

THE ROLE OF LOCATION ON AGRITOURISM SUCCESS; APPLYING HIERARCHICAL REGRESSION MODEL

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Abstract

This study investigates the effect of location on agritourism performance, focusing on the Tuscany region, Italy. Data were driven from a survey conducted to 292 Tuscany agritourism farms, together with qualitative information gathered from 8 personal interviews. Hierarchical multiple regression model was employed to analyse the data. Results indicate that location typology matters in agripreneurs' decision where to start an agritourism enterprise. Results suggests opportunity for designing the support policy and framework for agritourism development in Tuscany region.

Keywords: Agritourism, agripreneur, performance, Italy.

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Introduction

Due to that agritourism in Europe and especially in Italy, represents a unique form of rural tourism development in the international scene (Santucci, 2013), and a significant growth strategy in the context of structural change in agriculture (Esposti, 2012), investigating the most important drivers of the agritourism success, is indisputable. However, firm's performance is a complex, multidimensional and dynamic phenomenon (Moultrie et al., 2006), and empirically investigating the factors that affect it, it is challenging (Domi and Capelleras, 2016). Scholars argues that combinations of business' features are more likely to explain the performance (Newbert, 2008) rather than examination of direct link between each and performance (e.g. Jogaratnam, 2017; Lonial and Carter, 2015).

While this paper focuses on the role of agritourism location and type of service offered on performance, there are several reasons to justify these relationships. First, recent studies have examined the location as factor that influence the agripreneur's decision to start an agritourism enterprise (Honey et al., 2019; Lupi et al. 2017; Lucha et al, 2014; McGehee and Kim, 2004), and consumers' decision to visit the agritourism farms (Barbieri and Mshenga, 2008; Che et al. 2005; McGehee 2007; Honey et al., 2019). This is due to that massive fluctuations of visitors at those close located attractions it is assumed to increase the number of visitors at the agritourism farms, and consequently, their performance in terms of profitability. Second, this study it informs the debate about the links between agritourism location and their performance in the context of the case of Tuscany region, Italy. To this, due

to its worldwide reputation of Tuscany region (e.g., Florence, Siena etc.), as cultural destination (Giaccio et al., 2018), and a significant growth visitors for this purpose (Van der Borg, 1996), it is intriguing to consider if the proximate location of agritourism to these art cities, will increase the number of visitors at the farm, and consequently, its performance.

However, while the effects of location on agritourism performance are examined, there are still some inconsistencies about this relationship (Giaccio et al., 2018; Grande et al., 2011; Barbieri and Mshenga, 2008). This study investigates a more inclusive operationalization of the agritourism's location, by considering the proximity to one or more attractions (i.e., natural resources, coastal area, art city) and location typology (i.e., being disadvantaged or advantaged areas, and being close to one or more attractions etc.), as a potential source of visitors' fluctuations into the farm. This study tends to further contribute on this behalf.

In sum, the purpose of this research, therefore, was to investigate effects of location on agritourism performance. To achieve this purpose, two main objectives are developed to (1) examine the effects of agritourism's location approximate to one or more natural and/or anthropogenic resources on its performance; and (2) agritourism's location into disadvantaged, advantaged areas and/or areas with development problems on performance.

Literature Review

Location and agritourism performance

Due to that traditional countryside separated from urban life is no longer valid (Kapferer, 1990), increase about environmental awareness, viewing rural landscapes as consumption and recreation resource (Lundmark, 2006; Mather et al., 2006), the need to participate on farms' activities for recreational experiences (Barbieri and Mshenga, 2008), to experience the rural life and to support local farmers, has prompted a huge increase of visitors fluctuation on rural areas. Many urban residents are seeking a farm experience that is perceived to be relaxing (Barbieri and Mshenga, 2008), take active part in the fun activities offered by farms (Che et al. 2005; McGehee 2007), to value rural natural scenery and landscape and to escape from intensive and busy urban life (Honey et al., 2019). Obviously agritourism is acting as a "bridge reconnecting urban dwellers with agriculture and rural life" (Barbieri et al., 2016, p. 1101).

Approximate to the populated areas (i.e., urban cities) and location into reach rural areas in natural amenities (i.e., attractive landscape, protected areas etc.), prompted agripreneurs to transform their farm into agritourism (Honey et al., 2019; Lupi et al. 2017; Lucha et al, 2014; Brown and Reeder, 2007).

There are just a few studies empirically investigating the role of location on agritourism performance (see e.g., Barbieri and Mshenga, 2008; Giaccio et al., 2018). A few recent scholars has elaborated the distance from an urban area and the highway (Barbieri and Mshenga, 2008), proportional size of forest surfaces, presence of organic and environmental certifications, altitude to which the farm is located (Giaccio et al. (2018), as drivers of agritourism performance. Giaccio et al. (2018) had controversial results regarding the specific dimensions of location on agritourism performance. They found that proximate to the forest surfaces contributed to the growth income. Barbieri and Mshenga (2008) concluded that the distance to an urban area with at least 50 000 residents and proximity to the highway did not have any significant effect on agritourism gross income. Pacciani (1998, p. 38) stated that agritourism is perceived as the "missing link in a quality territorial system that integrates agricultural, tourist, artisan, environmental, cultural and historic resources". Other studies have stated that seaside resorts and attractive landscapes (Saxena et al., 2007; Grande et al., 2011), topography (McElwee, 2006), areas with environmental restrictions and characteristic landscapes (Lupi et al., 2017), represents tourist attractiveness, which in turn, it might be profitable for agritourism.

However, as Saxena et al. (2007) stated, other characteristics of location that drive performance may depend on other local context. In this vein, there is a need to empirically investigate a more comprehensive operationalization of location, which in turn are assumed to influence agritourism performance. This study has selected a more inclusive measure of the agritourism's location in terms of being surrounded by attractions such as art city, natural, thermal and coastal areas. Additionally, location typology is considered, in terms of being located into advantaged or disadvantaged areas.

In sum, the non-comprehensive operationalization of location dimensions and controversial results of scant previous studies, leads this study to empirically investigate the effects of location on agritourism performance, and following hypothesis is proposed:

H1: The proximity to one or more natural and anthropogenic attractions (i.e., art city/natural area/sea/thermal areas) it affects agritourism performance.

H2: Being located into the (A) disadvantaged; (B) intermediate; (C) advantaged areas will positively influence the agritourism performance.

Methodology

3.1 The process of data gathering and the sample

To empirically investigate the proposed hypothesis, the case of Tuscany region in Italy, was considered. Tuscany is located in Italy, and is an internationally well-known region about agritourism development. It has the highest number of agritourism entities compared to other regions of Italy. To this, a database containing 4,622 agritourism farms was retrieved from the Tuscany regional government. This database contained some preliminary data in terms of name of the agritourism, address, municipality, email, telephone and website.

To gather the required data, necessary to investigate the proposed relationship, a structured questionnaire was drafted. The items were mostly adjusted from previous studies (Tew and Barbieri, 2012; Barbieri and Mahoney, 2009; Barbieri et al., 2008). The final questionnaire was composed by 28 items organized into the following sections: (1) farmer/farms household profile; (2) characteristics of agritourism farms offerings, including farm products, accommodation and other recreational services; (3) location in terms of distance from an urban area and/or highway; and (4) economic performance in terms of objective measurement.

The online survey method was applied. To this, the Google form platform was exploited to design questionnaire and deliver it to the 4,622 agritourism farms through e-mail. After two weeks period a follow-up email was sent to the agritourism farms that had not yet responded. Finally, after 1 month period, we obtained 292 responses representing a response rate up to 6.3% of the population. In fact, by using the email survey technique, the response rate is approximately 7% to 19% (see e.g., Domi and Domi, 2021; Capelleras et al., 2021; Thomas and Wood, 2014). The sample's representativeness was checked using a Chi-Square (χ^2). Results showed no statistically significant differences in terms of geographical location (province) between sample of surveyed agritourism and the population.

Additionally, to the quantitative data, also qualitative data are gathered through face-to-face interviews with eight agripreneur exploiting an unstructured questionnaire. They were randomly selected from the target group. The unstructured questionnaire contained questions based on the need for additional information about quantitative data analysis.

To test the outlined hypothesis hierarchical multiple linear regression is employed with robust standard errors. In addition, the models fit the data well, there are no influential cases an outliers.

3.2 Variables and measures

The items used in this paper are based in the previous studies and adjusted to the purpose of this study (Appendix 1). Regarding the depended variable, we referred to the

Pfeffer and Salancik (1978, pg. 34) study, who defined performance as the “firm’s ability to create acceptable outcomes and actions”. In this vein, this variable in our study was operationalised using both objective and subjective measure. Regarding subjective measure, performance was measured based on financial (profitability, sales etc.) and non-financial measures (customer loyalty, attraction of new customers and better use of human resources). Regarding the objective measures we considered the annual gross income of agritourism.

Three independent variables are further specified. To this, location is operationalized in terms of location typology and proximate to the local attractions. As regard to the location typology, it is investigated if matters for agritourism performance, being located into one of the three rural areas; (1) disadvantaged areas¹, (2) intermediate areas, (3) and advantaged areas. The variable proximate to the local attractions considers the role of approximation to one or more attractions (up to four scale) on agritourism performance.

3.3 The model

The model implied to assess the effect of location typology, approximation to the attractions on agritourism gross income. The reason of choosing this model lies behind the aim of the study. Meanwhile we assumed that age of the entrepreneur, gender and previous experience has no impact on gross income.

The hierarchical regression model allows for measurement of the effect of each factor into the variability of explained variable by entering variables into block into the SPSS software. The first block comprise three control variables and the second block comprise other three explanatory variables of which we are interested for, namely location typology, distance or approximate to the attractions.

Results

Model summary tables, ANOVA and coefficient tables produced by SPSS software show the parameters of the model, significance of explanation/prediction and effect of each factor in explaining variable.

Model summary table shows that 3% of the variation in performance (i.e., gross income) is explained by control variables age, gender and previous experience. The values of the significance show that the variance explained by controlled and explanatory’s variables are significant at 95% and 99% confidence level. On the other hand, the explanatory variables add 44.8% of the variation explained to the agritourism gross income to the initial block of the model.

Table 1. Hierarchical multiple regression model

Model Summary ^c									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.151 ^a	.023	.015	1.394	.023	3.043	2	262	.049
2	.396 ^b	.157	.140	1.303	.134	13.711	3	259	.000

a. Predictors: (Constant), Gender, Age

b. Predictors: (Constant), Gender, Age, Hospitality_Offer, Location_typology_threeVariables, Distance_approximate_to_the_attractions

c. Dependent Variable: Perfo_GrossIncome

¹ Rural areas with development problems

Table 2. ANOVA

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	11.833	2	5.916	3.043	.049 ^b
	Residual	509.390	262	1.944		
	Total	521.223	264			
2	Regression	81.645	5	16.329	9.621	.000 ^c
	Residual	439.578	259	1.697		
	Total	521.223	264			

a. Dependent Variable: Perfo_GrossIncome

b. Predictors: (Constant), Gender, Age

c. Predictors: (Constant), Gender, Age, Hospitality_Offer, Location_typology_threeVariables, Distance_approximate_to_the_attractions

The Anova table shows that the model as a whole, including control and explanatory variables, is able to significantly predict the agritourism gross income at significant level.

Table 3. Coefficients

Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.844	.309		9.209	.000			
	Age2	-.100	.139	-.044	-.720	.472	-.040	-.044	-.044
	Gender	-.408	.171	-.145	-2.381	.018	-.144	-.146	-.145
2	(Constant)	1.845	.416		4.431	.000			
	Age2	-.097	.130	-.043	-.744	.457	-.040	-.046	-.042
	Gender	-.388	.160	-.138	-2.421	.016	-.144	-.149	-.138
	Location_typology_threeVariables	.390	.117	.191	3.339	.001	.194	.203	.191
	Distance_approximate_to_the_attractions	-.045	.088	-.030	-.514	.608	.012	-.032	-.029

a. Dependent Variable: Perfo_GrossIncome

The coefficient table shows that only gender, as a control variable has a significant contribution to the variation of the agritourism performance, while agriprenuers' previous experience contribution is not significant. The chances of male managed agritourism enterprise for better performance are 41.4 % higher than those female managed.

On the other hand, among the explanatory variables, all have significant contribution in the variation of the agritourism gross income except distance approximate to the attraction. As indicated on the Table 3 the variable location, if we go from rural areas with development problems to agritoursim that operate in advantaged areas it will be associated with approximately 32% increase in agritourism performance.

It resulted that if an agritourism is located into intermediate rural areas and/or at advantaged areas, will have a better economic performance in terms of gross income, than those which are located into rural areas with development problems. Agritourism farms that are surrounded by two attractions (e.g., art city and landscapes), perform better than those which are close to one attraction. However, when it raises the number of attractions that surrounds an agritourism, the effects on performance are non-significant.

Discussions

As it was assumed this study confirms the significant of being close to natural and anthropogenic attractions. This helps agritourism to enhance their gross income. More specifically those agritourism that are close to art city, forests, seaside, thermal areas etc., will experiences better performance than those that do not have such location. However, when it raises the number of attractions that surrounds an agritourism, the effects on performance are non-significant. Generally speaking, this finding is in line with the previous studies such as Giaccio et al. (2018), Saxena et al. (2007), Grande et al. (2011), McElwee (2006) and Lupi et al. (2017).

This paper is innovative by investigating the role of location into one of three categories of rural areas (i.e., disadvantaged, intermediate, advantaged areas) on the agritourism performance. It resulted that if an agritourism is located into intermediate rural areas and/or at advantaged areas, will have a better economic performance in terms of gross income. Such area are characterized by close connection with urban areas, intensive of visitor fluctuations etc., which might provide opportunities for agritourism entities. Contrary, those that are located into rural areas with development problems does not experience any positive performance. Advantaged areas are mostly marginalized area, characterized as mountain areas, long distance with massive fluctuations of visitors etc. This results is in line with findings of Giaccio et al. (2018), who found that agritourism income decrease significantly with the increase of the altitude.

Conclusions

This study is innovative through investigating the role of location typology, approximation to attractions, and type of the offer on agritourism performance.

The quantitative evidence of this study may help agripreneurs to be aware of the most important determinants of performance, and consequently, to better manage their agritourism. When deciding the place where to start the agritourism activities, this study suggests advantaged areas, with a close distance to the attractions. Thus, location matters.

These conclusions has also policy implications, when designing a strategy to foster the agritourism development. Thus, it is suggested to consider the typology of the area where to support agritourism development through policy making.

Appendix 1. Variables and respective observed variables

Variables and respective observed variables		Source
A	Location	
1	Agritourism located into disadvantaged area	Developed by authors
2	Agritourism located into intermediate area	Developed by authors
3	Agritourism located into advantaged area	Developed by authors
B	Performance	
1	Annual gross income	1. Less than €25.000 2. €25,000 - €74,999 3. €75,000 - €149,000 4. €150,000-€199,999 5. over €200,000

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Conflicts of Interest: The authors declare no conflict of interest.



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