Entrepreneurs' Self-Perception of Skills in Rural Tourism

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Abstract

The objective of this paper is to study the perception of entrepreneurial and personal maturity skills among owners of rural tourism businesses and structure these skills. The main obstacles to entrepreneurship felt by these entrepreneurs are also analysed. Using the results of a survey of rural tourism businesses in Northern Portugal, exploratory (EFA) and confirmatory factor analysis (CFA) were conducted. The data was evaluated through CFA, using Analysis of Moment Structure and performed a Structural Equation Model. The CFA led to two distinct factors: one includes emotional coping, critical evaluation and networking (personal maturity) skills, while the other (entrepreneurial) includes goal setting and environment scanning skills. The findings reveal, after a cluster analysis based on the resulting component scores, three different groups of entrepreneurs with different perception of competencies, background and type of business. The owners/managers encountered some restrictions in the start-up process as the bureaucracy and the lack of financial support and information. Studying rural tourism owner's perceived entrepreneurial competencies provide advances in identifying its dimensionality and corresponding profiles and help defining strategies to enhance them, in order to promote success and local development.

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Introduction

Since the 70's, in order to respond to the increase in tourism demand and as a way to find solutions to the reduction of agricultural activity and the migration from rural areas, rural tourism emerges as a fundamental activity for the development of these areas. In Portugal,

and according to the Portuguese legislation, rural tourism includes "establishments intended to provide accommodation services to tourists in rural areas that have for their operation an appropriate set of facilities, structures, equipment and complementary services, in order to provide a complete, diverse tourism

product in rural areas are deemed as tourism enterprises in rural areas” (Decree-Law nº 228/2009 of September 14).

Rural tourism is an important activity in Europe in terms of turnover and employment, composed by a large number of private micro enterprises. This sector is very fragmented, with a lot of competition both internally and externally and with the prevalence of part-time/pluriactivity jobs (Lane *et al.*, 2013). Visitors are attracted to rural areas due to their distinctive regional, cultural and social heritage, landscape qualities and environment. Rural tourism in Northern Portugal has been growing, both in terms of demand and supply, and as in other European regions it is dominated by micro and small businesses, whose success depends to a great extent on the entrepreneurial competencies of the promoters (Milheiro, Martins and Alves, 2013). In the process of entrepreneurship, mainly in small enterprises, the role of the entrepreneur is crucial.

Considering that the tourism development in rural areas can bring many benefits to the society, the units operating in this sector must be competitive in terms of knowledge domain, problem solving skills and competencies, and confidence to succeed. Among several important competencies, the entrepreneurial ones are a specific group that is important for the “exercise of successful entrepreneurship” (Mitchelmore and Rowley, 2010, 93), and it is relevant for the birth, growth and success of the organization. When starting and developing new ventures, entrepreneurs are involved in tasks like identifying market gaps and exploiting them, setting goals and defining strategies to attain them, formulating business strategies, negotiating, constructing effective relationships, dealing with problems and taking responsibility to solve them, and the way they perform them determines the success (Fang *et al.*, 2015). For Bird (1995) entrepreneurial competencies are carried by individuals who begin or transform organizations and add value by organizing resources and exploiting opportunities.

Despite the growing literature on the field of entrepreneurial competencies there is still

uncertainty regarding general underlying competencies (Davis *et al.*, 2016; Mitchelmore and Rowley, 2010), and a limited engagement by researchers in entrepreneurial competencies in rural areas, particularly in Portugal.

In this article, we analyse the socio-economic profile of owners/managers in rural tourism enterprises in the Northern region of Portugal, the characteristics of the business and entrepreneurs’ competencies. Further, based on all functional competencies defined by Phelan and Sharpley (2012) related with entrepreneurial and personal maturity skills of owners/managers of rural tourism, this paper aims to structure them, identifying which underlying competencies best define the entrepreneurial and the personal maturity skills based on data and establish relations between them.

Small businesses in rural areas face several obstacles. Distant communities have less opportunities for education and training programs, often lack education targeted to business management, marketing or tourism trends. They also often lack capital to finance their activity and are more affected by seasonality (Jaafar *et al.*, 2015). In this context, the main obstacles to entrepreneurship felt by these entrepreneurs and the problems encountered in running the business are also analysed. Relationships between competencies, characteristics and problems encountered in running the business are established.

The development of key skills and competencies as well as entrepreneurial competence is a potentially effective measure to deal with the incompatibilities of existing skills. Reflection by rural entrepreneurs on their skills and competencies has the potential to provide a subsequent guidance for their development. Knowing the entrepreneur’s perception of competencies can also help to implement targeted education and training programs, and policies of networking between the stakeholders by local and national authorities to promote entrepreneurial competencies, a major driven behind rural tourism.

The paper is organized as follows: first we provide a literature review. Then it is defined the research methodology followed by the presentation and analysis of the results. We conclude by summarizing the study's main results and highlighting the main implications of this study.

Literature review

Previous research has shown some factors impacting business outcomes, such as the macroeconomic and the internal environments (Man *et al.*, 2002; Nassif *et al.*, 2014; Teodoro *et al.*, 2017). However, in small businesses the role of the founder in defining the business concept and the method of operation is decisive (Campón-Cerro, 2015; Lichtenstein and Lyons, 2001; Watson *et al.*, 1998). For Lichtenstein and Lyons (2001) the individual who runs the business is more important than the products. Therefore, before analysing technical and financial factors, the entrepreneurs' competencies in creating and running the business should be analysed and classified.

The European Parliament and the European Commission consider that entrepreneurship must be analysed in a comprehensive way: "Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. [...] and is a foundation for more specific skills and knowledge needed by entrepreneurs establishing social or commercial activity." (Commission of European Communities, 2005: 27). Entrepreneurial competencies can be considered a combination of inborn personal characteristics and learned abilities and for Lichtenstein and Lyons (2001: 5), entrepreneurial competencies are recognizable and relevant in practice, can be developed and learned (entrepreneurs are made not born), increasing their abilities to "successfully engage in the kind of work required to identify and capture the new market opportunities", and are related to enterprise performance.

The concept of competency goes back to McClelland (1973) for whom it is the ability that adds economic value to the effort of a person

on a job. A broad definition was carried by Boyatzis (1982: 21) who defined as "an underlying characteristic of an individual, which is causally related to effective or superior performance in a job which could be a motive, trait, skill, aspect of one's self-image or social role, or a body of knowledge which he or she uses". Thus, for Boyatzis (1982) competencies encompasses knowledge, skills, attitudes and behaviours. The works of McClelland (1973) and Boyatzis (1982) have inspired the use of the competency approach to managerial performance and entrepreneurial performance (Man *et al.*, 2002). Several studies considered entrepreneurial competencies and skills as an important indicator of entrepreneurship (Chell, 2013; Phelan and Sharpley, 2012).

In this context, entrepreneurial competencies are considered "a higher-level characteristic encompassing personality traits, skills and knowledge, and therefore it can be seen as the total ability of the entrepreneur to perform a job role successfully" (Man *et al.*, 2002: 124). According to Ray (1993) there are three important factors that should be analysed, in order to understand the reasons why someone became entrepreneur and why some of them are more successful: personality or attributes; background and experience; and skills and competencies.

There are several competencies and skills identified in literature that are considered important to achieve the entrepreneurs' effectiveness and that comprises identifying market opportunities and exploiting them, creative problem solving, negotiating, conceiving business and strategic plans, innovation, strategic thinking, intuitive decision-making under uncertainty, reflection, networking, and vision (Kyndt and Baert, 2015; McElwee, 2008; Morgan *et al.*, 2010; Phelan and Sharpley, 2012). Research has attempt to organize the entrepreneurial characteristics into competency dimensions or clusters comprising several underlying skills or functional competencies from which resulted an extensive list of skills/competencies required by entrepreneurs.

Baum *et al.* (2001) distinguish between specific and generic competencies: while specific

competencies include industry and technical skills, general competencies include recognition of opportunities and organization skills. Lichtenstein and Lyons (2001) classify the entrepreneurs according to their level of skills in creating and operating a business in four dimensions with the underlying competencies: technical (ability to perform the key operations of the business), managerial (ability to organize and efficiently manage the operations), entrepreneurial (ability to identify and exploit market opportunities) and personal maturity skills (self-awareness, responsibility, emotional development and creativity). For these authors personal maturity skills are very important as they are an “indicator of one’s ability to change, grow, and develop these skills. It is the dimension that influences likeliness to transform” (Lichtenstein and Lyons, 2001, 18) and they are critical to an entrepreneur (Schallenkamp and Smith, 2008).

Man *et al.* (2002) developed a model of entrepreneurial competencies, categorizing them in six main areas, including opportunity (identify and exploit market opportunities in different manners), relationship (cooperation with environment, using relations, persuasive ability, communication and interpersonal skills), conceptual (decision skills and to consider complex information), organizing (organization of resources), strategic (setting, evaluating, and executing the strategies of the organization) and commitment (strengths to proceed with the business). In the same line, Mitchelmore and Rowley (2010) developed an entrepreneurial model, based on literature review that includes entrepreneurial, business and management, human relations, conceptual and relationship.

Phelan and Sharpley (2012), based on the set of competencies and skills defined by Man *et*

al. (2002), Schallenkamp and Smith (2008) and Mitchelmore and Rowley (2010) established a small set of important skills for the rural, land-based or tourism and hospitality services and analysed fifteen individual functional competencies grouped into broad categories: business and management, entrepreneurial and personal maturity skills/competencies. Business and management skills/competencies include skills and competencies to handle service expectations and deal with problems; managing financial resources, accounting, and budgeting; identifying and reaching customers /distribution channels; organizational skills; small Business Regulations; and managing/supervising employees and their needs. In the entrepreneurial and maturity skills/competencies, Phelan and Sharpley (2012) included the ability to take responsibility for solving a problem (accountability); to think critically (critical evaluation); to reflect and be introspective (self-awareness); to cooperate with others, networking and using contacts (networking); persuasive communication and negotiation (negotiation); to set personal goals, reach them and set new ones (goal setting); to recognize market gap, exploit market opportunity (environmental scanning), and business and strategic planning (business concept) (Table 1).

In recent years the competency approach has become popular to study the entrepreneur’s characteristics (Belás and Ključnikov, 2016; Chatterjee and Das, 2016; Kyndt and Baert, 2015; Lans *et al.*, 2005; Xiang, 2009; Manzanera-Román and Brändle, 2016), but literature on rural tourism is scarce. In small rural tourism lodging establishments a combination of inherited or created assets and processes influence success. According to Teodoro *et al.* (2017) in rural tourism the

Table 1. Functional competencies of Entrepreneurial and personal maturity skills/competencies

Accountability - Ability to take responsibility for solving a problem
Emotional coping - Emotional ability to cope with a problem
Critical evaluation - The ability to think critically
Networking - Cooperating with the others, networking and utilizing contacts
Self-awareness -Ability to reflect and be introspective
Environmental scanning - Recognize market gap, exploit market opportunity
Business concept - Business and strategic planning
Goal setting - Ability to set personal goals, reach them and set new ones
Negotiation - Persuasive communication and negotiation skills

Source: Phelan and Sharpley (2012)

processes depend largely on the traits, skills, motivations and choices of entrepreneurs especially when they undertake most of the tasks and so the entrepreneur becomes one of the most important success factors. Most of the literature on rural tourism entrepreneurship focus on entrepreneurial traits and motivations (Banki and Ismail, 2015; Busby and Rendle, 2000; Getz and Carlsen, 2000; Gomes and Renda, 2016; Jaafar *et al.*, 2011; Pato, 2016), but in a less extent on competencies.

In Spanish rural tourism, Campón-Cerros (2015) found that competencies in relationship marketing are crucial to establish long term relationships with customers and achieve success. Without the necessary skills the success of the businesses can be compromised and a greater involvement and coordination among the various stakeholders (clients, entrepreneurs, and local people) should be developed to project a strong destination image. For rural tourism in Greece, Fotiadis *et al.* (2014) developed a business-effectiveness model and concluded that the entrepreneur's personal skills in managing the tourist unit was the main reason for success. Fotiadis *et al.* (2016) implemented a new analytical method — fuzzy set/Qualitative Comparative Analysis — suggesting that high strategic planning, high leadership, and low organization of tourism packages relates to a high level of skills in planning and strategy. In Croatia and Slovenia Jurđana, Milohnić and Dadić (2015) also founded that proficiency in information and communications technology is fairly low, as well as the ability in carry out financial accounting, and due of this aspects some entrepreneurs use external financial and accounting services, which increase the operating costs.

Teodoro *et al.* (2017) analysed the factors that influence the performance of small rural tourism units in Serra da Estrela (Central Region of Portugal). The main determinant of better performance is having a formal website, so entrepreneurs need to develop their marketing and advertising strategies. The study also suggests that rural tourists prefer small and ancient lodgings and places where the owner/manager does not live. Education and previous entrepreneurial experience, contrary

to the expectations, don't influence positively success. Pato and Kastenholz (2017) with the objective to analyse the marketing actions in rural tourism lodging in Dão-Lafons (Central Region) and Douro Region (North) in Portugal conclude that most of the owners have lack of marketing skills and few have actively developed marketing activities. In spite of existing a minority that has a more entrepreneurial attitude in what concerns marketing actions and networking, which leads to a more successful business. To Almeida (2017) the tourism rural sector in the Region of Madeira, Portugal, should not only be concerned with the occupancy rate but mainly with business competencies, entrepreneurial spirit and high order competencies as networking and cooperation. Although most of the owners felt that they have competencies to meet the preferences of the visitors, they welcome training in culture and traditions. They also expect local authorities to promote transformational leadership, to develop strategic plans, particularly in the areas of cultural events, amenities and advertising.

With regard to restrictions to rural entrepreneurship, Jaafar *et al.* (2015) identified that the main constraints in operating small tourism-related businesses in the rural area of Kinabalu National Park, Malaysia, were, beyond seasonality, the lack of knowledge about trends and tourism opportunities, the lack of tourism marketing skills, and the limited knowledge on starting a business, having a lack of skills and knowledge related to the tourism sector.

Research methodology

A questionnaire was designed and sent to 241 rural tourism businesses in the North Region of Portugal registered in the official website maiturismo.pt with electronic address. There were 55 successful responses to the email survey.

The questions included in the survey were based on the literature (European Commission, 2012; Jaafar *et al.*, 2011; Phelan and Sharpley, 2012), and the core of the questionnaire was a list of entrepreneurial competencies compiled by Phelan and Sharpley (2012), coupled with Likert scales through which the entrepreneurs were invited to rate their ability in relation to

each competency. This survey also includes socio-demographic information about the owner/manager, characteristics of the business, creation and management of the business, problems faced while running the business and barriers to entrepreneurship.

It was made a descriptive analysis of the personal and demographic characteristics of the owner, the characteristics, management and background of the business, the perceptions of functional competencies of entrepreneurial and personal maturity skills defined by Phelan and Sharpley (2012), and the problems found in creating and managing the business.

In order to identify the functional competencies that better define the entrepreneurial and the personal maturity skills, there were conducted exploratory and confirmatory analyses. While Exploratory Factor Analysis (EFA) provides information about the numbers of factors required to represent the data, in Confirmatory Factor Analysis (CFA) the number of factors required in the data can be specified and which

measured variable is related to which latent variable.

The EFA on the skills was made employing principal component analysis. The data was evaluated through CFA, using AMOS (Analysis of Moment Structure) and performed a Structural Equation Model (SEM), a multivariate data analysis. There were analysed several indicators of best fit.

With the result of the factor analyses cluster analysis was made to categorize the entrepreneurs according to the factors obtained. ANOVA was applied in order to verify the significant differences between the clusters in each factor. A cross-tabulation was completed to categorize the personal characteristics of the owners and their businesses in each cluster.

Results and analysis

Entrepreneur and business characteristics

Table 2 summarizes the respondent's demographic information. The majority of the respondents are owners (78.2%) and

Table 2. Demographic characteristics

Profile variables	Categories	Frequency	Profile variables	Categories	Frequency
Position of the respondent	Owner	78.2%	Level of education	Ph.D.	0,0%
	Manager	16.4%		Master degree	9.1%
	Assistant manager	1.8%		Bachelor degree	61.8%
	Other	3.6%		Further Education	23.6%
Gender	Male	63.6%		Secondary Education	3.6%
	Female	36.4%		Primary Education	0,0%
Marital status	Single	10.9%	Area of specialization*	Other	0,0%
	Married	74.5%		Management/Administration	25.5%
	Other	14.5%		Finance/Accounting	8.5%
Age	Under 25	0,0%		Hospitality/Tourism	23.4%
	25-34	10.9%	Other	51.5%	
	35-44	20,0%	Working experience*	Management/Administration	56.4%
	45-54	9.1%		Hotel management	18.2%
	55-64	34.5%		Marketing	3.6%
Nationality	65 and more	25.5%		Restaurant management	1.8%
	Portuguese	92.7%		Other	32.7%
Other	7.3%	Activities before starting the business *	Liberal profession	27.3%	
			Entrepreneur (trade or industry)	16.4%	
			Worker in a hotel or restaurant	10.9%	
			Civil servant	25.5%	
			Bank employee	3.6%	
			Other	29.1%	

* Multiple answers permitted

managers (16.4%). 64% are male and the majority of the respondents are married (74.5%). In terms of age, 60% are over 55 years old, although 31% fall between the ages of 25 and 44. Most of the respondents have Portuguese nationality and 7.3% are foreigners. In terms of formal education, most of the respondents have high academic degrees: bachelor degree (61.8%) or master (9.1%), and only 27.2% have lower formal educational levels. The main areas of specialization of formal education are management/administration and hospitality/tourism (25.5% and 23.4%, respectively), agriculture (10.9%) and finances/accounting.

Considering the professional experience, the majority has worked in management/administration areas (56.4%) and hotel management (18.2%). These professional activities were developed mainly as liberal professionals (27.3%), civil servants (25.5%), entrepreneurs in services or industry (16.4%), workers in a hotel or restaurant (10.9%), and bank employees (3.6%).

Table 3 presents the main characteristics of the businesses. About 86% had been operating for more than six years and 24% for more than twenty years. Douro, which includes the landscape where Porto and Douro wines are produced (Alto-Douro Wine Region, a

UNESCO World Heritage Site) concentrates 40% of rural tourism establishments followed by *Minho-Lima* (23.6%) and *Cávado* (12.7%). Sole traders and society by shares are the predominant legal form. The businesses have a micro/small dimension: 65.4% have two or less paid employees and 34.6% have 3-10 employees. The majority of the establishments has five to nine bedrooms (60%) and 20% between ten and fifteen.

For most of the owners/managers this was the first experience in entrepreneurship (70.9%), while only 18.2% had a company previously (Table 4). The majority has been managing the tourism establishments for 6 or more years (71%). Less than half dedicate more than 30 hours per week to manage the tourism lodging and 24% dedicate less than 15 hours. At the same time they perform other activities, mainly agriculture (61.1%) and liberal professions (20%). Pato and Kastenholz (2017) point out as one of the weaknesses of rural tourism in Portugal the little time dedicated to managing tourism lodging, due to the fact of being engaged with other professional activities from which they obtain the largest part of their income, which can be an obstacle to a more professional management of the lodging business. 70.9% own the business by creating it and 20% inherited it. The start-up capital came mainly from their savings (78.2%), public

Table 3. Characteristics of the business

Description		Frequency	Description		Frequency
Years operation	Less than a year	1.8%	Legal form	Sole trader	45.5%
	1-5	12.7%		Society by shares	43.6%
	6-10	25.5%		Anonymous society	7.3%
	11-20	36.4%		Other	3.6%
	More than 20 years	23.6%	Number of employees	0	12.7%
Sub-region	<i>Alto Trás-os-Montes</i>	7.3%		1-2	52.7%
	<i>Ave</i>	5.5%		3-5	29.1%
	<i>Cávado</i>	12.7%		6-10	5.5%
	<i>Douro</i>	40.0%		11-20	0.0%
	<i>Entre Douro e Vouga</i>	0.0%		Over 20	0.0%
	<i>Grande Porto</i>	1.8%	Number of accommodation units	Less than 5	16.4%
	<i>Minho-Lima</i>	23.6%		5-9	60.0%
	<i>Tâmega</i>	9.1%		10-15	20.0%
				More than 15	3.6%

Table 4. Management of the business and background

Description			Frequency	Description			Frequency
Number of previous companies	0		70.9%	Family involvement	Only me		25.5%
	1		18.2%		With spouse/husband		45.5%
	2 to 5		10.9%		Other		29.1%
	More than 5		0,0%				
Years of managing the business	Less than a year		1.8%	Other activities that the management body exercises*	Agriculture		61.1%
	1 to 2		7.3%		Trade		7.3%
	3 to 5		20.0%		Business restaurant		14.5%
	6 to 10		25.5%		Recreation		5.5%
	11 to 20		29.1%		Liberal professions		20.0%
	More than 20		16.4%		Other		21.8%
Hours per week dedicated to the business	Less than 15		23.6%	Capital to start the business*	Own savings		78.2%
	15 to 30		29.1%		Loans from family and friends		14.5%
	More than 30		47.3%		Business Angels		0.0%
How get involved in business	Started myself		70.9%		Business partners		0.0%
	Purchased		0.0%		Venture capital		0.0%
	Inherited		20.0%		Public funding		50.9%
	Others		9.1%		Bank finance		45.5%
					Other		5.5%

* Multiple answers permitted

Table 5. Rural tourism entrepreneurs' perception of entrepreneurial and personal maturity skills/competencies

Skills		Very poor	Poor	Acceptable	Good	Very good	Mean	Standard deviation
		%						
Accountability	Ability to take responsibility for solving a problem	0.0	0.0	12.7	60.0	27.3	4.15	0.621
Critical evaluation	The ability to think critically	0.0	0.0	14.5	65.5	20	4.05	0.591
Emotional coping	Emotional ability to cope with a problem	0.0	0.0	18.2	65.5	16.4	3.98	0.593
Self-awareness	Ability to reflect and be introspective	0.0	0.0	25.5	58.2	16.4	3.95	0.591
Networking	Cooperating with the others, networking and utilizing contacts	0.0	0.0	25.5	58.2	16.4	3.91	0.646
Negotiation	Persuasive communication and negotiation skills	1.8	5.5	23.6	54.5	14.5	3.75	0.844
Goal setting	Ability to set personal goals, reach them and set new ones	1.8	7.3	25.5	50.9	14.5	3.69	0.879
Environmental scanning	Recognize market gap, exploit market opportunity	1.8	5.5	29.1	52.7	10.9	3.65	0.821
Business concept	Business and strategic planning	1.8	9.1	29.1	49.1	10.9	3.58	0.875

funding (50.9%), banking loans (45.5%) and loans from family and friends (14.5%). The family involvement is high: 45.5% manage the business with the spouse/husband and only 25.5% by themselves.

Competencies of owners/managers of rural tourism enterprises

The results for the perception of rural tourism owners of their competencies and skills are presented in Table 5 and Figure 1. In general, the owners/managers of rural tourism businesses have high perceptions of their abilities to take responsibility for solving a problem, to think critically and to deal emotionally with a

problem, considered as good or very good by 87.3%, 85.5% and 81.9%, respectively.

Nevertheless, to the underlying competencies of recognizing a market gap, exploiting market opportunities, and business and strategic planning the perceptions are lower. Only 60% rank the competency of business concept as good or very good, 63.6% of environment scanning and 65.4% of goal setting.

Figure 1 shows that the perceptions of entrepreneurial and personal maturity skills are high: the average ranking ranges from 4.15

regarding the ability to take responsibility for solving a problem to 3.58 in what concerns business and strategic planning. The results indicate the need to improve their skills in recognizing market gaps and exploit its opportunities and in business and strategic planning.

Comparatively to the results of Phelan and Sharply (2012) to farm tourism enterprises in the North West of England, the perception of functional competencies for the rural tourism owners in Portugal are lower in critical evaluation, accountability, emotional coping, and

Figure 1. Rural tourism entrepreneurs' perception of entrepreneurial and personal maturity skills/competencies– mean average rankings

Table 6. Problems encountered in business management

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean	Standard Deviation
Lack of tourism marketing skills	5.5%	32.7%	21.8%	32.7%	7.3%	3.036	1.089
Lack of knowledge on how to apply for funding from financial institutions	14.5%	43.6%	20.0%	21.8%	0.0%	2.491	0.997
Lack knowledge in tourism market trends and opportunities	5.5%	38.2%	20.0%	29.1%	7.3%	2.945	1.096
Lack of management skills and knowledge in tourism	16.4%	27.3%	27.3%	29.1%	0.0%	2.691	1.069

goal setting and higher in self-awareness, environmental scanning, networking, negotiation and business concept.

At the level of business management (Table 6), following Jaafar *et al.* (2011), 40% strongly agree or agree that they lack tourism marketing skills. They disagree or strongly disagree that they lack expertise on how to obtain funding (58.1%), in tourist market trends and opportunities (43.7%) in management skills and knowledge in tourism (43.7%).

A cross-tabulation analysis was conducted to show the association between the socio-demographic status of the owners of rural tourism businesses and their perception about the problems found in business management. Only five demographic variables viz. age, gender, educational qualification, age of the firm and if it was inherited or not are included in this study for convenient analysis. Tests are administered to know if there is an association between the gender of the owners/managers and the degree of agreement with each one of the four parameters regarding the lack of skills and knowledge mentioned. The sample survey results bring out some interesting issues. In general, our results show that the socio-demographic variables do not have similar effects in the presence of some parameters regarding the lack of skills and knowledge of the entrepreneurs. Similarly, taking into account age-related differences, it was found that the impact in the lack of skills or knowledge differs from aggregate-level outcomes. Thus, our study reveals the importance of the disaggregated analysis that takes into account the contextual heterogeneity that surrounds the entrepreneurial activity. In general, the two main conclusions are:

1) Gender is one of the factors which influences the perception of the problems found in business management. The results show that about 50% of the women perceive have lack of skills which is the opposite in the case of men, except in the lack of knowledge on how to apply for funding from financial institutions where both disagree more than agree.

2) In both, younger and older entrepreneurs, the percentage of those who do not agree to

have lack of skills is slightly higher than the ones who agree, except for the lack of tourism marketing skills where there is a higher percentage among older people that agree. The same is true for entrepreneurs with less literacy compared to those who have the highest qualifications, the owners who have inherited the business and the business with more years in operation.

Exploratory factor analysis of the skills

A factor analysis was conducted, in order to categorize the skills of the entrepreneurs. Some skills – accountability, self-awareness and negotiation - were eliminated to improve the correlation quality in order to proceed the factor analysis. Data revealed that internal coherence was appropriate, with Kaiser-Meyer-Olkin equal to 0.688 and Bartlett's Test of Sphericity was significant at 0.000 level (130.783). Principal components analysis was applied with a Varimax rotation with Kaiser Normalization and eigenvalues greater than one. Given the sample size, significant loadings are those equal or higher than 0.70 (Hair *et al.*, 2010). Communalities are all higher than 0.60. The competencies were categorized into two main components, which explained 71.1% of the variation of the perception of the skills (Table 7). The first factor had the highest eigenvalue (2.937) and explained 49% of the total variances of the variables and included the core entrepreneurial competencies: business concept, goal setting and recognizing market opportunities and exploring them and it was labeled *Entrepreneurial factor*. The second factor explained 22.1% of the variance and was linked to emotional coping, networking and critical evaluation and it was called *Personal maturity factor*.

Confirmatory Factor Analysis

A confirmatory factor analysis was used to test whether the measured variables adequately represented the number of construct factors using Analysis of Moment Structure (AMOS version 24). Factor analysis (exploratory and confirmatory) and structural equation modelling are statistical techniques that are used to reduce the number of observed variables into a smaller number of constructs by examining the co-variation among the observed variables. This application tests the hypothesis that

Table 7. Principal component analysis of the perception of skills – Rotated Component Matrix

	Factor loadings and components		Communalities
	Entrepreneurial factor	Personal maturity factor	
Business and strategic planning	0.938		0.879
Ability to set personal goals, reach them and set new ones	0.895		0.837
Recognize market gap, exploit market opportunity	0.738		0.634
Emotional ability to cope with a problem		0.801	0.698
Cooperate with the others, networking and utilizing contacts		0.783	0.663
Ability to think critically		0.741	0.551
Percent of variance explained	48.96%	22.09%	
Cumulative percentage	48.96%	71.05%

Figure 2. Original Model CFA

Entrepreneurial competencies are a structure composed of personal maturity skills and core entrepreneurial skills. Figure 2 reports the first order measurement model of skills. Each latent variable is measured with three observed variables.

The confirmatory factor analysis was appraised for model fit with common parameters including the χ^2 goodness of fit statistic among others. This appraisal was supplemented by the Comparative Fit Index (CFI), Good Fit Index (GFI), and Root Mean Squared Error of Approximation (RMSEA).

The results (Table 8) of the initial CFA fit indices of the initial model showed a poor fit based on recommended values: $\chi^2 (8) = 14.92$, $p = 0.061$, CFI = 0.944, GFI = 0.924, RMSEA = 0.127 (Hair *et al.*, 2010). This shows that the data from the sample does not fit with the hypothesized model. To improve the model fit, some items must be removed on the basis of modification indices, factor loadings, and standardized residuals (Bagozzi & Yi, 1988; Hair *et al.*, 2010).

After modification, one of the skills, the variable business and strategic planning, was dropped in the latent factor "Entrepreneurial". A

correlation between the skills studied is shown in Table 9 to check multicollinearity and based on results the correlations between the skills

Table 8. Fit Indices for the Measurement Model

Fit Index	Original model	Modified Model	Recommended values
df	8	4	
χ^2	14.925	4.005	
χ^2 / df	18.866	1.001	
CFI	0.944	1.000	≥ 0.90
GFI	0.924	0.973	≥ 0.90
RMSEA	0.127	0.005	≤ 5.0

Table 9. Correlation for CFA

Observable variable	Recognize market gap, exploit market opportunity	Ability to set personal goals, reach them and set new ones	Emotional ability to cope with a problem	Ability to think critically	Cooperate with the others, networking and utilizing contacts
Recognize market gap, exploit market opportunity	1				
Ability to set personal goals, reach them and set new ones	0.551	1			
Emotional ability to cope with a problem	0.238	0.350	1		
Ability to think critically	0.251	0.173	0.376	1	
Cooperate with the others, networking and utilizing contacts	0.465	0.369	0.562	0.394	1

The Figure 3 depicts the model that was run through AMOS for structural equation modelling output.

Figure 3. Structural Model results with standardised regression weights

were less than 0.9, denoting no multicollinearity.

The improved model provided the following fit indices: CFI = 1.000, GFI = 0.973, RMSEA = 0.005, $p = 0.405$, and with the $\chi^2 (4) = 4.005$, not exceeding three times its degrees of freedom (Bollen, 1989). The RMSEA of 0.005 is a good fit for the conditions of small sample sizes ($N < 250$) and number of variables ($m = 5$) (Hair *et al.*, 2010).

The results of the CFA model indicated a good fit between the model and the data. Standardized parameter estimates are provided in Figure 3 and unstandardized estimates are reported in Table 10.

The standardized coefficients (β) of all of the paths were found to be significant at the 0.001 level. The correlation among the two latent constructs in the CFA is 0.64, which mean that personal maturity and entrepreneurial are related positively. All functional competencies have high factor score weights. The functional competencies that contribute most for the score

of Entrepreneurial are market scanning and the ability to set personal goals, and for the score of the Personal and maturity skills are emotional ability to cope with a problem, ability to think critically and cooperating with the others, networking and utilizing contacts.

Cluster and multivariate analysis

A cluster analysis was made on the two factors from the previous analysis perceived by owners/managers of rural tourism businesses to identify similar groups. Using the Ward's hierarchical procedure, because equally sized clusters are expected and no outliers are present, and examining the dendrogram, the results showed a two-three cluster resolution. The two and three cluster resolutions were tested using K-means technique and the results were more interpretable with three clusters.

Further analyses were conducted to examine if there are significant differences between the factors means in the clusters, using ANOVA and in order to know which clusters are different from each other, post-hoc Scheffé test was applied to determine which groups were

Table 10. Standardized and unstandardized coefficients for CFA

Observable variable	Latent construct	β	B	SE
Recognize market gap, exploit market opportunity	Entrepreneurial factor	0.79	1	
Ability to set personal goals, reach them and set new ones	Entrepreneurial factor	0.70	0.89	0.277
Emotional ability to cope with a problem	Personal maturity factor	0.66	1	
Ability to think critically	Personal maturity factor	0.48	0.73	0.244
Cooperate with the others, networking and utilizing contacts	Personal maturity factor	0.86	1.36	0.362

Table 11. REGR factor score

Complete Linkage	Entrepreneurial factor		Personal maturity factor		
	Subset for alpha = 0.05		Subset for alpha = 0.05		
	1	2	1	2	3
3	-1.068		-1.061		
1	-1.050				0.90
2		0.705		-0.006	

different. In what concerns entrepreneurial factor the clusters 1 and 3 are significantly similar. The normality, linearity, and homogeneity of the data were also examined and it was verified that they were robust to slight violations. Means for groups in homogeneous subsets are displayed in Table 11 for the post-hoc Scheffé.

The owners/managers of rural tourism in the Northern Portugal in cluster 2 related to entrepreneurial factor have values above mean zero and those included in clusters 1 and 3 are similar to each other and below the mean zero. On personal maturity factor the respondents included in cluster 1 have values above mean zero and those in clusters 2 and 3 below the mean zero. From this analysis, we conclude that cluster 1 perceived their maturity skills higher than the members of the other clusters followed by cluster 2 in entrepreneurial skills. We verified that the owners/managers of rural tourism in cluster 3 have low personal maturity and entrepreneurial skills.

A cross-tabulation analysis was conducted between the two factors and demographic characteristics of the owner/manager and the business.

Cluster 1 – Entrepreneurs with low perception of entrepreneurial competencies and highest personal maturity skills

This is the group with a higher percentage of younger owners/managers (41.7% are under 44 years old) and only 50% are married. 75% have higher education degrees with specialization in management and/or tourism/hospitality (41.6%), and their professional experience is mainly in these areas (75%). The management body prosecutes others activities, with emphasis on agriculture and restaurants, but 25% of the owners don't have any other activity, the highest percentage of the three groups. It's the group that has been in this business for more years, with a large number of employees and accommodation units and who dedicates more time to the business. For almost all of them (91.7%) this was the first experience in entrepreneurship. More than half begun this business by opportunity (58.3%), creating the enterprise (66.7%), but 33.3%

inherited it (the highest rate among the three clusters). 58.3% were helped by family, relatives or friends with concrete recommendations and actions to start it, but the family involvement in the business is not very high, as 41.7% manage the business by themselves, contrary to the owners in the other clusters. This cluster is very heterogeneous in the opinion about their management skills and knowledge in tourism, tourism market trends and opportunities, tourism marketing skills and knowledge on how to apply to funds from financial institutions. In this cluster they perceived their skills in emotional intelligence and networking (100% each), and critical evaluation (91.7%) as good and very good. 66.7% of the members scored only as acceptable their skills in market scanning and 58.1% in goal setting.

Cluster 2 - Entrepreneurs with the highest perception of entrepreneurial and intermediate personal maturity skills

Members of this cluster are similar to cluster 1 in gender, nationality (Portuguese), but almost all are married (84.8%). More than half are more than 55 years old. 72.7% have higher education degrees with specialization in management (21.2%) and hospitality/tourism (15.2%) but the previous professional experience is mainly in management (57.6%). 72.7% of the members of the cluster created the business, mainly by opportunity (48.5%) although for 42.2% it was both by opportunity and necessity. There is a high family involvement in the business, the highest of the three clusters: 63.6% with the wife/husband and 15.2% with other members of the family. Contrary to cluster 1 and 3, for 39.4% this was not the first time they started up a business, and 15.2% have had between two to five previous ventures. The enterprises are located in *Douro* (36.4%), *Minho-Lima* (18.2%) and *Cávado* (15.2%), with one or two workers paid (54.5%), and more than half are sole traders. Besides lodging they also have other activities, mainly agriculture followed by liberal professions. Most of the members of this cluster disagree or strongly disagree that they have lack of knowledge on how to apply for funding (63.6%), lack of knowledge in tourism market trends and opportunities (54.6%), lack

of management skills and knowledge in tourism (54.5%), and lack of tourism marketing skills (45.4%). This is the group with higher perceptions of their entrepreneurial skills among the three clusters: 96.9% perceive as good and very good the competencies in setting goals and 84.9% in market scanning. The underlying competencies in Personal maturity skills are considered good by most of the entrepreneurs.

Cluster 3 - Entrepreneurs with the lowest perception of entrepreneurial and personal maturity skills

Unlike the members of the other clusters, where almost all the owners are man, in this cluster 50% are women. This is the group with the highest rate of foreigners (20%) and age (70% of the owners/managers are more than 55 years old). Only 60% have higher education degrees and the main area of specialization is agriculture (20%), but 30% have professional experience in management. They created the business mainly driven by the opportunity (50%) and the majority (55.6%) had no help from family, relatives or friends with concrete recommendations and actions to start it. 30% manage it without family involvement, but 20% do it with the wife/husband and 50% with other members of the family. This is the group that used most of its own savings as the only source of start-up capital (40%), followed by public funding and commercial bank loans. They have the smallest number of paid-workers (40% don't have employees) and the owners/managers spend less time running their businesses than the other clusters. They also develop agricultural activities, leisure services and liberal professions. Most of the members of this cluster agree or strongly agree that they lack management skills and knowledge in tourism market trends and opportunities and in tourism marketing skills (60% each), but half of them disagree or strongly disagree that they have lack of knowledge to apply for funding. They perceive as poor or very poor their perception on market scanning and goal setting (40%) and only acceptable in networking, emotional intelligence and critical evaluation.

Comparing the characteristics of entrepreneurs in these groups several results can be

highlighted. Entrepreneurs with better prior education and with academic specialization and professional experience in management and/or tourism/hospitality have a higher perception of their skills. Among them, the highest perception of entrepreneurial competencies is from owners with degrees mainly in management followed by tourism/hospitality, with professional experience in management and who had several previous experiences in new ventures. It is worth to point out that the first-time entrepreneurs evaluated their own entrepreneurial competencies lower than those with previous experience. Therefore, it seems that entrepreneurs who have had previous ventures can be more optimistic about their competencies.

Lower perceptions of entrepreneurial and personal maturity skills are felt by respondents with lower level of education and/or education and professional experience in agriculture, where tourist activity of country home rental predominates, which seems to be an activity very attractive for women who can easily manage family and business life. This business may be a secondary activity for the family, where at least one of the members develop another parallel activity. Entrepreneurs with lower skills in marketing and management, and lower knowledge in tourism, market trends and market opportunities also perception as low their entrepreneurial competencies.

Barriers to entrepreneurship

Following the barriers to entrepreneurship defined by the European Commission (2012), the results of this study for rural tourism entrepreneurs in the North of Portugal show that bureaucracy, lack of financial support and lack of information are the main restrictions found (Table 12). These three barriers are particularly felt by entrepreneurs with the lowest perception of entrepreneurial and personal maturity skills, followed by those with low perception of entrepreneurial and highest personal maturity skills. The results suggest that the entrepreneurs with a higher perception of their entrepreneurial skills overcome more easily these barriers (cluster 2). In case things go wrong, a second chance is well regarded mainly by entrepreneurs with a higher perception of their entrepreneurial skills. This

Table 12. *Perceived barriers to entrepreneurship*

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean	Standard Deviation
Lack of available financial support from the government to small businesses	1.8%	10.9%	20.0%	45.5%	21.8%	3.75	0.99
The complexity of administrative procedures	1.8%	5.5%	12.7%	49.1%	30.9%	4.02	0.91
The difficulty to obtain enough information on how to start a business	0.0%	16.4%	18.2%	43.6%	21.8%	3.71	0.99
One should not have started a business if there is a risk it might fail	5.5%	38.2%	16.4%	36.4%	3.6%	2.95	1.06
People who have started their own business and have failed should be given a second chance	0.0%	3.6%	23.6%	58.2%	14.5%	3.84	0.71

positive attitude towards giving entrepreneurs a fresh re-start is very important as businesses set up by re-starters grow faster than businesses set up by first timers in terms of turnover and jobs created (Stam *et al.*, 2008).

Compared to the overall results for Portugal, rural tourism entrepreneurs in the North of Portugal found more difficulties when they started up the business due to the complexity of administrative procedures (European Commission, 2012).

Conclusions

From a rural development perspective, tourism in rural areas can play an important role in ensuring the revitalization of these areas. The dominance of micro and small enterprises highlights the importance of the owner in the process of start-up and growth of the business, and so it is important to understand the entrepreneurial competencies among the owners of rural tourism companies. Which characteristics an entrepreneur of a small business should have is not a simple task. While some literature focuses on personal traits, Lichtenstein and Lyons (2001) consider that, more than the personal characteristics or the business, entrepreneurs should be categorized by their skills and competencies in creating and running the business. The competency-based approach takes a comprehensive perspective in searching for competencies precursors of success.

In this research a set of skills/functional competencies were structured in two main factors: Entrepreneurial and Personal maturity

skills, based on the perceptions of the owners of rural tourism lodgings in Northern Portugal. Through Confirmatory Factor Analysis and Structured Equation Modelling it was found that the underlying competencies in the Personal maturity factor were emotional coping, ability to think critically and networking. Having the emotional ability to cope with a problem, to enable to process information before deciding upon an action or being able to critically observe the ideas before acting, and the ability to create or maintain contacts, define the higher order competencies. In the Entrepreneurial factor the goal setting and market scanning were the significant functional competencies. The entrepreneurial role requires individuals motivated to set goals, particularly challenging goals, and with the competency to scan environment, choose potential opportunities and to take advantage of them.

Entrepreneurs of rural tourism in the North of Portugal have a high perception of their personal maturity skills, mainly the ability to take responsibility for solving a problem, to think critically and emotional coping. According to Lichtenstein and Lyons (2001) these are the competencies that enhance the probability to promote changes. The competencies most associated to entrepreneurship – opportunity recognition, business and strategic planning and goal setting – according to their own personal evaluation are lower. This business was for most of them the first experience in entrepreneurship and they created it, although some have inherited it. Opportunity, but also necessity, were the reasons to start-up a new

venture mainly with their own personal savings combined with loans and public funding.

The cluster analysis suggests that education influences the entrepreneur's attitudes, ensuring that they recognize better new opportunities and are able to explore them, to encourage to deal with different problems, and better communicate. Using past experience in the area and the experience in managing other enterprises, they can acquire the understanding of competencies and strategies need for advancement, which is in accordance with Garrigós-Simon *et al.* (2008). It can also be highlighted that second-time entrepreneurs are more optimistic about their competencies.

The cluster with lower entrepreneurial and personal maturity skills is a group with a strong involvement of the wife/husband and other family members in the management of the business in detriment of other partners and that accumulate the management of the business with other professional activities dedicating less time to this business. Holders of smaller ventures, measured by the number of paid workers, have a lower perception of their competencies and so the results suggest that competencies are vital do promote growth. It is also interesting to note that entrepreneurs with lower perceptions of their skills seem to avoid more the risk, preferring to use self-funding as the start-up capital instead of getting into debt.

The groups with lower perception of entrepreneurial competencies felt that they lack of marketing and management skills, and knowledge in tourism, market trends and opportunities. Entrepreneurial activities involve the process of achieving competitive advantage, where opportunities identification and its exploration is crucial (Ma, Huang & Shenkar, 2011) and marketing in rural tourism is also extremely important to attract tourists and boost consumers' loyalty, particularly in areas with scarce economic and human resources (Pato and Kastenholz, 2017; Saxena, 2016). The recognition of the lack of skills as a problem found in running the business suggests that entrepreneurs would welcome training support and advisory services in these areas, in order to promote the business. It is fundamental to enhance the skills and

competencies of the entrepreneurs, in order to strengthen them to compete with other segments of the hospitality market in Portugal and in the global market.

While in literature, most of the classifications of the entrepreneurs have been made with reference to their personal characteristics like personality, motivation, education, work experience and family background, in this study the basis of their classification were their competencies and skills. Moreover, while most of the literature on entrepreneurial skills focuses particularly on the conception of its categorization and definition of the underlying competencies, in this study we attempt to structure them, identifying which underlying competencies best define the entrepreneurial and personal maturity skills based on data and establish relations between them.

In future research it would be important to study the entrepreneurial and managerial competencies in different stages of the business and the influence of the entrepreneurial competencies on the performance of the enterprise.

Focusing on entrepreneurial skills is crucial, as Lans *et al.* (2010) point out, because it allows entrepreneurs to be aware of their level of skills and to identify some specific competencies that promote success.

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