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Domestic demand for tourism in rural areas: Insights from summer stays in three French regions

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Tourism has the potential to make a major contribution to the development of rural areas. However, empirical evidence suggests that its economic impact is limited, because rural visitors are thought to engage in few recreational activities and are seen as low spenders. This study gives new insights into the domestic demand in areas of France described as "rural", with data extracted from the national database provided by the French "tourism demand survey". The results of the "activity-based segmentation" of visitors' stays in three rural regions show that during the summer season, visits to friends or relatives, which involve little expenditure and no specific activities, continue to take place. However, more expensive stays are the most common. They involve activities aimed at experiencing the outdoors or enjoying local sights, based on natural and cultural amenities that are mainly located in regional natural parks. The main forms of accommodation are campsites and rural cottages. Gastronomic tourism has also emerged as an activity that attracts higher spending visitors. These findings are discussed in relation to the results of segmentation studies in other European countries. Their academic and management implications also are presented.

1. Introduction

The pursuit of sustainable development in rural regions has revealed that tourism is an important area of policy action which complements traditional, agriculture-oriented rural policies (Fleischer & Felsenstein, 2000; OECD, 1999; Yagüe Perales, 2002). However, the economic impact of growth in rural tourism remains open to debate (Canoves, Villarino, Priestley, &Blanco, 2004; Dissart, Aubert, & Truchet, 2009; Sharpley, 2002). Optimistic views of the potential for rural tourism development are usually based on the assumption that rural areas are attractive to tourists because of their contrast with the urban world (Lane, 2009). However, rural tourism is primarily a domestic activity, visits to friends or relatives, which often require low spending, account for the majority of trips. Several market segmentation studies in developed countries (Davidson, 1995; Park & Yoon, 2009; Ryan, Hughes, & Chirgwin, 2000; Scottish Tourist Board, 1997; Sharpley, 1996) highlight the relative lack of activities undertaken by visitors to rural areas, who are often happy to relax and enjoy their surroundings. Yagüe Perales (2002) describes this type of tourism as a "homecoming", which can be traced back to the beginning of the rural exodus. Detecting new behaviours and consumption patterns of tourists in rural regions have been the focus of recent studies (Frochot, 2005; Pesonen, 2012; Rid, Ezeuduji, & Pr€obstl-Haider, 2014, to cite a few). Their empirical results distinguish new types of tourists who make far greater and more profitable use of the landscape and associated environmental, cultural, and architectural resources. Development of rural tourism could therefore be achieved through a better valorisation of the natural and cultural resources specific to a rural destination. However, simply having these amenities available is not enough e they must be integrated into an economic process that generates added value (Terluin, 2003). Cities and towns usually have more to offer in terms of products and services. These products and services are also more expensive than in rural settings (Thrane & Farstad, 2011). Rural destinations therefore have to invest in facilities and services (accommodation, infrastructures, etc.) to complement natural and cultural amenities (Fleischer & Tchetchik, 2005) to meet the needs and expectations of consumers, while the availability of tourism infrastructure does not automatically lead to development of rural areas (Dissart et al., 2009). To sum up, the spatial distribution of tourist demand results from the heterogeneous nature of consumer preferences, which itself is a product of destination competitiveness (Dwyer & Kim, 2003; Papatheodorou, 2001).

In order that informed public and private investment decisions can be made, there needs to be research into concepts and methodologies allowing integrated studies of supply processes and consumer preferences (Dissart & Marcouiller, 2012; Rosentraub & Joo, 2009). Market segmentation techniques are a powerful tool to identify groups of tourists with similar tastes and preferences (Wedel & Kamakura, 1998). This information can then be used to better adjust supply to demand and to outline supply strategies (Dolnicar, 2008). Although market segmentation of rural tourists has benefited from fifteen years of empirical research (since the early study of Kastenholz, Davis, & Paul, 1999), existing literature is rather limited. Very few previous studies in this field have made use of an activity based approach. One exception is Pesonen (2013). No study has yet been carried out which focuses on the different segments of domestic tourists' behaviour in relation to the competitiveness of rural areas, and the activities, services, and products on offer in those areas. Such a study would be useful to both policy makers and private sector stakeholders, helping them to efficiently target their investments.

The purpose of this paper is to address the appeal of rural areas for domestic tourism in France e one of the world's top tourist destinations. Analysing domestic tourism activities in the country can provide useful newinsights. In this study, an in-depth statistical analysis of tourists' behaviour is conducted, with the aims of: i) providing a very detailed statistical portrait of tourism in rural destinations and ii) identifying and profiling different activity-based rural tourism segments. The originality of the study lies in use of a regional comparative approach to identify rural tourism segments and test the validity of the results when clusters are obtained with data from very distinct geographical locations regarding natural and cultural attractiveness, and condition for specific tourist activities.

Detailed data extracted from the French "Tourism demand survey" forms the basis for a behavioural segmentation (Dolnicar, 2008) of rural visitors. This extraction concerns summer stays in 2003, 2005 and 2007 in three French regions: Aquitaine, Auvergne and Rh^one-Alpes. At first glance, they appear to play host to very different types of rural tourism. In Aquitaine, where there are a high proportion of rural areas, tourism is centred on the coast. Auvergne, which boasts many outstanding protected areas, still receives relatively small numbers of tourists. The appeal of the Rhône-Alpes region to tourists is well-established, yet its attractiveness is threatened by the urban sprawl. However, the results of the activity-based segmentation study on tourist stays in the three regions reveal similarities in the demand segments and tourist profiles observed for their rural areas.

This paper makes three main contributions to the recent literature on rural tourism. It is the first to detail a segmentation analysis of domestic tourists in France. Secondly, it builds its empirical investigation on secondary data from national surveys, in contrast with the most common approach, which consists of carrying out research into a single rural destination using researcher administered surveys. Finally, by applying an activity-based segmentation approach to tourist stays in rural areas, this study contributes to the emerging application of activity segmentation of rural tourism. Before presenting the findings in more detail in Section 4 and discussing these in Section 5, Section 2 will explain the notion of rural tourism demand adopted in the present study and Section 3 will describe the methodology.

2. Rural tourism demand analysis: a conceptual framework

2.1. Choosing the stay as an indicator of tourism demand

The conceptualisation of rural tourism remains problematic because the associated delimitation is very complicated. The first difficulty is to define the term "tourism". Because of the many types of travel that exist and the different reasons for these trips, the question of what is considered tourism and what is not is open to debate (Demen-Meyer, 2005). To measure tourism in terms of official statistics, different countries initially sought to distinguish "tourists" from other travellers. However, in doing so they failed to select homogeneous criteria, in spite of regular changes to their data collection systems. Because of this, databases of tourism statistics in France were long developed according to the distinction between holidays and other trips. Since 1994, with the implementation of the "tourism demand survey", the notion of a "stay" has been used. A stay refers to the place(s) of residence during a trip (a departure and return home with at least one night spent away) made for non-professional purposes. Since the present analysis is derived from this database, it adopts this notion.

Although some academic studies that conduct segment analysis of domestic tourism in rural regions with national survey data do exist, it is important to note that the length of stay is a common measurement of tourism demand in literature relating to tourism economics. This is because this variable is the most closely related to visitor spending (Downward & Lumsdon, 2000; GarínMu-noz, 2007; Garín-Mu-noz, Luís, & Montero, 2007) and the choice of activities by nature-based tourists (Mehmetoglu, 2007). Therefore, rural stays may also reflect the preference of visitors for the different types of existing activities and facilities in a particular rural destination and their spending behaviours. This study used the stay as the appropriate notion to investigate and profile the different segments of tourism demand for rural regions, in terms of their competitiveness in providing tourism activities, products and services.

2.2. Developing a spatial delimitation of rural destinations

The second difficulty concerns the definition of "rural". Rural is not an established concept, and remains a default category. Indeed, whatever the method used to define it, rural refers to anything that is not urban. The rural world thus reveals different dimensions - environmental (nature, low population density), economic (small scale units, the role of agriculture), and historical (traditions, authenticity) e that collectively represent the antithesis of today's urban lifestyles (Sharpley, 1996). The wide range of tourism practices it encompasses e farm tourism, ecotourism, green tourism, nature tourism, etc. e make its exact definition difficult to pin down. Ultimately, and despite clarification by some authors such as Lane (1994) or Getz and Page (1997), the contours of "rural tourism" remain unclear. The notion of "tourism in rural areas" was put forward by Frochot (2005) to cover all tourist practices that can be observed in the countryside. In this study, thanks to an abundance of available data, there is also potential for a spatial delimitation of rural tourism. Thus, the study concerned stays of at least one night in areas geographically defined as rural.

2.3. Implementing an activity-based segmentation approach to rural tourism demand

The appropriate criteria for segmenting tourists are not self evident. Some studies use socio-demographic variables such as age, gender, and physical aptitudes (Dolnicar, 2004). However, Roberts and Hall (2001) argue that socio-demographic characteristics have low predictive validity for screening rural visitor segments. Other studies refer to a well-grounded theory of tourist behaviour and follow an "a posteriori" segmentation analysis (Mazanec, 2000). Segmentation studies could then implement the psychographic approach using variables such as motivations, attitudes and perceptions, or simply the benefits tourists expect from their trip. Another

approach, called the behavioural approach, uses variables such as activities undertaken, frequency of visits, or amount of expenditure. Although activity choice is considered as one of the determinants of tourism spending and therefore as a potential means of stimulating the development of local economies (Fredman, 2008; Limaa, Eus ebioa, & Kastenholza, 2012), activity based approach is rarely adopted in the rural tourism literature (Pesonen, 2013). This contrasts with the literature on nature-based tourism and cultural tourism segmentation studies (McKercher, Ho, Cros, & So-Ming, 2002; Mehmetoglu, 2007 Sung, Morrison, & O'Leary, 2001). This study also uses activity categories to segment rural tourists. Almost all research studies belonging to the behavioural approach to rural tourism are based on ad-hoc surveys and concern a single site (see particularly Frochot, 2005; Molera & Pilar Albaladejo, 2007; Yagüe Perales, 2002). Here, a national database is available, making it possible to test the robustness of the visitor segments within different regional contexts. 3. Material and methods 3.1. Data source The data used for this study were obtained from the "tourism demand survey" conducted by TNS Sofres on behalf of the French Directorate of Tourism. This postal survey involves a panel of 20,000 individuals, representative of the French population aged 15 and over according to the following criteria: age, gender, occupation, socio-professional category, and region of residence. The survey then observes the distribution of domestic tourism by areas visited. It does not include the stays of foreign visitors, even though international tourism is responsible for France's position as the world's leading tourist destination. The survey records trip data according to the place of stay¹. The distinction between tourism in rural areas and tourism in urban areas refers to this place of stay rather than to the places visited. The ruraleurban typology (ZAUER) developed by the French National Institute of Statistics and Economic Studies (INSEE)² was used to determine whether a particular destination can be considered as urban or rural. This detailed survey was used to conduct a segmentation study.

Each respondent indicates whether or not he or she has travelled (departure and return home with at least one night spent away) over the course of the previous month, and describes each trip. The data collection and measurement process then involves a self-administered questionnaire, which is used to obtain:

- Socio-demographic profile of the respondent (14 descriptors: age, gender, occupation, socio-professional category, education level, etc.), and his or her household (44 variables concerning household composition, place of residence, type of housing, income, etc.).
- A long list of variables that reflect the characteristics of each trip declared (60 descriptors: start and end date, reason for travel, type of accommodation, means of transport, recreational activities, etc.). Activities are described in detail: 36 types of activities are distinguished and up to three activities can be listed in order of importance.

The survey covers all regional destinations in France. However, as mentioned in the introduction, in order to obtain a deeper understanding of tourist practices in rural areas, stays were selected in three regions (Rhône-Alpes, Aquitaine and Auvergne) that vary greatly in terms of rural tourism. In Rhône-Alpes, 41.6% of municipalities are rural, compared with 65.6% in Aquitaine, and 68.1% in Auvergne. Observations were extracted from the TNS-Sofres database corresponding to non-professional travel for three years (2003, 2005 and 2007). Analysis was confined to the summer season (from 1 April to 30 September), considering that this period covers the majority of stays in the year. In total, there were 5525 individual stays for Aquitaine, 2586 for Auvergne and 7530 for Rhône-Alpes. Fewer than half of summer stays concern rural areas in two regions: 45% of the observations in Aquitaine, and 40% in Rhône-Alpes. In Auvergne, 55% of stays take place in rural areas, thus highlighting the predominance of rural areas in this region.

In 2003, the respondents who stayed in Rhône-Alpes were invited to fill in an additional questionnaire listing their party's expenditure during their stay. The total expenditure is broken down into consumer expenditure categories such as transport, accommodation, food, and recreational activities. After matching with the "tourism demand survey" data for the year 2003 and eliminating incomplete or inconsistent observations, data for just under half of all stays (1296 out of a total of 2668) recorded for Rhône-Alpes in that year were usable. This second database enabled the inclusion of spending behaviour analysis in the study.

3.2. Statistical methods

The main objective of this study was to identify tourists' practices rather than to attempt to determine the influence of tourist characteristics on their behaviour (activities, accommodation, and length of stay) at the destination. Because of this, tourism segments were based on the recreational activities undertaken by visitors during their stay (active variables) according to socio-demographic and travel-specific characteristics (illustrative variables) for the three regions studied.

The "factor-cluster segmentation" approach is the typical way of dealing with the problem of large numbers of variables, in order to construct stay segments. The first stage of this process uses factor analysis to summarise

¹ For each trip made, the survey only mentions the two places of stay in which most nights are spent. In short, some parts of the trips are left out of the survey. If the trip is a tour, only the department or the region is indicated, meaning that the rural/urban classification unavailable. Data concerning tours were therefore not used.

² 2 Urban zone categories correspond to "a set of municipalities, all in one block and without enclaves (...), and by rural districts or urban units (outer-urban crown) among which at least 40% of the resident population having an employment works in the pole or in the municipalities attracted by it" (Armand, 2006).

the information contained in the full set of variables into a small number of subsets or factors. The second stage uses the factor scores to conduct a cluster analysis. The standard multiple correspondence analysis (MCA)was applied, since activities are described by categorical variables. An ascending hierarchical classification (AHC) was then applied to the first factors identified through the MCA by minimising inter-group similarity, while maximising intra-group similarity with respect to the socio-demographic variables of the respondents and their stay characteristics.

The behavioural approach developed constructs segments based on recreational activities, in other words, the variables that are assumed to have the most influence on the destination choice process (Dolnicar & Leisch, 2003). However, to ascertain that the segments obtained with the sample observations were good predictors of the travel intentions of the entire population, a multiple discriminant analysis was conducted to test the validity of the classification obtained. The technique chosen was that of treebased segmentation (CART analysis), a method that progressively divides the sample in order to obtain a classification tree. More specifically, the classification and regression tree method (Breiman, Friedman, Olshen, & Stone, 1984; Dolnicar, Grabler, Grün, & Kulnig, 2011) was used here to build binary decision trees with high predictive capabilities. This method enabled us to set out as clearly as possible the "partitioning process" and to empirically predict the assignment of new individuals to one of the tourists groups.

With the database available, there were two options for classifying stays in rural areas: applying the factor analysis only to rural stay observations, or applying it to all of the observations, then extracting the corresponding segments for the rural destinations. The decision was taken to implement both options simultaneously and to compare the two partitions obtained. This comparison was made using the Rand index (Hubert & Phipps, 1985). This index tests the robustness of the classifications obtained with each option and enabled us to choose wisely among the partitions generated. It checks that two elements in the same cluster of a first partition are also in the same cluster of the second partition³. This index measures the degree of inclusion of the partition obtained with the rural observations dataset in the partition including all observations.

4. Results

4.1. General features of rural tourism

This section provides a description of stays and visitors in rural destinations for all the three regions under studies and discusses the results in comparison with the statistical portrait of tourism in urban destinations. Considering the numbers of stays presented in Table 1, the countryside primarily attracts visitors from urban areas (albeit to a lesser extent in Auvergne), and these visitors tend to have a higher education level and come from middle-class backgrounds. Their household income level is rarely below 1000 euros per month per consumption unit (whereas in 2006, 30% of all French people had a standard of living lower than this threshold). Visitors to rural areas travel less than 300 km to get to their place of stay (a little more if they stay in Aquitaine). Tourism is much more intra-regional in Rh^one-Alpes than it is Auvergne and Aquitaine. All age groups are concerned. Trips to rural areas mostly involve families with children in Rh^one-Alpes, whereas in Aquitaine and Auvergne, visitors are mainly single adults or couples. Taking into consideration all of these socio-demographic characteristics, the profiles of rural visitors do not differ from those of tourists who stay in urban areas (as it can be seen in the Appendix 1-Table 1).

³ The Rand index has a value between 0 and 1, with 0 indicating that the two data clusters do not agree on any pair of points and 1 indicating that the data clusters are exactly the same.

Table 1
Socio-demographic characteristics of respondents visiting rural areas in summer season (as % of total observations).

	Aquitaine $n = 2480$	Auvergne $n = 1244$	Rhône-Alpes $n = 2998$
Age groups:			
- Under 35 years	26.9	21.5	22.1
- 35-49 years	26.9	27	29.3
- 50-64 years	24.2	25.8	24.9
- 65 years and over	22.1	25.8	23.6
Education level:			
- Primary and middle school	2.4	29	31.9
- High school and baccalauréat diploma	24.6	27.9	25.2
- Beyond baccalauré at	42.9	43.1	42.9
Monthly household income per consur	nption unit	:	
- Less than 1000 €	16.0	17.6	14.6
- 1000−1499 €	33.0	33.3	33
- 1500-1999 €	25.3	20.9	24.1
- 2000 € or more	25.7	28.1	28.3
Municipality of residence:			
- Urban or peri-urban	84.4	75.6	87.9
- Rural	15.6	24.4	12.1
Proportion of visitors from the same region	23.9	12.6	37.7

Source: "tourism demand survey" for the years 2003, 2005 and 2007.

Looking at Table 2, rural areas would seem to be the preferred destination for short (three nights or less) or very long stays (at least one week). A large proportion of these stays almost certainly generate low expenditure on accommodation, since the main purpose of the stay is to visit family, friends, or second homes. Consequently, visitors staying in rented accommodation are in the minority. Stays at sites providing limited services, such as holiday cottages or campsites, account for around a quarter of trips. Stays in hotels or bed and breakfast accommodation are in the minority (8e10%). However, in comparison with stays in urban areas (see Appendix 1-Table 2), those in rural areas more often involve rented accommodation, even if hotels and bed and breakfasts are used less, and second homes play a greater part in rural areas.

Table 2 Rural stay characteristics.

	Aquitaine $n = 2480$	Auvergne $n = 1244$	Rhône-Alpes n = 2998
Tourist group:			
- Single adult	22.1	27	11.1
- Adult couple	39.6	40	30.7
- Group of adults	9.0	13	20
- Adult(s) with children	29.4	21	38.2
Number of nights:			
- 1-3	33	41.4	41
- 4-6	18.9	20	17.7
- 7 or more	48.1	38.6	41.3
Type of accommodation:			
- Rented accommodation	45.9	41	46.2
Holiday lets (cottages, etc.)	12.5	9.9	15
Holiday villages, residences	8.1	5.3	10
Hotels	5.8	14.6	13.2
Campsites	17.1	7.7	7.3
B&Bs	2.3	2.6	2
- Family, friends	41.1	41.6	41.4
- Second home	11.8	17.4	12.4
Distance from residence:			
- Less than 300 km	39.6	51.1	87.9
- More than 300 km	60.4	48.9	12.1
Proportion of visitors from the same region	23.9	12.6	37.7

Source: "tourism demand survey" for the years 2003, 2005 and 2007.

Table 3

Comparison of classification results for the two datasets.

Aquitaine		Auvergne		Rhône-Alpes	
Compared partitions All*rural	Rand index	Compared partitions All*rural	Rand index	Compared partitions All*rural	Rand index
Partitions 5*5 Partitions 6*6	0.86 0.91	Partitions 5*5 Partitions 6*6 Partition 7*7	0.75 0.84 0.47	Partitions 5*5 Partitions 7*7	0.69 0.84

Source: "tourism demand survey" for the years 2003, 2005 and 2007.

Table 4Comparison of number of splitting criteria according to rural versus all dataset.

Aquitaine			Auvergne			Rhône-Alpes		
Category	All	Rural	Category	All	Rural	Category	All	Rural
1/6	1	2	1/6	20	25	1/7	1	3
2/6	1	1	2/6	12	15	2/7	3	3
3/6	4	1	3/6	15	7	3/7	1	1
4/6	1	2	4/6	0	1	4/7	4	5
5/6	2	6	5/6	2	1	5/7	6	1
6/6	5	6	6/6	2	2	6 and 7/7	4	11
All categories	14	19	All categories	51	51	All categories	19	24

Source: "tourism demand survey" for the years 2003, 2005 and 2007.

4.2. Summer rural stay segments and their profiles

In order to investigate rural stay segments, the "factor-clustering" approach was applied with two datasets, one containing only rural observations and another combining rural and urban stays. Comparing the results of the two analyses with the Rand index showed that the segments obtained with the two datasets are quite

similar for specific partitions. The maximum values of the Rand index reported in Table 3 suggest the partitions 7*7 in Rhône-Alpes, the partitions 6*6 in Aquitaine and Auvergne.

The results of the CART analysis presented in Table 4 indicate that for each region, the splitting criteria of the clusters are minimised with the "all stays" data, except for Auvergne. For Aquitaine and Rh^one-Alpes, stay clusters obtained with the "all stays" dataset are centred on well-identified activities, since the assignment of a new observation to a cluster follows a tree decision process composed of a maximum of five steps in Aquitaine (Table 4 column 2), and six steps for Rh^one-Alpes (Table 4 column 8). On the contrary, for the Auvergne region, the clustering process used to identify stay segments was more complicated. The optimum size of the decision tree for the three predominant clusters (see Table 4 column 5) is very large. This implies that activities engaged in by rural tourists in this region are highly dispersed, and far less targeted than in Aquitaine or Rh^one-Alpes. Nevertheless, the stability of the partitions generated by the dataset for all stays observed for the three regions, and the robustness of partitions obtained with the same dataset for Aquitaine and Rh^one-Alpes, prompt us to retain the segmentation of rural stays obtained with the "factorclustering" analysis of the "all stays" data.

Table 5 reports the results of the cluster analysis of all stays for each region, and the corresponding clusters for rural stays. According to this table, tourism segments are of equal importance whether the analysis concerns rural stays dataset only or the merged datasets of the rural and urban stays. The summer season is indeed ideal for outdoor activities and visits, whether tourist stays take place in a rural or urban area. Our results thus corroborate the fact that during the summer season, the recreational activities favoured by tourists have little connection to the characteristics of the place they choose to stay. However, caution should be taken when interpreting these findings, because in the survey questionnaire, the items used to describe the different activities undertaken by tourists were generic and not specific to the place of stay. It cannot be ruled out that this result is partly due to the way the data were collected.

It is necessary to highlight some particular regional characteristics: i) a "walking" segment is only available for Aquitaine. For the other regions, this activity is included in the segment "Visit to natural and cultural heritage sites". These two segments could also be merged in Aquitaine, ii) in Auvergne and Rhône-Alpes, a "gardening" segment is built relating to owners of second homes. It should be noted that this segment is marginal, iii) the "spring skiing" segment is very specific to the Rhône-Alpes region. It often involves stays that continue beyond the winter period, that is to say: outside of the observation window used for this study. These specific segments will therefore not be taken into account in subsequent comments. It is also important to notice that the presence of regional natural parks in Auvergne and Rhône-Alpes regions has certainly favoured the development of tourism in these natural protected areas. Natural parks were the destination for 59% of rural stays for Auvergne and 40% for Rhône-Alpes respectively.

Table 5Statistical repartition of rural stay clusters for the three regions.

Aquitaine			Auvergne			Rhône-Alpes		
Cluster denomination	% of All stays n = 5525	% of Only stays to rural areas $n = 2480$	Cluster denomination	% of All stays $n = 2586$	% of Only stays to rural areas n = 1244	Cluster denomination	% of All stays n = 7530	% of Only stays to rural areas n = 2998
Doing nothing	37	30	Doing nothing	45	36	Doing nothing	35	26
Water-based activities	19	21	Water-based activities	1	1	Water-based activities	9	11
Visits to natural and cultural heritage sites	11	11	Visits to natural and cultural heritage sites, walking	25	30	Visits to natural and cultural heritage sites, walking	29	27
Walking	14	13						
Outdoor pursuits	13	19	Outdoor pursuits	21	25	Outdoor pursuits	17	24
Gastronomy	6	5	Gastronomy	3	4	Gastronomy	4	4
			Gardening	4	5	Gardening	2	2
						Spring skiing	4	6

Source: "tourism demand survey" for the years 2003, 2005 and 2007.

Going back to the common features of rural tourism in the three regions, two main categories of stays can be identified. The first corresponds to "passive" stays, called "doing nothing". By contrast, the second category includes "active" stays. Table 5 shows that the proportion of passive stays is always less than half of all stays. It is systematically smaller in rural areas than in urban ones. Appendices 2e4 detail the profile of this category of stays in rural areas for each region. The length of these stays is shorter (one to three nights), and they entail tourists being hosted by their family or friends. Active stays are clearly predominant in rural areas. Indeed, people may tend to stay in rural areas to have access to outdoor activities, visit cultural and natural heritage sites, and to experience local culture. Being in a place where these recreational activities are available may also encourage visitors to engage in them. On this basis, two main objectives are distinguishable for active stays: experiencing outdoor (corresponding to "water-based activities" and "outdoor pursuits" segments) and experiencing natural and cultural heritage (corresponding to "natural and cultural heritage discovery" and "gastronomy" segments). Although the importance of the segment built around water-based activities is very different across the three regions (the same water-based infrastructure is not available from one region to another), this segment has to be distinguished from the other outdoor activities. Indeed, water-based activities specifically concern families on low incomes. Other outdoor pursuits, such as hiking, cycling, climbing, hunting, or fishing, are more likely to involve groups of adults with high incomes. Stays aimed at "nature and heritage discovery" or "gastronomy", are shorter than those aimed at experiencing outdoor recreation. They predominantly concern visitors aged 50 or over. These features are summarised in Table 6 below and statistical details for each region are provided in Appendix 2 for Aquitaine, Appendix 3 for Auvergne, and Appendix 4 for Rhône-Alpes.

Table 6
Profiles of summer stay segments in rural areas.

"Doing nothing"	"Water-based activities"	"Outdoor pursuits"	"Natural and cultural heritage discovery"	"Gastronomy"
Short stay (less than 3 nights)	Long stay (at least a week)	Long stay (at least a week)	Stays of more than 4 nights	Short stay (less than 3 nights)
Visit to friends or family	Rented accommodation	Rented accommodation	Rented accommodation	Rented accommodation
Group of adults over 50 years of age	Family with children	Group of adults	Group of adults over 50 years of age	Group of adults over 50 years age
Middle and high incomes	Low incomes	Very high incomes	Low and middle incomes	Low and middle incomes

Table 7
Statistics of spending data (mean and standard deviation in euros) and number of observations according to area of stay in Rhône-Alpes for 2003 summer season.

	In urban areas		In rural areas		2
	€	nb	€	nb	
Transport per person	51.13 (50.2)	783	45.31 (40.3)	514	5%
Accommodation per person per night	24.51 (20.5)	198	20.74 (20.3)	196	10%
Food per person per day	9.56 (15.5)	783	10.80 (15.7)	514	ns
Activities per person per day	13.63 (19.8)	179	13.52 (28)	155	ns
Other goods and services per person	51.02 (105.8)	783	63.08 (106.5)	514	5%
Total expenditure per person per day	50.95 (56.8)	783	46.30 (46.6)	514	ns
Total expenditure per person for the stay	226.43 (279.3)	783	274.07 (284.4)	514	1%

^a Critical probability for the difference in expenditure between rural areas and urban areas (t-test).

Source: extension to the "tourism demand survey" for 2003 in the Rhône-Alpes region.

4.3. Length of stay and expenditure level in detail

Table 7 presents the results of the descriptive statistical analysis of spending data available for stays in Rhône-Alpes during summer 2003. It shows that, because of the longer stays in rural areas, expenditure is higher there than in urban areas, despite lower transport costs. First, rural stays make greater use of rented accommodation than urban stays (respectively 38% and 25%). Second, more products and services (other than transport, accommodation, food and activities) are purchased during stays in rural areas; these mainly include regional specialty products and souvenirs. It should also be noted that stays in rural areas are more likely to generate expenditure for recreational activities: 30% compared to 22% of stays in urban areas. Ultimately, stay costs (estimated by expenditure per person per day) in rural areas are not significantly different from those in urban areas.

Table 8 enables an appreciation of differences in spending between rural stay profiles. The comparison of the average expenditure per person per day between rural stay profiles shows no significant differences. Daily expenditure for accommodation, food and activities are on average higher for "active" tourism segments, but the differences are not significant. These observations seem to indicate that the average stay cost does not vary across profiles defined by recreational activities. However, the comparison of the expenditure incurred per person over the duration of the stay presents significant differences between profiles. This variable could be used as an indicator of tourism demand in economic terms and could be explained by the length of stay, the composition of the party and the income of the visitors.

The results of mean-comparison tests also show that for "active" stays, spending is more than double that of "doing nothing" stays, whereas the stay length varies to a lesser extent. For "gastronomy" stays, it should be noted that the robustness of the statistical tests is reduced due to the small size of the sample. However, the total difference in expenditure is clear, and is probably attributable to the cost of meals and comfortable accommodation. "Natural and cultural heritage discovery" stays are two days longer than "passive" stays, and include higher transport costs and purchases of other goods and services (especially regional products). "Outdoor pursuits" and "water-based activities" stays last two or three days longer. They involve more spending beyond housing and food; they also tend to generate more expenditure for recreational activities, whether for the equipment hired or purchased or for coaching.

Table 8

Spending data (mean and standard deviation in euros) according to rural stay profiles in Rhône-Alpes for summer 2003.

	"Doing nothing" $n = 126$	"Outdoor pursuit" $n = 125$	"Water-based activities" $n = 61$	"Natural and cultural heritage discovery" $n = 166$	"Gastronomy" $n = 14$
Total expenditure per person per day	41.67 (53.5)	47.07 (42.4)	43.25 (33.5)	43.31 (37.5)	93.82 (104.4)
Accommodation per person per night	5.22 (15.5)	7.27 (11.1)	7.44 (10.2)	8.59* (15.3)	30.34 (47.8)
Food per person per day	10.24 (16.3)	9.99 (10.8)	9.3.9 (10.3)	10.98 (12.4)	32.39 (54.4)
Activities per person per day	1.66 (10.7)	5.85* (27.7)	3.70* (6.2)	2.28 (6.9)	3.73 (5)
Total expenditure per person	127.31 (186.0)	320.77*** (250.7)	311.24*** (294.5)	294.04*** (315.9)	352.68** (203.9)
Transport per person	36.86 (38.8)	43.97 (36.4)	39.97 (35.4)	51.92*** (44.5)	54.23 (34.4)
Other goods and services per person	33.43 (65.4)	74.30*** (82.0)	77.18*** (115.2)	64.52*** (130.6)	74.07 (73.4)
Number of nights	5.72 (11.3)	8.16** (6.0)	9.15** (8.6)	8.04 (8.1)**	5.43 (4)

^{*, **, ***:} Critical probability (respectively p < 0.1, p < 0.05 p < 0.01 t-test) for difference from "doing nothing" stays. Source: "fourism demand survey" for the year 2003 and extension to the survey for the Rhône-Alpes region.

5. Discussion and conclusion

The first outcome of this analysis is a statistical portrait of rural (versus urban) visitors and their stays to measure the difference between rural stays and urban stays. No socio-demographic differences were found between tourists staying in rural areas and those staying in urban areas: age, education, and household income etc. are all very similar. These observations contrast with the results of the only other known study comparing urban and rural tourism (Andriotis, 2011). According to the Andriotis study, tourists staying in the city of Heraklion (Crete) weremore likely to be older and retired, while those staying in the rural area of Archaneas tended to be younger and highly educated. The results highlight the fact that summer stays in rural areas are more likely to involve rented accommodation and fewer visits to family and friends. The expenditure incurred during a stay in a rural area is higher per person than in urban areas, even if per day these differences are not significant. However, these findings cannot be interpreted as an attempt to compare rural tourism with urban tourism and to conclude that the weight of rural tourism market is just as considerable as that of urban tourism. On the one hand, our investigations underestimate the number of tourists in rural areas, because the distinction between rural tourism and urban tourism refers to the place of stay rather than to the places visited. On the other hand, our study only takes into account French tourists, and not any foreigners in France, who stay more frequently in towns and cities. Indeed, our investigations were not aimed at assessing this weight, but at specifying the proportion of different tourism practices.

Secondly, a comparative analysis is made between three regional settings of rural tourism. The results demonstrate the strong similarities between the forms of rural tourism observed in the three regions studied (Aquitaine, Auvergne and Rh^one-Alpes). While stays in rural areas in Auvergne are characterised by more diffuse activities than in the two other regions, tourist demand for rural areas can be mapped around five main stay segments according to the activities undertaken: "water-based activities", "outdoor activities and experiencing nature", "Nature and heritage discovery", "gastronomy" and "doing nothing". This last segment represents the most traditional form of rural tourism, described as "homecoming" by Yagüe Perales (2002). The four other segments belong to what she describes as "modern" rural tourism. They represent real economic potential: most often, they involve rented accommodation and the activities undertaken generate varying levels of expenditure. They are also seen as a "modern" type of rural tourism because they correspond to the expectations of urban dwellers, in other words the search for authenticity and for high quality natural surroundings (Pearce, 1990), which are more often located in renowned areas with amenities (protected areas). Indeed, the importance of natural regional parks for rural stays in Rh^one-Alpes and Auvergne confirms that the development of "active tourism" in rural areas took place mainly in protected areas or destinations branded as unique.

Finally, although it is not strictly possible to compare results obtained with distinct studies for a number of reasons (among others the differences in the survey designs, the periods of the surveys were conducted, the population and the periods under study, and for the most part, the use of activity as the criterion for demand segmentation), the results of the statistical analysis conducted in the present study indicate that domestic tourism to rural areas during summer season in France shares with Scotland (Frochot, 2005), Spain (Molera & Pilar Albaladejo, 2007), and the recent study of Pesonen (2012) for Finland, some general figures. The main tourism market segments are made up of people interested in outdoor activities and excursions or family holiday. The segment with access to specific rural amenities tends to include older visitors. More specifically, a large proportion of visitors staying in rented accommodation during the summer are involved in longer stays for water-based activities or outdoor pursuits. They are families with children, or groups of young adults. While, visitors who are more interested in rural culture (gastronomy) and amenities (visits to natural and heritage sites) are older visitors from the low and middle classes.

From a strictly academic viewpoint, some empirical results obtained by this study are not new. However, taken together, all the findings confirm the reality of some forms of mass tourism in rural areas that are significantly attractive for cultural and heritage visits and practices of outdoor recreational activities. This does not mean that markets for more authentic tourism products and services do not emerge. Gastronomic tourism has been shown to attract higher-spending tourists, while rural destinations need to build up their competitive advantage. The consolidation of gastronomic tourism and its links to local products and amenities calls for

further research. These results imply that there is a need to determine which combinations of rural amenities, local products, and tourist services should be promoted to strengthen the development of niche markets in rural tourism. The application of appropriate stated preferences techniques such as choice modelling (Crouch, Devinney, Louviere, & Towhidul, 2009), could be a new avenue for theoretical and methodological development relating to this goal. Such a method would offer a conceptual framework to support the stay approach to tourism demand measurement and analysis.

A number of questions remain with regard to the sustainable development of rural areas. While the aim of a regional natural park in France is to protect the distinctive natural and cultural heritage of rural regions and to contribute to local development by nurturing small businesses in the tourism sector, it appears that the establishment of regional natural parks has contributed to the development of mass tourism in these protected areas. Paradoxically, the promotion of rural tourism destinations by responding to visitors' requirements calls for regulation of tourist activities and the adoption of mandatory measures to enhance environmental protection. This challenges the governance of tourism with a more integrated approach that includes all stakeholders within the sphere of the regional natural park and beyond.

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.tourman.2014.07.020.

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