Developing a Typology for the Visitors of Wineries and Proposing Recreational Activities to Improve their Experience

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Abstract. Tourism can benefit rural regions which, in many cases, suffer the consequences of the extensive population migration that occurred in the previous decades. To attract more visitors to such regions, it is necessary to investigate visitors' satisfaction levels and views so that relevant stakeholders know which steps should be taken to transform the region into an attractive destination. Using quantitative data, the present study explores the views and preferences among the visitors of the wineries located in the Regional Unit of Drama. Based on these insights, it proposes an integrated recreational experience which would not be limited to a visit to the local wineries but also offer activities which could be held in the region and fully correspond to the expectations and profile of each visitor type. The present findings could be particularly useful to local stakeholders as they point to specific paths for tourism development.

Keywords: typology for winery visitors; tourism development; local development; visitors of wineries; Regional Unit of Drama.

1 Introduction

The contribution of tourism to the prosperity or rural communities is well established and desirable. Tourism is accompanied by the inflow of foreign exchange while it consists the key driver of local economy through the creation of jobs and improvements in infrastructure or services (Andereck and Nyaupane, 2011; Martínez et al., 2019). The economic benefits flowing from tourism at a local and national level can be summarized as direct and indirect with the direct benefits including the profits of tourism businesses, the revenues of those employed in the tourism sector and the revenues from accommodation (Karamanidis, 2006). Possibly, the biggest difficulty for tourism businesses is to find and maintain valuable customers. According to Hayes (2011), instilling dedication in customers is far more important than the short-term growth in revenues since loyal customers do not seek other products or services (Kristensen et al., 2000, Westlund et al., 2001). Reichheld (1996) observed that the customers remain dedicated to a business due to the value they receive from it. In other words, customer satisfaction is reliant on the quality of the provided product or service (Levesque and McDougall, 1996) and when the perceived service quality is high, customer satisfaction increases (Parasuraman et al., 1985).

With the critical role of satisfied customers in the service sector in mind, this paper explores the views and preferences among the visitors of the wineries located in the Regional Unit of Drama. In specific, it proposes an integrated recreational experience which would not be limited to visiting the local wineries but would also offer activities which would fully correspond to the preferences of each visitor type. In this way, all visitors would be the most satisfied with their visit to the Regional Unit of Drama while tourism development could be triggered.

2 Methodology

The area of study was the Regional Unit of Drama which is part of the Region of Eastern Macedonia and Thrace in Greece. The Regional Unit of Drama is in the northernmost part of Macedonia and the westernmost part in the administrative region of Eastern Macedonia and Thrace. The research instrument was the questionnaire and in total 500 visitors completed the questionnaire. To examine visitors' views, a structured questionnaire was designed which was completed through personal interviews. The collection of the questionnaires started in November 2016 and ended in September 2017. To analyze the obtained data, descriptive statistics, Categorical Principal Components Analysis and Categorical regression were conducted (Siardos, 2002), using SPSS (version 23).

3 Results

3.1 Socioeconomic characteristics

In the sample, male participants (59.4%) outnumbered their female counterparts (40.6%) and most respondents were aged between 31 to 40 (30.4%) and 41 to 50 years (23.4%). In addition, many residents were university graduates (34.6%) and married (54.3%). Concerning the number of children, the responses "no children", "one child" and "two children" presented similar shares, that is, 27.8%, 27.2% and 24.6%, respectively. Most of the visitors were public employees (18.4%), freelancers (14.2%), private employees (13.8%) and workers (12%). Conversely, only 3.8% of the respondents were pensioners.

3.2 Visitor types

In order to indicate the types of visitors with similar characteristics, visitors' views were analyzed using Categorical Principal Components Analysis (CATPCA). The variables used in this analysis are presented in Table 1.

The solution of two dimensions gave values of characteristic root $\lambda_1= 1.73$ and $\lambda_2= 1.626$ while Cronbach's reliability coefficient alpha scored 0.764 while the variables "The importance of maintaining the cultural character (D29)" and "Overall evaluation of tourist services (D31)" had the highest positive loadings in terms of the first dimension, whereas the highest negative loading appeared for the variable "Drama's proposal to third parties (D30)". As for the second dimension, the highest positive loadings were for the variables "Intention to purchase agricultural and livestock products" (D33), "Overall meeting the expectations of visitors" (D25) and "Destination of special cultural interest" (D28) while the highest negative loading was for the variables "Drama: value for money destination" (D27) and "Drama's proposal to third parties" (D30). The scattering of the variables in the two dimensions plane is presented in Figure 1.

Table 1. The loadings of the principal components

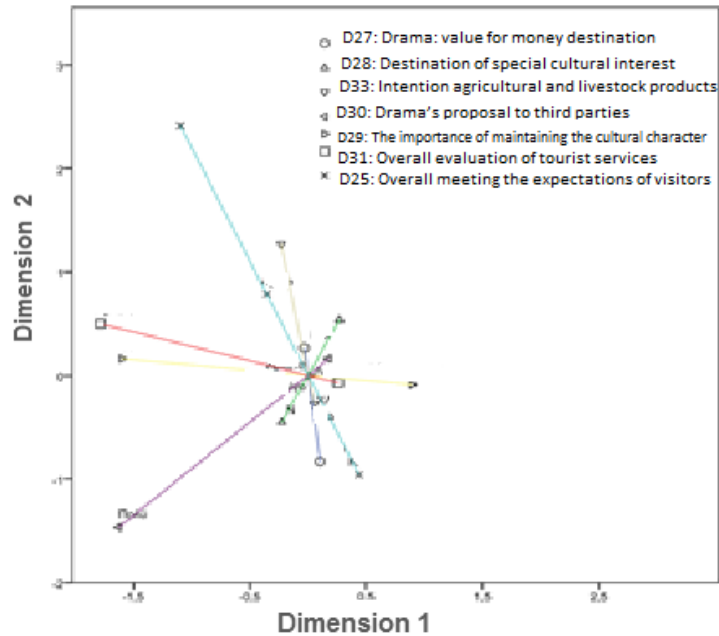| Variables	Dimension 1	Dimension 2
D27: Drama: value for money destination	0.058	-0.472
D28: Destination of special cultural interest	0.247	0.494
D25: Overall meeting the expectations of visitors	-0.238	0.523
D31: Overall evaluation of tourist services	0.678	-0.190
D30: Drama's proposal to third parties	-0.537	-0.484
D29: The importance of maintaining the cultural character	0.805	-0.080
D33: Intention to purchase agricultural and livestock products	-0.109	0.594

Fig. 1. Scattering of the variable categories

The high loadings in the two dimensions enable the identification and interpretation of the dimensions. That is, the first dimension may be characterized "The region's character and infrastructure" while the second dimension may be characterized as "Satisfaction with the visit". Therefore, the scores of the CATPCA could be used as general indicators of visitor characteristics and provide for visitor type recognition.

3.3 Correlation between visitors of wineries and their demographic characteristics

Categorical regression was used to test the simultaneous combined correlation between visitor type (CATPCA scores) and their demographic characteristics (Table 2). A correlation occurred between the first dimension and visitors' a) gender, b) age, c) educational level, d) number of children and e) main occupation. Conversely, there was no significant statistical difference between visitor type and family status. According to Pratt's index of relative importance, it was indicated that main occupation, educational level, age, gender and number of children were the variables with the greater weight in the sub-sample.

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Table 2. Results of Categorical regression regarding the correlation between visitor types and their demographic characteristics (Dimension 1)

Variables	Beta	SE	p	Pratt Index
Gender	0.207	0.054	0.000	0.061
Age	0.385	0.056	0.000	0.078
Educational level	0.222	0.092	0.003	0.115
Family status	0.111	0.066	0.092	0.045
Number of children	0.218	0.068	0.002	0.053
Main occupation	0.644	0.039	0.000	0.649
$R^2=0.580$, Beta: Regression coefficient, SE: Standard error				

As for the second dimension, it was correlated with a) gender, b) family status and c) main occupation (Table 3). Based on Pratt's index of relative importance, it was indicated that a) main occupation, b) gender and c) family status were the variables with the greater weight in the sub-sample (in a declining order).

Table 3. Results of Categorical regression relating to the correlation between visitor types and their demographic characteristics (Dimension 2)

Variables	Beta	SE	p	Pratt Index
Gender	0.245	0.101	0.016	0.110
Age	0.061	0.169	0.718	0.022
Educational level	0.137	0.313	0.826	-0.064
Family status	0.239	0.099	0.016	0.046
Number of children	-0.156	0.179	0.384	0.041
Main occupation	0.663	0.083	0.000	0.845
$R^2=0.506$, Beta: Regression analysis, SE: Standard error				

Next, Cluster analysis was carried out to derive the visitor types (Table 4). Again, the factor scores, which resulted from CATPCA, were used as dependent variables and three types of visitors occurred (Winery visitor type 1, Winery visitor type 2 and Winery visitor type 3 – Figure 2).

Table 4. Cluster centers for each type of winery visitors

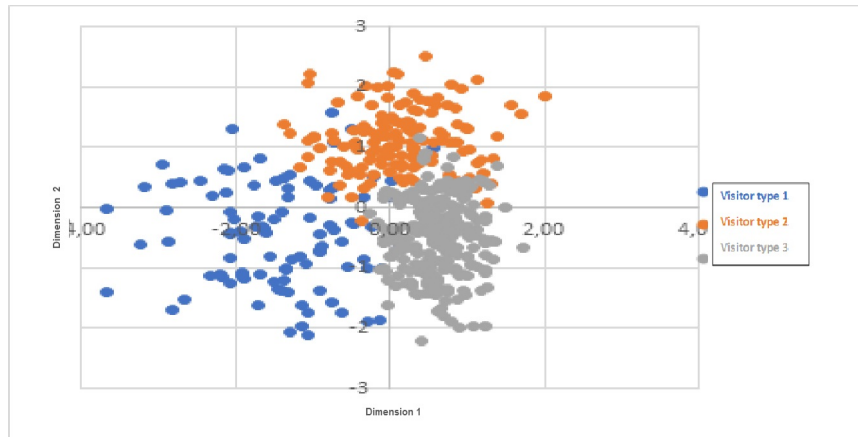|	Types of visitors of wineries		
	1	2	3
Dimension 1	-1.59	0.06	0.59
Dimension 2	-0.39	1.20	-0.51
Number of subjects	101	142	257

Fig. 2. Identification of the types of winery visitors in the two-dimensional space

There is significant differentiation among the three visitor types. Winery visitor type 3 expressed a moderate satisfaction with the character and the infrastructure in the region. A similar satisfaction was expressed by Winery visitor type 2, while Winery visitor type 1 evaluated them negatively. The highest visit satisfaction level was recorded for Winery visitor type 2 as opposed to the other two types, which expressed a slightly negative satisfaction.

3.4 Desire for complementary activities

Principal Component Analysis was used to investigate winery visitors' desire for participating in activities unrelated to wine during their visit. The variables used in this analysis are shown in Table 5.

Three factors were loaded by the application of Principal Component Analysis which account for 63.8% of the total variance of the data with this percentage being considered satisfactory (Table 5) (Hair et al., 2010). The first factor (mean= 1.26) can be named "Educational activities and guided tours" as it refers to activities which are of interest both to young and old people (Guided tours with a mean of 1.80). The second factor is formed only by the variable "Mountaineering" (mean=1.92) while the third factor can be named "High-profile activities" since it is formed by the variables "Horse-riding" (mean=1.33) and "Gastronomy seminars" (mean= 1.16).

Table 5. Results of Principal Component Analysis and analysis of category reliability

Variables	F1	F2	F3	CFV
D26.6 Educational activities	0.844			0.808
D26.4 Guided tours	0.732			0.568
D26.9 Other sport activities	0.662			0.537
D26.3 Mountaineering		0.893		0.851
D26.1 Horse-riding			0.720	0.816
D26.5 Gastronomy seminars			0.626	0.640
Explained variance	32.4%	20.6%	17.4%	
Total explained variance	70.4%			
Cronbach's alpha	0.757		0.722	
Total scale reliability	0.725			
Mean factorial degree	1.41	1.92	1.25	
Standard deviation	0.52	0.82	0.35	
Kaiser-Meyer-Olkin (KMO) Test	0.505			
Bartlett's test of sphericity	Chi-square=428.877, df= 15, p<0.0001			

4 Conclusions

Respondents' visit to local wineries has two dimensions with the first being the region's character and infrastructure and the second being their satisfaction with the visit. The first dimension is affected by participants' demographic characteristics and, in particular, by their gender, age, educational level, number of children and occupation, while the second dimension is influenced by gender, family status and occupation.

Winery visitors were found to be interested in participating in activities which could be combined with their visit to the wineries. In specific, educational activities and guided tours, mountaineering and high-profile activities (horse-riding and gastronomy seminars) were the three types of activities which appealed to the visitors. Since the region offers optimal conditions for developing these activities, the local stakeholders and those responsible for promoting tourism in the Regional Unit of Drama should consider offering these types of activities to enhance visitors' satisfaction and transform the visit to the wineries into a complete experience which fully corresponds to the visitors' expectations and preferences.

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