008; Yun, 2009). One of these is agritourism, which is a style of vacation
that is normally spent on a farm. Consequently it is possible to create a relationship between
rural tourism and agritourism (Phillip *et al.*, 2010): Fig. 1 shows firstly that rural tourism com-
prises agritourism, secondly, it is a specific subset of tourism in rural areas as a broader concept,
that could be also mass tourism and alternative tourism (European Commission, 2010; WTO,
2010; WTTC, 2010).
Local government investment in rural tourism and private stakeholders’ projects can attract tourists and increase local socioeconomic development (Smith et al., 2010). An increasing number of institutional and private efforts are trying to create or improve rural tourism attractions in order to strengthen development in rural areas, in particular as regards marginal rural areas. In fact, many undeveloped and marginal countries have detected it as a chance for socioeconomic prosperity.

A necessary condition for the successful development of tourism activity is to understand consumers’ behaviour. It seems necessary to understand this profile also as regard rural tourism.

3. Methods

3.1 Conjoint analysis

Several descriptive analyses have been conducted on rural tourism (Asciuto et al., 2013; Cawley and Gillmor, 2008; Ohe, 2002); nevertheless a more generalized framework is required in order to allow exploration of consumer behaviour in greater detail and the creation of useful rural tourism services in order to compete more effectively.

Conjoint analysis is a statistical technique applied in market research to determine how people value different features composing an individual product or service. This technique originated in mathematical psychology and was developed by P.E. Green (Green and Srinivasan, 1978). Other prominent conjoint analysis researchers include Richard Johnson, who developed the Adaptive Conjoint Analysis technique in the 1980s, and Jordan Louviere.

Conjoint analysis allows the researcher to measure consumers’ preferences for products or services in a direct, controlled manner. This is possible by measuring consumers’ responses when facing hypothetical products or services (Dellaert et al., 1998). Conjoint analysis is a multivariate
Consumer behaviour in rural tourism. Conjoint analysis of choice attributes in the Italian-Slovenian technique. It has been applied to understand how respondents develop preferences for products or services, including tourist services (Thyne et al., 2006). In fact, it helps in estimating and predicting consumer’s preferences given a set of alternatives that are specified in terms of levels of different attributes (Green and Srinivasan, 1978 and 1990; Hair et al., 1998). While traditional techniques used to assess consumer’s preferences tend to consider each attribute independently, conjoint analysis can help to understand how a consumer trades off one attribute against another. Consumers do not consider each product attribute independently when formulating a choice decision. They evaluate the total value of a good/service (tourist service) by combining the separate amounts of utility for each attribute level. Conjoint analysis gives information on how consumers are likely to make a buying decision. Therefore, it is possible to understand how respondents develop their preferences.

Conjoint analysis determines what combination of a limited number of product attributes is most important in respondent choice or consumer decision making (Levy, 1995).

Conjoint analysis asks the consumers to choose among a controlled set of potential products or services. By analyzing the respondent’s preferences among these products, the implicit importance of a specific attribute of the product or service can be identified. Conjoint analysis also points out the tradeoffs that respondents make during the decision-making process and the price they are willing to pay for it (Toombs and Bailey, 1995). Conjoint analysis assumes that the choice between the alternatives is driven by the respondent’s utility. In detail, the respondent’s indirect utility is broken down into two components. While the first component is deterministic, and is a function of the attributes of alternatives, the second one is an error term and regards the characteristics of the respondents and a set of unknown parameters.

The utility of an attribute is a numerical expression of the value the respondents give to an attribute level and represents the relative value of the attribute (low utility means less value, while high utility indicates more value).

It is also possible to quantify the importance of an attribute. In fact, it can be calculated by analyzing the difference between the lowest and the highest utilities inside the range of the levels of attributes.

Conjoint analysis is very useful in identifying consumer segmentation as it groups respondents with similar preferences.

The implicit valuations (utilities or part-worths) can be used to create market models that estimate market share, revenue and even profitability of new products or services.

4. Materials

4.1 Analysis of rural tourists’ behaviour in a cross-border region

To investigate the opportunities for developing the rural socio-economic system through rural tourism, we analysed consumer behaviour. The aim of our study was to collect preferences about the factors that can increase rural tourism. In detail, to identify the preferences, we carried out a survey in a rural area located in a cross-border region located between the North-Eastern part of Italy, the Friuli Venezia Giulia region, and Slovenia. In particular we chose a marginal rural area, the Natisone Valley, in order to help the local decision making process in countering depopulation and the decline of this area.
In Table 1 the decline in local population and the low value of density of population in this rural area are evident.

To understand consumer behavior and tourists’ preferences better, we used the conjoint experiment. The conjoint experiment was designed and administered through a questionnaire by using a convenience sample. We conducted 400 interviews in the area (200 pilgrims to a local holy place and 200 tourists to a local Lombard town). The questionnaires were collected between August 2009 and January 2010: the choice of this period is based on an expert opinion that it is important to ensure that responses were based on a full range of experience at different levels of tourism. This ensures that a wide range of opinions were captured, deriving from respondents with different experience. The conjoint experiment was included in a larger questionnaire which was also designed to measure further aspects of the social impacts of rural tourism. The conjoint experiment was pre-tested to determine the most efficient format. The questionnaire also included a general demographic section.

A set of tours in the rural cross-border area considered were shown to respondents. We chose four types of rural destination of the Natisone Valley. The first one is Matajur, a mountain 1642 meter high in the Julian Alps on the border between Slovenia and Italy. The second is the cave of San Giovanni d’Antro, which is an original cave church. The third concerned votive chapels that are widely distributed over the territories of the Natisone Valleys. Typically, they date from the 15th and 16th Centuries and were mainly erected in isolated locations away from human settlements, where they were more secure from depredation. Last but not least we chose the “Villaggio degli orsi” (Bears’ Village) visitors centre located in Stupizza village, where one can learn about the bear and the other carnivorous animals (lynx, wolf), which inhabit the wildest and most evocative areas of the Friuli Venezia Giulia region and Slovenia.

The respondents were asked to select and rank the tours they were shown. All examples were similar enough to each other so that consumers would see them as close substitutes, but dissimilar enough clearly to determine the respondent’s preference.

4.2. The selection of attributes

As stated, this study aims to identify the choice attributes of general tourists, therefore we selected the constituent attributes of previous tours using a questionnaire based on literature
reviews (Green and Srinivasan, 1990). Generally, three to seven attributes are suggested (Green and Srinivasan, 1990). We selected four attributes for our study: 1) meal; 2) information; 3) transport; 4) price.

4.3. The selection of levels
The sets of tours were created from a combination of levels of the attributes. The levels are the differentiated representation of an attribute. Meal, in this case, was presented with two levels: as “yes”, i.e. presence of meal, or “no”, i.e. no meal., Information was presented as “guided tour”, i.e. the presence of an expert who describes the context, or “brochure”, i.e. the tourist is invited to read some information without an opportunity of putting questions. Transport was presented as “bus”, or “car”. Price was presented as “€ 5”, or “€ 30” (Tab. 2).

| Tab. 2 - The attributes and levels included in the factorial design of the conjoint analysis |
|----------------------------------|----------------------------------|
| **Tour Attributes**              | **Levels**                       |
| MEAL                             | yes; no                         |
| INFORMATION                      | guided tour; brochure           |
| TRANSPORT                        | bus; car                        |
| PRICE                            | € 5; € 30                       |

4.4. Full factorial design
We were able to consider all the number of combinations of attributes and levels (profiles), i.e. a full factorial design, to determine the consumer preferences. In full factorial design the ideal profile can be designed where the correlation between parameters becomes 0. With the full profile method, the number of cases would be 16 (2×2×2×2).

We constructed 8 choice sets. Each choice set consists of 2 alternatives (Fig. 2). We also included the “status quo” option (or “do nothing” option), i.e. pay nothing and get nothing, so the experiment could be used to compute the value (Willingness To Pay - WTP) of each alternative. In fact, by designing the study in an appropriate manner it is possible to use statistical analysis to identify the value of each attribute of the tour in driving the customer’s decision. Nevertheless in this paper we do not describe these results.

<table>
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<th>Fig. 2 - The choice set</th>
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<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td>MEAL</td>
</tr>
<tr>
<td>INFORMATION</td>
</tr>
<tr>
<td>TRANSPORT</td>
</tr>
<tr>
<td>PRICE (€)</td>
</tr>
<tr>
<td>Please indicate your preference (check only one option)</td>
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</table>

In order to evaluate the preference of respondents we decided to adopt a scoring method using Likert’s scale. As this method tends to lead to the centralization of responses and consequently to reduce the power of discrimination, the interviewers had to guide the respondents to produce
a wider range of responses. Specifically, a 10-point Likert’s scale was used for the measurement of respondent’s preference of each profile, where 1 point refers to the lowest preference and 10 points the highest (Goossen & Langers, 2000; Yun & Im, 2006). This scaling does not have a mean point, unlike the widely used 5-point or 7-point scales, but we chose 10-point Likert’s scale as it is easier to convert it into percentages. In addition, more reliable data can be captured by collecting more variable values compared with other scales.

The range of the utility values for each factor provides a measure of its importance. We know that factors with greater utility ranges play a more significant role than those with smaller ranges. Conjoint utilities are scaled to an arbitrary additive constant within each attribute and are interval data. The arbitrary additive constant, origin of the scaling within each attribute, results from dummy coding in the design matrix. However, if we add a constant to the part-worths for all levels of an attribute or to all attribute levels in the study, it does not change our interpretation of the results. When using a specific kind of dummy coding called effects coding, utilities are scaled to sum to zero within each attribute.

5. Results and discussion

5.1. General statistics of respondents
General statistics about the respondents show that females predominated (51%) among respondents and that the age group 30-59 years prevails (52.2%), while 26.0% were under 30 years of age (Tab. 3).

Data on education indicated that 73.5% respondents had at least a high school education.

<table>
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<tr>
<th>Characteristic</th>
<th>%</th>
<th>Characteristic</th>
<th>%</th>
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<tbody>
<tr>
<td>Male</td>
<td>49.0</td>
<td>Young (&lt; 30)</td>
<td>26.0</td>
</tr>
<tr>
<td>Female</td>
<td>51.0</td>
<td>Adult (30-59)</td>
<td>52.2</td>
</tr>
<tr>
<td>Primary</td>
<td>3.0</td>
<td>Senior (60 and +)</td>
<td>21.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>21.8</td>
<td>Local (FVG)</td>
<td>73.5</td>
</tr>
<tr>
<td>High</td>
<td>49.5</td>
<td>Other (Italy)</td>
<td>26.5</td>
</tr>
<tr>
<td>Graduate</td>
<td>25.7</td>
<td>Young (&lt; 30)</td>
<td>26.0</td>
</tr>
</tbody>
</table>

In order to illustrate certain characteristics of consumers we analyzed their behaviour by age (Tab. 4). The percentages describe the number of respondents within their category.

We clarify that the scores greater than or equal to 8 (in a scale 1-10) are considered as “excellent”.
The respondents indicated Matajur mountain as their most preferred destination (70% excellent scores). Also the cave of San Giovanni d’Antro obtained a good percentage of preferences (68%).

As regards education, we noticed that the higher the level of education, the less the votive chapels were preferred (Tab. 5).

Moreover the higher the education level, the greater was the preference in favour of Bear Village. It is important to note that the great part of interviewees over 60 years old had attended only primary school and most of the respondents under 30 were graduates.

Gender does not influence the preferences.
5.2. Importance and utility

We used SPSS to analyse the data we collected. The utility analysis on the entire responses indicated very high internal validity of the model. In fact it resulted in Pearson’s R index of 0.991 and Kendall’s tau index of 0.933. These indices provide measures of the correlation between the observed and estimated preferences and represent a correlation between the preference of each profile and deduced utility value. Since higher correlation can be interpreted as a higher explanatory power of deduced utility, it is useful for evaluating the internal validity of the model. The average preference of the concerned profile was represented by the value of the constant, which was uniformly distributed close to 7.3.

The importance of each attribute was between 21-27% (Figs. 3 and 4). These results show that consumers who intend to visit rural sites consider all attributes important during the choice process. However, the meal was shown to have less importance in the choice of rural site. This is because, unlike ordinary tourist’s behavior, those who intend to visit rural sites aim to enjoy a unique experience that cannot be similar to those available in urban settings.

<table>
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<tr>
<th>SUBFILE SUMMARY</th>
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<tr>
<td>Average Importance</td>
</tr>
<tr>
<td>21.14</td>
</tr>
<tr>
<td>27.86</td>
</tr>
<tr>
<td>26.65</td>
</tr>
<tr>
<td>24.34</td>
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<tr>
<td>B = -.2106</td>
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Source: own calculation

\[
\text{Pearson's R} = 0.991 \quad \text{Significance} = 0.0000
\]

\[
\text{Kendall's tau} = 0.933 \quad \text{Significance} = 0.0000
\]
The presence of a meal ("0") has a positive utility value, while the absence received a negative utility value. We clarify that this does not mean that the absence was unattractive. In fact, the absence may have been acceptable to all respondents. But, all being equal, the presence is better.

The utilities are scaled to sum to zero within each attribute, so the absence must have a negative utility value. The guided tour ("0") has a positive value. The auto ("1") received positive utility value too. It can be seen that with a higher price we have a negative utility value.

The respondents who intend to visit rural sites consider information and transport important attributes.

6. Conclusions

The key contribution of this paper is an insight into consumer behavior in rural tourism. In particular, the paper has provided insight into a research area underdeveloped, as regards tourism i.e. tourist behavior in a rural marginal area (Marangon et al., 2008). Often, in this type of zone, tourism could be a strategic activity in favour of local socio-economic development. Nevertheless, the supply of tourism activities is not preceded by an analysis of consumer behaviour/demand. It is important to identify tourist needs in order to create the best supply of rural tourism. In order to improve this knowledge, the present study seems to provide useful information through the analysis of attributes determining choice from the consumers’ perspective for the selection of rural tourism sites, as part of the rural development planning process.
In detail, through conjoint analysis it was possible to detect those characteristics or preferences of the tourist facilities offered that will be most influential in the choice of one type of rural tourism experience as opposed to another.

The results of the analysis revealed a high level of importance for information facilities and transport. It was also noticed that the presence of a meal and the cost were considered less important.

As marketing strategies should identify what the potential tourist needs and then provide it; according to the results shown in this paper, information facilities and programs should be developed or increased.

In order to improve the provision of information, cross-border cooperation also seems to be important, with an integrated and territorial approach for increasing participation and including support for the creation of equitable, sustainable, and integrated rural tourism (Cawley and Gillmor, 2008; Saxena and Ilbery, 2008). It is necessary to enable cooperation and to form cohesive cross-border, nature-based tourism business partnerships.

Having drawn these conclusions, it is also important to consider some of the limitations of the research. Firstly, we were not able to use conjoint analysis for valuation purposes. To overcome this limit we are still processing the data in order to compute the value of each alternative. Secondly, relating to the notion of integration in favour of rural cross-border tourism, further research is needed to obtain a deeper understanding of the mechanisms that help to improve tourism activities. These will be our next steps.

**REFERENCES**


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