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Research Article

Vânia Costa,* Andreia Moura, Maria do Rosário Mira, António Cerdeiras, Inês Pinto da Cruz, José Filipe Pereira, Isabel Silva Martins, Oscarina Conceição, Abílio Vilaça, Cláudia Almeida, Paulo Carrança

HC Tourism. Profile and Trends of Human Capital in the Tourism Sector

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Abstract: Tourism is a strategic sector in Portugal since it generates employment and it is a factor of economic and social development. The tourism sector not only has an intensive need of labour force but also provides employment opportunity to a range of qualifications. Being an industry of people, it directly depends on the performance of activities, skills, professionalism, quality and competitiveness. The main objective of this article is to present the HC Tourism project, which aims to seek and understand the needs of skills in tourism industry by studying the active companies that belong to the tourism economic subsectors, by region and subsector of economic

activity. The methodology used in this project is based on a qualitative and quantitative approach, throughout the collection of primary and secondary data. The qualitative approach was based on a literature review which allowed to compile a list of 150 skills, divided under four domains: i) soft skills; ii) hard skills; iii) management skills; iv) transversal skills. The quantitative approach returned primary data, which were collected through an online survey implemented and sent to national tourist entrepreneurs, expecting to develop the ideal profile of the tourism human resources, based on a sample of 555 answers.

Keywords: Skills; Human capital; Human resources; People management; Tourism

*Corresponding author: Vânia Costa, School of Hospitality and Tourism, Polytechnic Institute of Cávado and Ave, Barcelos, Portugal, University of Aveiro, Portugal, CiTUR, Portugal and UNIAG, Portugal, ORCID: http://orcid.org/0000-0002-4202-8779, E-mail: vcosta@ipca.pt

Andreia Moura, Maria do Rosário Mira, Polytechnic Institute of Coimbra, Portugal, GOVCOPP, University of Aveiro, Portugal, ORCID: https://orcid.org/0000-0002-1722-3476 e https://orcid.org/0000-0001-8878-955X

António Cerdeiras, José Filipe Pereira, Abílio Vilaça, Polytechnic Institute of Cávado and Ave, Portugal, ORCID: https://orcid.org/0000-0001-9761-9085; https://orcid.org/0000-0002-9609-2426 e https://orcid.org/0000-0002-9101-8067

Maria Isabel Martins, Polytechnic Institute of Cávado and Ave, Portugal, GOVCOPP, University of Aveiro, Portugal, ORCID: https://orcid.org/0000-0001-6052-4592

Inês Pinto da Cruz, CEIS20 — Centre of 20th Century Interdisciplinary Studies, University of Coimbra, Portugal, ORCID: https://orcid.org/0000-0002-6112-3616

Oscarina Conceição, Polytechnic Institute of Cávado and Ave, Portugal, DINÂMIA'CET-IUL, Lisbon, Portugal and UNIAG, Portugal. ORCID: https://orcid.org/0000-0001-8072-8250

Cláudia Ribeiro de Almeida, University of the Algarve, School of Management, Hospitality and Tourism, Portugal, CinTurs, University of the Algarve, ORCID: https://orcid.org/0000-0002-0790-3152

Paulo Carrança, Porto and Northern Portugal Tourism, Regional Tourism Entity, ORCID: https://orcid.org/0000-0001-5138-9114

1 Introduction

The economic crisis, the need for new skills and the demographic changes have contributed to the recognition that the learning strategies of adults and lifelong learning must play a key role in the policies of competitiveness and employability, social inclusion and active citizenship. Skills will determine competitiveness and will play a crucial and essential role in social cohesion through economic growth and job creation, thus intensifying the need for continuous improvement of skills to meet the growing needs of the labour market in knowledge-based economies (European Commission, 2017; World Economic Forum, 2018).

In this sense, the competitive capacity of the societies is largely due to their ability to develop appropriate skills to the market and to improve the qualifications of citizens, since better qualified and prepared citizens allow a greater capacity to add value to businesses and to maintain employment, thus contributing to a greater caption of investments and a higher creation of new skilled jobs (European Commission, 2017).

Societies are experiencing various economic, social and cultural changes, which are transforming them increasingly into knowledge-based societies (Organisation for Economic Co-operation and Development, 2018); so, in the tourism sector, in particular, competitiveness is associated with the creation of partnerships between all stakeholders, allowing, in this sense, a better identification of the real skills needs of the companies to better respond to the changes in the consumer patterns and expectations of travellers, thus ensuring an effective response to the market and consequent improvement of the qualifications of its workers (World Economic Forum, 2017).

In Portugal, the tourism sector assumes high relevance in the national socio-economic context, mainly due to its importance in the generation of jobs and contribution to the global exports of the country. However, its main challenge is the qualification of its workers, since most of the employed population in the sector have qualifications at a basic level of education (Ministry of the Portuguese Economy, 2017) and also show a lack of digital skills and, without these, the country and its population will not be able to face the challenges of the digital era as well as will not beneficiate from its positive effects (European Commission, 2018).

The competitiveness of tourism companies will be based on the ability to create partnerships along with the national educational institutions in order to develop strategies that allow better communication of the real skills needed and create better paths that allow a better answer to the changes in tourists patterns (OECD, 2015) as well as to better prepare the human resources according to the effectively market needs and thus mitigate the difficulties of recruitment and selection of qualified staff that are felt in the sector (European Commission, 2017; World Economic Forum, 2017).

Thus, this problem is the base and the motivation for the elaboration of this project, mainly the observed problems regarding to the dynamics of change of the tourism sector, the needs of training and qualification of human resources as well as the weak communication between educational institutions and the tourism companies. Its main objective is the contribution with a qualitative study that allows a creation of a documental base with the different types of skills most used in the literature.

In this project, the methodology used is built on a qualitative approach based on a literature review, addressing theoretical concepts such as tourism, management and qualification of human resources as well as the summarisation of the skills used in similar studies under different scientific perspectives, such as: marketing, management, tourism and hospitality. The analysis of these documents intends to examine and compile the skills most used in the related studies linked with the project theme, creating a documental basis for the creation of a survey that will be implemented to the national tourism entrepreneurs, whose objective is to measure and identify, in a generalised way, the main skills most valued in the Portuguese workers of the tourism sector according to their perspective.

This paper is organised as follows. In section 2, a literature review is made regarding the importance of human resources in the tourism sector, followed by section 3 that describes the project and its objectives. Subsequently, in section 4, we present the used methodology and the steps of the investigation and in section 5, we present the main conclusions of the research.

2 Human Capital in the Tourism Sector

We live in a rapidly evolving world economy and in a world where millions of people are unemployed, while at the same time – employers complain that they are unable to find skilled workers because there is an imbalance between the supply and demand for skilled personnel in the labour market (World Economic Forum, 2018).

In the coming decades, current jobs we know will be replaced by new types of jobs that require better and different qualifications for workers (World Economic Forum, 2018). So, with that in mind, the qualification or requalification of the workers' skills, through education or training, will play a key role in the competitiveness of the companies, in the employability, in the social inclusion and also in an active citizenship (European Commission, 2017; European Council, 2016a), which intensifies the need for a continuous development and identification of skills needs that can correspond to the growing needs of the labour market inserted in increasingly knowledge-based economies (European Commission, 2017; World Travel and Tourism Council, 2015; World Economic Forum, 2018). Even though most governments do not have policies whose priority is based on the supply, application and updating of specific skills of their population, which, in the long term, will increase the imbalances in the labour market (European Commission, 2018).

The lack of skilled workers will have impacts on all sectors of economic activity, and, in particular, in the tourism sector, in the next decade, this impact will result in a loss of 14 million jobs if there is no reversal of the situation (World Travel and Tourism Council, 2015); therefore, the sector needs strategies that can predict and adapt the necessary skills to the real needs of the companies, encouraging companies to improve the qualifications of their workers through the provision of professional training (OECD, 2015, European Commission, 2017).

The transition of industrial societies into knowledge societies, based on service delivery, the globalisation and the digital advances have changed the business models and there is more and more an increasingly need for qualified workers, especially with skills related to information and communications technology, in response to the new market needs (Ramlall and Ramlall, 2014).

These needs require strategies of competitiveness as well as a necessity of differentiation in the organisations that provide services; thus, the human resources are a decisive element in these strategies since the services provided by this type of organisations have a great emphasis on the contact with the client, like in the case of the tourism sector (Bzunek, 2015), and demands broader skills, which implies a restructuring of the skills held by their workers in order to have a greater capacity to respond adequately to the constant changes (Hsu, 2018; Pérez, Alonso and López, 2016).

In the tourism sector, the proximity and personal contact between the tourist and the worker of the organisation is constant, so qualified human resources play a key role in the provision of the service but especially in the competitiveness of the sector (Bañuls, 2009) since these are determinant in the perceived quality of the final product provided once it directly influences the satisfaction, loyalty, repetition and recommendation of the consumer regarding the tourism destination, product or service provided (Giannakis & Harker, 2014; OECD, 2013).

At the same time, the global changes felt also changed the behaviour of the consumers, generating the satisfaction of new and different needs, leading organisations to put emphasis in soft skills and to hire workers with better soft skills rather the ones with better hard skills, since they allow a greater and rapid adaptation to the changes as well as to a greater satisfaction of the tourists' needs and expectations (Rivera et al., 2012).

In that sense, skills are the characteristics focused on each person and can be defined by the set of knowledge, attitudes and personal characteristics that are difficult to distinguish individually, are essential for employability and are transferable to the work environment and can and should be continually developed through education and training according to the interests and objectives of the organisations for which they work (Jeou-Shyan et al., 2011). Those who have a cognitive origin are called hard

skills and those that have origin in behaviours are called soft skills (Ramlall and Ramlall, 2014; Windels, Mallia and Broyles, 2013).

Hard skills are clearly identifiable and measurable and are those necessary for the performance of a specific profession or task, they are defined as the individual detained capacities that allow the evaluation and identification of complex problems, and consequently, the development of creative solutions for them (Junrat et al., 2014).

Soft skills are the individual human characteristics that contribute to the success of an organisation and are based on individual attitudes and personality traits acquired by professional and personal experiences (Ibrahim, Boerhannoeddin and Kayode, 2017) and are transferable and transversal to the performance of any profession of any sector (Junrat et al., 2014; Tadimeti, 2014; Tsitskari et al., 2017).

Their applicability is what makes them different because the hard skills are applicable to the performance of a particular task or activity, while the soft skills are applicable to the performance of any task or activity, complementing the hard skills, and are considered more important in the companies that provide services, given the personal proximity in the relationship between employees and customers (Frantz and Misal, 2016; Kamaruddin et al., 2012).

Concluding, in general, but specially in the tourism sector, human resources are part of the service provided to the tourists and are an element whose value for the organisation is difficult to quantify, but in which the soft skills play a key and decisive role in the relationship and quality of the consumer experience. In this sense, developing strategies that value and enhance the qualifications of human resources and also identify the skills needs, provide a competitive advantage and better operational results to the companies (Jeou-Shyan et al., 2011; Lu et al., 2015).

3 Profile and Trends of Human Capital in the Tourism Sector Project

The HC Tourism project emerges as an instrument of mobilization, of both teachers and students, for the resolution of specific problems coming up from the scope and the regional relevance and in close collaboration with the regional agents and the business sector. Specifically, it aims to identify, understand and develop the profile of the

human capital of the tourism sector in Portugal in order to suit the trends and the needs of this industry.

This study was born from the need to build a bridge between the tourism companies and the educational institutions in the identification of the hard and soft skills that should be held and developed by the workers of this industry, in order to be an essential output to the planning of higher training in the tourism sector and to foster the convergence of the educational offer to the real needs of the sector as well as a correct inclusion and qualification of the human resources in the labour market.

Given the transversal nature of the tourist activity, the project will necessarily need the inclusion of all entities of the whole value chain of the tourism sector, by adopting integrated collaborative strategies through a clustering process to be developed throughout the project, thereby fostering the links between enterprises, public administration and teaching activities in order to achieve the expected results as well as to promote the connection among the various areas of tourism, fostering the Portugal brand as a strong, distinguished and qualified tourist destination at a global scale.

4 Methodology

In this project, the methodology used is based on a qualitative and quantitative approach through the collection of primary and secondary data. The qualitative approach was based on the literature review, addressing theoretical concepts such as tourism, the management and qualification of human resources, as well as the review of the skills used in similar studies of diverse scientific perspectives such as: marketing, management, tourism and hospitality. The analysis of these documents was intended to analyse and compile the skills that were used in the studies related to the project theme and that would serve as a basis for the items to be implemented in the survey, allowing us to elaborate a first draft with 150 different skills, divided into four domains, namely: i) soft skills, ii) hard skills, iii) management skills and iv) transversal skills. This document was subsequently reviewed by a set of experts from various areas, including the tourism area, and after the inclusion of their suggestions, the final version was created, containing the same four dimensions and 92 skills in total.

After this, our focus was on the characterisation of the Portuguese business tissue, analysing the Iberian Balance Sheet Analysis System (SABI) database, focusing the national active companies that operate in the economic activity sub-segments of 'Hotels and Restaurants', 'Recreational and Cultural Activities' and 'Transports and Logistics' regarding to the i) number of companies, ii) subsector of economic activity, iii) dispersion by region (NUT II), iv) number of workers and v) annual turnover, in order to be aware of the needed sample to implement the next part of the study, the quantitative approach. This quantitative approach returned primary data, which were collected through an online survey implemented and sent to the national tourist entrepreneurs, accessible in the online professional platform LimeSurvey and whose main objective was to measure, in a general way, what skills were most valued in the workers of the tourism sector by the tourism entrepreneurs.

The instrument and the collected data were submitted for analysis of the content as well as for a validation of the reliability and construct (Costello and Osborne, 2005), using a statistical software treatment, Statistical Package for the Social Sciences (SPSS) program, Version 24.0, for Windows.

4.1 Procedures

4.1.1 Qualitative Approach

The qualitative approach was based on the literature review carried out to formulate the overview of the problem that would allow a better understanding of the phenomenon under study (Benckendorff and Zehrer, 2013). Specifically, the identification of the profile of the human capital in the tourism sector and it was clear that the produced investigation related to the thematic of this project, it is mainly developed in scientific areas such as: tourism, hospitality, human resources, management and marketing.

Our initial documental selection was based on the research of documents in digital support in free access platforms such as 'B-on' and 'ResearchGate', using keywords such as: skills, human resources management, human capital and tourism, returning an initial selection of 112 documents, which allowed to extract relevant information on the concepts of tourism, human resources management and skills (soft and hard). After these selections, we excluded 61 documents based on the documents in which the access to full text was not available and publications that addressed skills in a generic way and were not applicable to the tourism sector, returning a final documental basis of 51 documents. The analysis of these documents returned 17 publications related to the skills of human resources with what is expected by the tourism sector in general, 40 documents distinguish these skills between soft and hard skills and, at the same time, 34 articles address the management of human resources training according to different perspectives, namely tourism and hospitality, marketing and organizational development and management. The 51 selected publications constitute the theoretical background of this project and allowed to consolidate the planning of the empirical research, namely ideas about the structure and the items that integrate the questionnaire as well as the suggestion of ideas and methodological procedures to be adopted, giving conceptual sense to the empirical study. This literature review analysis suggested the organisation of the skills in four dimensions, specifically: i) soft skills, ii) hard skills, iii) management skills and iv) transversal skills, and the chosen final structure of the questionnaire follows the same analysed structure.

4.1.2 Quantitative Approach

4.1.2.1 Portuguese Tourism Companies

According to the Bank of Portugal (2014), the tourism sector aggregates companies that operate in the economic activity sub-segments of 'Hotels and Restaurants' [HR], 'Recreational and Cultural Activities' [RCA] and 'Transports and Logistics' [TL].

The characterisation of the Portuguese touristic companies follows those sub-segments and will be presented

with the analysis of the Iberian Balance Sheet Analysis System (SABI) database where, despite the totality of the national companies not being present, represent those who have the obligation to present organized accounting (IES) and were available and active in the SABI database on 31 July 2018, representing about 80% of the total companies in the sector (Bank of Portugal, 2016), focusing on the period 2006–2016, since this was the available period for analysis in the database.

Analysing the total number of active companies, in the period 2006–2016, it was verified that, in 2016, about 44.123 companies were active, more than 21.996 companies than those active companies verified in the year 2006, which represents an increase of about 99.4% under the decade in the analysis (Figure 1). In the same period, the number of workers follows a growth in the number of active companies and, in 2016, the sector employed 258.959 workers, a growth of 166.76% when compared with the year 2006 (Figure 1).

Analysing the structure of the active national tourist companies, by sub-segment of economic activity in the period 2006–2016, its observed that the 'Hotels and Restaurants' sub-segment is the most representative since it represents, on average, about 68.3% of the total companies for the studied period, followed by the 'Transports and Logistics' sub-segment, which represented about 22.3% of the companies and lastly, the 'Recreational and Cultural Activities' sub-segment that represented about 9.3% of the total active tourism companies. We also verify, for the

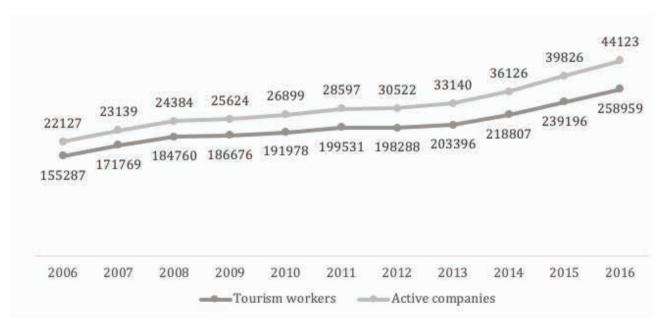


Figure 1: Evolution of the Portuguese tourism active companies and tourism workers Source: Own elaboration based on SABI database

same period, a continuous growth in the representation of active companies in the 'Recreational and Cultural Activities' and in the 'Hotels and Restaurants' sub-segments and a decrease in the 'Transports and Logistics' sub-segment (Figure 2).

Analysing the sector by region NUT II, comparing 2006 and 2016, we verify, in 2016, a decrease in the number of active companies in the regions of Algarve, Lisbon and Autonomous Region of Madeira and an increase in the remaining regions. Regarding the annual turnover, in the same period, the regions of Lisbon, Autonomous Region of Madeira and Autonomous Region of Azores had a small decrease when compared to the increase in thfig2e remaining regions (Figure 3).

Concluding, when we compare the year 2006 and 2016, the 'Hotels and Restaurants' sub-segment aggregates most of the sector active companies and also the majority of the workers, although, the annual turnover is dispersed into 'Hotels and Restaurants' sub-segment and into 'Transports and Logistics' sub-segment. The 'Recreational and Cultural Activities' sub-segment has grown in the number of active companies but decreased in the annual turnover and number of workers (Figure 4).

In the next section, we will characterise the sample obtained with the implementation of the HC Tourism instrument.

4.1.2.2 HC Tourism Instrument

Having as support, the conceptual study resulting from the analysis of the documental basis and due to the lack of inexistent similar instruments created that evaluate the object under study. A new measure instrument was elaborated that aims to respond to the investigation problem and implicit objective of this research, concretely by identifying the ideal profile of human capital in the tourism sector, in the perception of employers. Based on a literature review, the studied skills obtained allowed the formulation of the questionnaire in four dimensions: (i) soft skills; ii) hard skills; iii) management skills; iv) transversal skills). In addition to the literature review, the guestionnaire applied, includes reviews and suggestions from tourism experts and form a pre-test to ten companies chosen aleatory before its final implementation.

Therefore, the final version of the instrument, was divided into these 4 dimensions and 92 skills/items in total. The questionnaire uses simple multiple choice questions, through a seven-point Likert scale, applied to all dimensions, since it is easy to build, intuitive in its filling and simple for the application statistical tests (Thayer-Hart et al., 2010). The instrument and the collected data were submitted for the analysis of the content as well as a validation of the reliability and construct (Costello and Osborne, 2005), using a statistical software treatment, Statistical Package for the Social Sciences (SPSS) program, Version 24.0, for Windows.



Figure 1: Portuguese tourism active companies (in %), by sub-segment of economic activity (2007-2016) Source: Own elaboration based on SABI database

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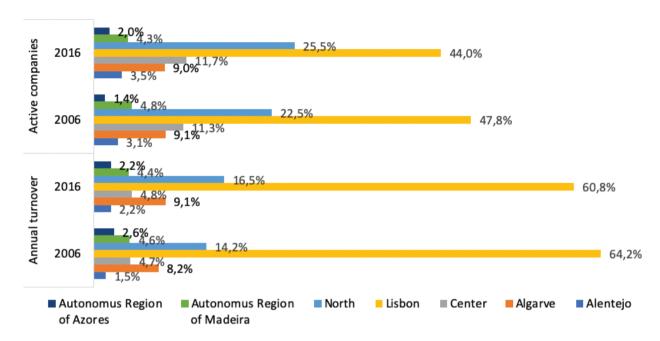


Figure 3: Structure of the Portuguese tourism sector, by NUT II (2006 and 2016)

Source: Own elaboration based on SABI database

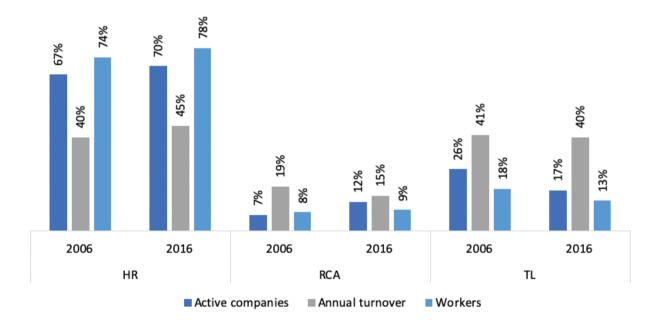


Figure 4: Structure of the Portuguese tourism sector, by sub-segment of economic activity (2006 and 2016)

Legend: HR - Hotels and Restaurants; RCA - Recreational and Cultural Activities; TL - Transports and Logistics

In a first moment, using the series mean method, we replaced the missing values that were equal to or inferior to 3% (Marôco and Garcia-Marques, 2006), returning a sample study with 555 valid answers for the remaining statistical analyses (N = 555; 48.8% of the total data collected). Subsequently, we proceeded to the observation of

Source: Own elaboration based on SABI database

possible extreme values (outliers), using Mahalanobis distance (Daneshgadeh et al., 2018; Shi et al., 2018) and also the analysis of the kurtosis and skewness of the sample (Cohen, 1988). Those analysis returned no need of additional adjustment to the sample of study.



Table 1: Procedures summary table

Profile and Trends of Human Capital in the Portuguese Tourism Sector Project

Qualitative approach (Literature review)

Quantitative approach (HCTourism instrument and techniques used for the treatment of data)

Objectives:

- i) Identify the main skills used in other studies;
- ii) Elaboration of a documental basis that supports the data instrument to be implemented;

Steps:

- i) Selection of the documents:
- a) Themes that address the human resources skills from different areas of knowledge: tourism, hospitality, human resources, management and marketing;
- b) Use of free access databases: B-On, Google Scholar, ResearchGate:
- c) Keywords researched: human resources; human resources management; human capital; tourism; skills.
- ii) Criteria for adjusting the documental basis:
- a) Themes that address the human resources skills of tourism;
- b) Documents addressing the specific skills of the tourism sector;
- c) Documents addressing soft and hard skills; iii) Final documental basis:
- a) containing 150 different skills;
- b) divided into 4 dimensions: soft skills, hard skills, management skills and transversal skills;

Research questions:

- i) Identification of the main skills and their types used in the various studies;
- ii) Creation of a theoretical documental basis that supports the data instrument to be implemented;

Objectives:

- i)Identification of the main skills expected by the tourism entrepreneurs related to the tourism human resources;
- ii) Specify regional and sectorial differences; cia-Marques, 2013); iii) Develop the ideal profile of the human capital of the tourism sector;
- I Step (HC Tourism instrument):
- i) Elaboration of the preliminary version of the questionnaire:
- a) Based on the literature review, a preliminary version of the questionnaire was elaborated, composed of 150 items and 4 dimensions;
- b) This version was reviewed by 10 experts from different scientific areas;
- c) Analysis and inclusion of their suggestions;
- d) Creation of the final version of the instrument data:
- e) Pre-test to 10 companies for testing the platform functioning and possible errors;
- f) Implementation of the data instrument to the study population;
- ii) The final structure of the questionnaire is composed of:
- a) Introduction- presentation letter of the questionnaire and also a brief explanation of the nature and scope of the study as well as the assurance of confidentiality and anonymity of the answers;
- b) Soft skills scale that comprises 27 evaluation items:
- c) Hard skills scale that includes 26 evaluation items;
- d) Management skills scale that includes 26 evaluation items;
- e) Transversal skills scale that includes 13 evaluation items;
- f) Characterisation of the companies and respondents;
- iii) Implementation of HC Tourism instru-
- a) The questionnaire was online between 15-11-2018 and 11-01-2019. 48.310 emails were sent and received 1.137 answers;
- b) The majority of the responses were from companies related to the Hotels and Restaurants sub-segment (27.3%), based in the NUT II region of Lisbon (15%) and were classified as micro-enterprises (35.4%).

- II step (analysis of the data collected):
- i) Initial analysis:
- a) Replacement of the missing values using the series mean method, (Mâroco & Gar-
- b) Identification of the outliers (Tabachnick & Fidell, 2014);
- c) Checking the normality of the variables (Cohen, 1988);
- d) Definition of the final sample for the remaining statistical analyses (N = 555).
- ii) Descriptive analysis:
- a) Analysis of the dispersion measures (standard deviation, minimum and maximum value obtained for response);
- b) Analysis of measures of central tendency (mean, median and mode);
- iii) Exploratory factorial analysis:
- a) Data reduction and extraction of factors through the Varimax rotation method;
- b) Analysis of sample adequacy through KMO and Bartlett's sphericity test (Pestana & Gageiro, 2000);
- c) 7 factors were extracted: Organisational citizenship: Transformational leadership: Commercial management; Tourism Animation; Ethics and professional deontology; Leadership; Strategic management; E-Business; Foreign languages
- d) Analysis of the internal consistency trough Cronbach's alpha coefficient (Nunnally, 1978); e) Analysis of the correlation between items
- and factors using the Pearson coefficient (Wiedermann & Hagmann, 2016);
- f) Analysis of the relation between the obtained results from different groups applying the ANOVA tests (Picot, Malec & Maussion, 2013; Shapiro & Wilk, 1965).

Research hypotheses:

i) Are there statistically significant differences between the different sub-segments? ii) Are there statistically significant differences between the regions NUT II?

Afterwards, in a second moment, an exploratory factorial analysis by dimension was conducted, with the main objective of reduction of the items to study throughout the extraction of factors that are possible with this statistical analysis (Lovik et al., 2017). The adequacy of the sample for this analysis was verified through the analysis of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and the Bartlett's test, since they are the most appropriate tests for this type of analysis (Pestana and Gageiro, 2000), choosing the rotation method more used (Varimax) and accepting factor saturations with values greater than 0.4 and that clearly discriminate only in one factor (Tabachnick and Fidell, 2013).

The internal consistency of the dimensions and factors were analysed by the calculation of the Cronbach's alpha coefficient, considered by the authors as the most common statistical test in the validation of the scales (Najafabadi and Najafabadi, 2016; Taber, 2018; Trinchera, Marie and Marcoulides, 2018) allowing the measurement of the consistency and reliability of the responses obtained in relation to the construct they intend to explain (Türkel, Özdemir and Akbulut, 2017; Vaske, Beaman and Sponarski, 2017), accepting values above 0.7 as an indicator of high reliability of the implemented scales and developed instrument (Demirci and Ozvurek, 2018; Taber, 2018; Trinchera, Marie and Marcoulides, 2018). The correlations between the scales and the extracted factors were measured by the Pearson coefficient (r) since, according to Cohen (1988), the obtained answers are greater than 30 and the sample shows normal distribution and values above 0.5 were considered as strong and statistically significant. In the end, we used the technique of analysis of variance (ANOVA) to find the statistical significance between the extracted factors and the different groups observed (Picot, Malec & Maussion, 2013).

4.1.2.3 Sample

The universe of this study is composed of 46.951 active companies of the Portuguese tourism sector in July 31, 2018, listed in the Iberian Balance Sheet Analysis System Database (SABI), which corresponds approximately to 80% of the total sector companies (Bank of Portugal, 2016), containing companies whose main economic activity (CAE) integrates the sub-segments of Transport and Logistics (TS), Hotels and Restaurants (AR) and Recreational and Cultural Activities (ARC), according to the classification followed by Bank of Portugal (2014). The target population of this investigation is composed of 13.992 companies that had an email contact in the SABI database, using a simple probabilistic sampling technique.

1.137 answers were collected between 15 November 2018 and 11 January 2019 covering the characteristics of the total national business structure both in the CAE and the region where they are located with a confidence level of 95%, according to the Raosoft instrument.

Characterising the answers received by economic activity, we observed 27.3% of the responses belonging to the AR group, 14% to the ARC group and 6.2% belonging to the TS group. Regarding the regional distribution NUT II, 15% of the answers were located in the metropolitan area of Lisbon, 11.9% in the North region, 8.1% in the region of the Centre, 3.7% in the Algarve region, 3.3% in the Alentejo region, 3.2% in the Autonomous Region of the Azores and 2.6% in the Autonomous Region of Madeira.

5 Conclusions

One of the greatest assets of the organisations are the human resources and, in this sense, there is a need of a strategic and fundamental response not only to globalisation but also to the transition to the knowledge-based economies, ensuring the personal and professional development of the citizens, by creating opportunities that allow them to develop and update key skills throughout life, in particular, in the tourism sector since it crosses constant challenges and changes (Kim, Park and Choi, 2017). Also, the access to employment will increasingly depend more on the individual capacity of learning and the adaptation to new skills, rather than on the skills already seized and held by the worker (ManpowerGroup, 2017).

In Portugal, the tourism sector showed, for the period 2006–2016, a constant development regarding the growing number of new companies as well as to the number of workers in the sector, which demonstrates an increasing importance to the national economic and social context, in 2016 employing 258,959 workers, about 5% of the total employment in Portugal.

The rise of the sector is based on the exponential growth in the number of new active companies felt in the sub-segment of the Recreational and Cultural Activities, about 256.5% in ten years but also in the enlargement of the subsector of the Hotels and Restaurants, growing around 110% since the year 2010.

Although, when we compare the years 2006 and 2016, the 'Hotels and Restaurants' is the group that has more representation on the number of active companies and also in the number of employed population despite the fact that the annual turnover is dispersed in this sub-seg-

ment and also in the 'Transports and Logistics' sub-segment.

In conclusion, the qualifications or requalification of the tourism human resources are the main challenges that the destiny Portugal crosses. With that in mind, the identification of the skills needs of the labour market as well as a better communication between the educational institutions and the sector companies are essential to diminish the felt mismatch of skilled workers. Thus, the HC Tourism project has, as its main contribution, the development of a tool that allows the identification and the refinement of the skills that satisfy the real needs of the sector, contributing, this way, to qualified human resources that better respond to the challenges crossed by the sector every day.

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Vânia Costa, PhD in Economics, Adjunct Professor of Polytechnic Institute of Cávado and Ave. Integrated researcher at GOVCOPP; researcher at CiTUR and UNIAG. Her current research interests include tourism and economic development, economic analysis of investment projects in tourism, competitiveness and business performance in the hospitality and tourism industry, human capital in tourism and transports economics.

Andreia Moura, PhD in Tourism, Invited Adjunct Professor at Coimbra Education School, Polytechnic Institute of Coimbra, Portugal. Integrated researcher at GOVCOPP; researcher at CiTUR and researcher of the Alliance on Training and Research in Social and Fair Tourism. Her current research interests include accessible tourism; social tourism; tourism planning and destination competitiveness, and human capital in tourism.

Maria do Rosário Mira, PhD in Tourism, Adjunct Professor at Polytechnic Institute of Coimbra; Integrated researcher at GOVCOPP. Her current research interests include research methodology, quality, human resources and internationalization of tourism destinations

António Cerdeiras, Degree level in Tourism Management Activities from the Polytechnic Institute of Cávado and Ave and he is finishing the Master's degree in Tourism Management also in the School of Hospitality and Tourism from Polytechnic Institute of Cávado and Ave, Portugal.

His research interests are related to Human Resources Management, Tourism Industry and Tourism Economy.

Inês Pinto da Cruz, PhD in High Studies in History. She is an integrated researcher at CEIS20 – Centre of 20th Century Interdisciplinary Studies. She has been teaching at Coimbra Education School, Polytechnic Institute of Coimbra, Portugal as an Invited Adjunct Professor. Her current research interests include deviant behaviour, history and sociology of science, sociology of leisure and tourism.

José Filipe Pereira, Invited Professor at Polytechnic Institute of Cávado and Ave. Post-graduation in Food Safety and in Food: Sources, Culture and Society. He is a researcher from GreenUPorto (PhD research in food consumption sciences and nutrition). His current research interest has a focus on food consumption, sensory analysis, restaurant operations and behavioural economics applied to food consumption.

Isabel Silva Martins, Master in Management from the ISEG-Superior Institute of Economics and Management of University of Lisbon. She is an invited assistant in IPCA-Polytechnic Institute of Cávado and Ave, where she lectures in the areas of Management, Tourism and Marketing areas (Analysis of Touristic Markets, Planning and Management of Touristic Destinations and Accessible Tourism). Member of GOVCOPP in Tourism and Development Research Group, as a PhD student in the Tourism area. Her research interests are: souvenirs, shopping, authenticity, identity and geographical representations.

Oscarina Conceição, PhD in Economics, Adjunct Professor in the School of Management of Polytechnic Institute of Cávado and Ave since 2009. She was an Assistant at University of Minho between 2004 and 2010. She is a Researcher at DINÂMIA'CET – IUL. Her research interests include entrepreneurship, innovation and technological change processes and their impact on firms and markets' performance.

Abílio Vilaça, Invited Professor at Polytechnic Institute of Cávado and Ave. Master in Business Management with specialization in Marketing from the University of Minho. Degree level in Systems Engineering and Informatics from the University of Minho.

Cláudia Ribeiro de Almeida, Post-doctoral Degree in Tourism, a PhD Degree in Tourism, a Master Degree in Total Quality Management in Services, a Degree in Mar-

keting and a Bachelor in Tourism. Adjunct Professor at University of Algarve in the Tourism Department. Cláudia belongs to the Research Centre for Tourism, Sustainability and Well-being (CinTurs) at University of the Algarve.

Paulo Carrança, Coordinator of Studies and Projects Office of Porto and Northern Portugal Tourism, Regional Tourism Entity. Degree level in Tourism from the Polytechnic Institute of Viana do Castelo.

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