

Smart Innovation, Systems and Technologies 345

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Advances in Tourism, Technology and Systems

Selected Papers from
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Pedro Liberato · Alejandro Peña
Editors

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Preface

This book—*Advances in Tourism, Technology and Systems: Selected Papers from ICOTTS 2022, Volume 1*—from the SIST Series is composed of the best selected papers accepted for presentation and discussion at the 2022 International Conference on Tourism, Technology and Systems (ICOTTS'22). The ICOTTS is a multidisciplinary conference with a special focus on new technologies and systems in the tourism sector and was held between 03 and 05 November 2022. The ICOTTS'22 was supported by the Autonomous University of Chile, Santiago, Chile and by International Association for Digital Transformation and Technological Innovation (IADITI).

The International Conference on Tourism, Technologies and Systems is an international forum for researchers and professionals in the tourism sector, which enables the discussion of the latest innovations, trends and concerns in several areas, in the Tourism sector, associated with Information Technologies and Systems. It is an event for professionals in the sector, in search of technology solutions, where academics, IT experts and business managers meet to discuss new ideas that help them maximize the potential of tourism business through technology.

The ICOTTS'22 Scientific Committee is composed of a multidisciplinary group of 137 experts who assessed some 296 papers from 22 countries, received for each of the main topics proposed for the conference: (a) Tourism research in providing innovative solutions to social problems; (b) Information and communication technologies in hospitality and tourism industry; (c) Sustainable tourism; (d) Tourism trends; (e) Health and wellness tourism; (f) Tourism management; (g) Marketing strategies in hospitality and tourism industry; (h) Hospitality, tourism and food-service environment; (i) Tourism in the different scientific areas; (j) eTourism and Tourism 2.0.

The papers accepted for presentation and discussion at the conference are published by Springer and will be submitted for indexing by ISI, SCOPUS, Ei Compendex, Google Scholar and SpringerLink.

We thank all those who contributed to the ICOTTS'22 conference (authors, committees, workshop organizers and sponsors). We deeply appreciate your involvement and support, which were crucial to the success of the conference.

Porto, Portugal
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Visitors to Vale do Tua Regional Natural Park in Northeast Portugal: A Cluster Segmentation Analysis



Luisa Lopes , Salete Esteves , and Lara Santos 

Abstract Tourism plays an important role in many economies, and in Portugal, protected areas (PA) have had a strong impact in terms of tourist and economic attractiveness. This study identifies visitors of a Portuguese protected area (PPA), the Vale do Tua Regional Natural Park (PNRVT), based on benefit segmentation. It addresses the following research questions: what are the possible PNRVT market segments? What is the profile of each segment? What motivates each group to visit the PNRVT? It seems important to know the perceptions and profile of potential visitors to PNRVT understanding their motivations and the importance given to resources, activities, equipment, and services they desire. For these purposes, data were collected through a self-administrated questionnaire, and multivariate statistics techniques (hierarchical and *K*-means cluster analysis) were applied, reaching a convenience sample of 395 respondents. From the results obtained, it is possible to conclude that visitors of the PPAs aim to see nature, landscape, flora, fauna, and pedestrian paths. Concerning the PNRVT, five distinct segments of visitors were identified, based on the resources, activities, equipment, and services as desired benefits and further characterized by the motivation for their visit, the frequency of visit, and their sociodemographic profiles. In practice, the present investigation contributes by helping public and private institutions and companies to improve their tourism offerings and develop more efficient marketing plans.

Keywords Visitors · Tua valley · Portuguese protected area · Consumer profile · Cluster analysis · Segmentation

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1 Introduction

In the twenty-first century, tourism has become one of the most dynamic and fastest growing economic sectors in the world, being considered a decisive driver in job creation and local and regional economic development. In 2019, according to The World Travel and Tourism Council *Travel on Tourism Economic Impact Report* [1], globally, this sector represented around 330 million jobs (losing 62 million in 2020) and 10.3% of GDP and global jobs. In the following years, this scenario suffered some setbacks as global responses to control the spread of the COVID-19 pandemic included partial or complete border closures, travel restrictions, home confinement, and social distancing impositions. With millions of people out of work, uncertainty about the economic recovery, and global fear of the continuation of COVID-19 and its future waves, the tourism industry was among the first industries affected and will be among the last industries to recover [2]. This pandemic has hit the international tourism and hospitality industry hard with a 74% decline in international tourist arrivals in 2020 compared to 2019 [3]. Even during the persistent COVID-19 pandemic, the tourism industry has focused on domestic markets, with a decrease of 47.4% in 2020 and an increase of 31.4% in 2021, in domestic visitor spending [1] and in nearby markets to ensure a gradual recovery, using recovery marketing [4]. One of the consequences of the COVID-19 pandemic crisis has been the development of proximity tourism in outdoor spaces with managers of protected natural parks thinking and adjusting their domestic tourists' experience [5]. The pandemic highlighted the interconnectedness of people and ecosystems and the complex interdependencies between the sustainability principles which must be considered for increased PA resilience and sustainability [6]. It is now more urgent than ever to proceed with the revitalization and reactivation of these natural spaces, attracting and educating the public, experiencing quality and well-being trips, preserving natural resources, and generating social and economic benefits, especially needed in territories with low population density.

Palacios-Florencio et al. [7] considered that the practices in sustainable tourism can become a potential solution to stimulate tourist movements and help the revival of the tourism industry. Moreover, sustainable tourists have significantly higher spending patterns than less-sustainable tourists suggesting that in some destinations, it does economically payoff to be sustainable [8]. The tourist demand for protected natural areas has grown over the last decades, with sustainable tourism seen as a key activity for the development of these territories. The concept of sustainable tourism, although not always unanimous, guides toward a conception where the environmental, social, and economic components are the main dimensions that must be considered in its development [9]. Sustainable and self-sustaining destinations are now seen as a product of responsible markets and responsive citizens [10]. The PAs are territories whose main function is the conservation of the environment. In these resources, sustainable tourism advocates that a good quality travel experience should be provided for visitors, as long as the natural resources that attract these visitors are not harmed [11].

These protected spaces have a set of resources that enhance them for the development of sustainable tourism and environmental education, thus contributing social and economic benefits to the sustainable development of the regions [9]. In the specialized literature, reference is made to concepts and definitions such as green tourism, adventure tourism, nature tourism, rural tourism, or sustainable tourism associated with nature and PAs [12]. Ecotourism is another term associated with tourism in PAs [13]. Regarding the different terms, it is assumed that any one of them implies tourist practices in nature. Tourism and demand for PAs are intrinsically linked to the modern era [14], and in recent decades, there has been a significant increase in PA, as well as the number of visitors looking for those areas [6, 7, 11, 15–20]. This increase in visitors is due, among other factors, to the global expansion of tourism, the development of transport, the growing interest of visitors in getting to know the natural and cultural heritage, the resulting political favor, but also the need to compensate for life, urban environment and a greater perception of environmental issues and the importance of physical activity [21–23]. Moreover, recent research suggests that taking part in parks and nature tourism improves health and happiness [24, 25]. In Portugal, the importance of the natural and cultural values of the PPAs make it a very important tourism resource. The observation and reading of data on the evolution of visitors to the National Network of PPAs [26], in the period between 2014 and 2017, allow us to verify that, in most PPAs, the evolution of visitors presents a growing dynamically and reveals the interest of visitors in the PPAs.

Literature has profusely discussed the reasons for visiting PAs, showing that tourists visit a natural park for several reasons, such as the challenge tour, the social trip, the nature tour, and the routine escape tour [27]. In Portugal, in a study carried out by Carneiro et al. [16], a set of motivations was listed, such as “resting”, “learning/expanding knowledge”, “seeing a specific place”, “meeting new people”, “contacting local residents”, among others. In the results of the study, the main motivations for the visit are “opportunities to rest/tranquility and to have new experiences” (Gerês National Park) and “visit a specific place in the protected area” (Sintra Park). It should be noted that, in Portugal, tourism segmentation has been approached in a sectoral way in specific contexts such as wine (e.g., [28]), golf (e.g., [29]), or cities (e.g., [30, 31]). With few exceptions (e.g., [18]), the literature does not show, characterize, or distinguish different segments of visitors in PPAs.

The present study, of an exploratory nature, intends to contribute with knowledge about the expectations of potential visitors to the PPAs, in general, and the PNRVT, in particular, as well as to identify and characterize different profiles or segments of visitors to this park, based on benefits wanted. This study seeks to illustrate how the knowledge of the different segments of visitors can be used in the development of strategies that will improve the visitors’ experiences, respecting the sustainability of the territory.

The article proceeds as follow: First, with the research background in mind, it deepens knowledge on the definition of PA, segmentation, and most common segments in sustainable tourism. Second, it presents the methodological approach and clarifies the data collection process. It also examines data and results obtained in

this research. Finally, discussion, conclusions, and implications for further research are drawn.

2 Background

A PA is a unique space with its own characteristics and whose resources allow the acquisition and consumption of various tourist products and activities that visitors can enjoy. Natural parks and other PAs are popular destinations for people who want to enjoy nature-based leisure, travel, and ecotourism activities [11]. Visitors can consume intangible elements, itineraries, landscapes, and tangible elements, namely local crafts, gastronomy, museums, interpretation, and environmental education centers or information posts [17, 32].

It is essential to understand the nature of visitors of PAs to: minimize the impact on resources arising from the increase in PAs visitation, develop effective education and public relations programs efficiently managing risk, and create effective marketing strategies [11, 33]. At this level, introduced in the literature by Smith [34], segmentation became unavoidable as a market approach, since segmenting a market means, in the first place, dividing it into groups of clients with relatively homogeneous characteristics [35]. In tourism, segmentation can identify specific groups of visitors, allows offers to be better customized and can, thus, increase satisfaction with destinations, and develop better and more efficient tourism policies [36].

There are several segments in ecotourism, among them, there is a group that visits the destination just to appreciate nature, and a second segment, which is motivated to carry out various activities in the destination. Moreover, some authors find other segments related to activities in the destination [36]. According to the study carried out by THR (Asesores en Turismo Hotelería y Recreación, S.A.) for Turismo de Portugal, I.P. [37], the nature tourism sector integrates two large markets, one of a soft nature, in which experiences are based on the practice of low-intensity outdoor activities (walks, excursions, walking trails, wildlife observation, etc.), representing about 80% of the total nature trips, and another one of hard nature, where the experiences are related to the practice of sports in nature (rafting, kayaking, hiking, climbing, etc.) and/or activities that require a high degree of concentration or knowledge (birdwatching, etc.). The latter market represents around 20% of all nature trips. Concerning average expenditure, it is understood that the spending made by the consumer of soft nature tourism is comparatively lower than that of a hard nature, where the average expenditure is directly related to the degree of specialization or intensity in the practice of activities, the equipment, and services required [38].

Also, despite the existence of a diverse literature about segments in tourism (Table 1), Tkaczynski and Rundle-Thiele [39], in a review of 120 event studies, with the purpose of identifying how visitors are segmented, concluded that the most usual segmentation approach is multiple base that combines demographic, geographic, psychographic, and behavioral variables.

Table 1 Sample of proposed segments in PA

Study	Designation of segments	No. of segments
Eagles [40]	Ecotourism, wild travel, adventure tourism, motorhome	4
Fernández [41]	Nature visitor: casual, occasional, vocational, well-informed, specialist, scientific and ecotourist	7
Kibicho [42]	Environmentalist, want it all, independent	3
TP [37]	Soft, hard	2
Flores [43]	Nature seen as: setting, school, adventure, residence, domesticated	5
Marques et al. [18]	Self-centered visitors, occasional visitors, urban visitors, excursionists, and sociable naturalists	5
Konu and Kajala [11]	Autonomous and social, explorers of nature through exercise, nostalgic lovers looking for mental well-being, lovers of relaxation in nature	4
Perera et al. [44]	Ecotourists, picnickers, egoistic tourists, adventure tourists	4
Cordente-Rodríguez et al. [45]	Nature, multiple reasons	2
Carrascosa-López et al. [36]	Nature, multiple motives, reward, and escape	3

Source Own elaboration

The most used segmentation variables are age, gender, education, and income (demographic variables), origin/place of residence (geographical variables), motivations and purpose of the trip (psychographic variables), and experience—first visit or repeat—amount spent and length of stay (behavioral criteria). The authors of this study therefore advocate the use of multiple targeting bases [39].

3 Methodological Approach

3.1 Sampling and Questionnaire

Seeking to answer the outlined research questions, two types of sources were used in the present investigation: primary and secondary. Concerning the primary sources, the convenience sampling technique was used for data collection, and a questionnaire was applied online using institutional emails and social media. It was made available in an electronic medium (Limesurvey Platform). The structure of the questionnaire consists of three thematic groups: sociodemographic characterization; knowledge about natural parks (visit experience, sources of information, most appreciated elements, visit frequency, motivations), and perceptions about the PNRVT, in particular (products associated with each municipality in the PNRVT, expectations in

Table 2 Synthesis of the online survey

Temporal basis	Cross-section
Unity of analysis	Potential visitors of natural parks
Sampling	Convenience
Sample	395
Data collection	Survey questionnaire online
Dates	December 2021 to January 2022
Data analysis	Univariate and multivariate

Source Own elaboration

terms of resources, activities, and desired equipment, desired products at the park store, visit intentions, and suggestions). For the analysis of the sociodemographic profile of the potential visitor, five variables are used (age, gender, education level, professional situation, and residence) that are among the most addressed in similar academic studies.

The data obtained were analyzed using Jamovi statistical program (version 2.2.5), using univariate and multivariate statistical methods. Table 2 summarizes the main methodological elements of this study.

3.2 *Vale Do Tua Regional Natural Park*

PNRVT (Fig. 1) was created on September 24th, 2013, through Portuguese Regulation No. 364-A/2013. The surface of the park encompasses, approximately, an area of 25,000 hectares and, in its vicinity, it shares the status of a protected area with the Montesinho Natural Park, Douro International Natural Park and Albufeira do Azibo Protected Landscape [26]. The natural park was established, and its objectives are the preservation of the rural, natural, and cultural heritage and to enhance its resources to create wealth for the local populations [46]. The contrasts that can be observed in the Tua Valley are diverse in terms of climate, lithology, and geomorphology, characteristics that condition human activity that has adapted to this region over time [47]. It is also intended that the PNRVT is an instrument to promote the development of sustainable tourism in the region, with a special focus on forms of tourism that are based on the enjoyment of natural spaces and their resources, such as nature tourism, nautical, health and welfare tourism, tourism promotion, and tourist use of riverside villages [48].

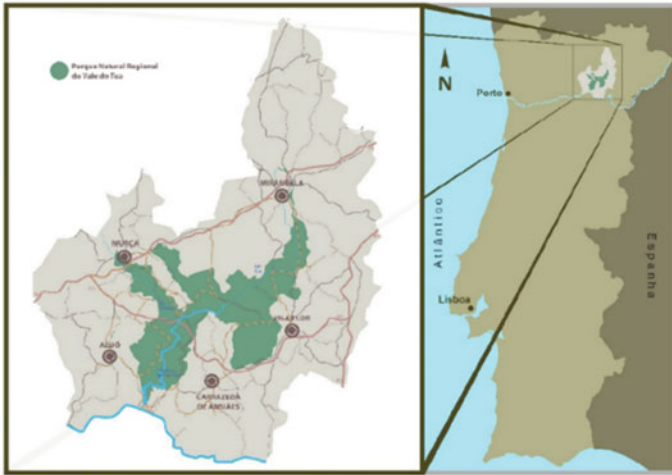


Fig. 1 PNRVT. *Source* Tapada et al. [49]

4 Results

The obtained sample (Table 3) consists of 624 questionnaires (395 complete and considered valid). In terms of age, the sample includes individuals between 18 and 80 years old who are on average 43 (43.4) years old, with at least 68% of respondents aged between approximately 32 and 55 years old. Respondents are mostly female (66.8%) and have a high level of education, with Postgraduate/MBA/Masters/Ph.D. being the most frequent answer (48.4%). In terms of employment, most are employed (73.7%), and there is a reasonable percentage of students (10.9%). Most respondents are from the north (Porto Region, Interior, and Coast North) (93.5%). In terms of income (net monthly household income), there are only 22 respondents with an income of fewer than 665 euros, which was to be expected since most respondents have high levels of education, with most respondents earning between 1001 and 2000 euros (39%), and 36.2% of respondents earning more than 2000 euros, a higher percentage than that of respondents earning 1000 euros or less, which is 24.8%.

A descriptive analysis of the various themes relevant to the present study is carried out. In the question “have you ever visited a protected area”? almost all respondents (91%) have already visited a natural park at least once, showing the quality of the obtained sample based on the visitor experience. Questioned about public’s expectations about this type of infrastructure, it should be noted that, given the experience of respondents, in the PPAs who visited before, what they most like to see is nature, landscape, flora, fauna, and pedestrian paths.

The question “do you know or heard about the PNRVT”? aimed to assess the total awareness of this PA. Of the 395 respondents, 288 (72.9%) know or have heard of this PA. When questioned about how they became aware of the PNRVT, it appears that the publicity made by family, friends, or acquaintances (33.9%) is the one that

Table 3 Sociodemographic characteristics

	Frequency	%
<i>Sex</i>		
Male	131	33.2
Female	264	66.8
<i>Highest level of education</i>		
Up to 9 h grade completed	10	2.5
Secondary school completed	66	16.7
Higher education (Bachelor)	128	32.4
Postgraduate/MBA/Master/PhD	191	48.4
<i>Professional situation</i>		
Student	43	10.9
Employed	291	73.7
Self-employed/employer	31	7.9
Unemployed	14	3.5
Retired	10	2.5
Other	6	1.5
<i>Region</i>		
Porto Region	24	6.1
Interior North	248	62.8
Coast North	97	24.6
Lisbon Region/Coast Center/South and Islands	26	6.5
<i>Net household income (monthly)</i>		
< 665 euros	22	5.6
665–1000 euros	76	19.2
1001–2000 euros	154	39.0
2001–3500	111	28.1
> 3500 euros	32	8.1

Source Research data

had the most effectiveness, followed by television/radio/press (28.9%). The Internet/Website/social networks (23.5%) appear in third place, which reveals the need to guarantee attractive information in this means of dissemination. It should be noted that only 100 (34.7%) respondents indicated that they had already visited the PNRVT.

Regarding the motivations for visiting the PNRVT (Table 4), the most valued motivations were learn/expand knowledge (mean = 3.99) and see a specific place (mean = 4.03), all with averages close to 4. The least scored motivation was meeting new people, where 74% scored a maximum of 3.

In the case of the PNRVT, if there was a store, the respondents would most like to buy local products, honey, and olive oil.

Table 4 Visit motivations of PNRVT

Variables	< 3 (%)	3 (%)	> 3 (%)	Mean	SD
Learn/expand knowledge	8	20	72	3.99	1.06
See a specific location	5	28	67	4.03	0.98
Have peace and calm/be away from the crowds	7	26	67	3.96	1.04
Move to a different environment/have new experiences	7	28	65	3.91	1.01
Rest	12	31	57	3.76	1.14
Avoid responsibilities/rest the mind	9	35	56	3.79	1.06
Be with friends/develop friendships	18	39	43	3.37	1.15
Contact local residents	29	34	37	3.16	1.17
Meet new people	35	39	26	2.90	1.19

Source Research data. Likert scale between 1 (not at all important) and 5 (very important)

Regarding the desired benefits (Table 5), in the PNRVT, the respondents would most like to find the following: pedestrian routes, nature observation activities, food, and tourist train trip.

This study focuses on the segmentation of potential visitors to PNRVT. Based on Tkaczynski and Rundle-Thiele [39], the set of 16 desired benefits (activities, facilities, equipment, and services) and sociodemographic variables (specifically sex) were then used as clustering variables. The inclusion of the variable sex is justified due to their importance as visit motivation to PPA (six of nine motivations presented for visiting PA are influenced by sex). Thus, five clusters are formed, and the K-means clustering method is performed on this data set using the Hartigan–Wong algorithm with the Euclidean metric. The results (Table 6) suggest that the prospective Type 1 (21%) customer values “accommodation and food equipment”. The prospective Type 2 (21%) had the highest percentages in almost all activities. The Type 3 (15.2%) potential customer mainly values “travels”. The prospective Type 4 (20%) had the lowest percentages in almost all activities. The potential Type 5 (22.8%) customer values tourist itineraries.

5 Discussion and Conclusions

These final discussion and conclusions highlight the main contributions, as well as the limitations and recommendations for future research.

The survey reveals the existence of five groups exhibiting different preferences and behavioral characteristics. A brief characterization of each segment follows, and

Table 5 Characterization of the desired benefits in the PNRVT

Variables	Frequency	%
Pedestrian routes	245	62.0
Nature observation activities	240	60.8
Food (restaurant, bar,...)	212	53.7
Tourist train trip	197	49.9
Accommodation	186	47.1
Tourist entertainment activities (climbing, rafting, arborism, paintball,...)	176	44.6
Nature guides	173	43.8
Boat trip	161	40.8
Interpretive center	148	37.5
Picnic park	147	37.2
Rural tourism enterprises	121	30.6
Reception center and the park's product store	118	29.9
Cycle track	93	23.5
Camping park	87	22
Playground	62	15.7
Playing fields (e.g., shooting range)	28	7.1

Source Research data. Likert scale between 1 (not at all important) and 5 (very important)

Table 7 includes sociodemographic, frequency of visit, and visit motivations of all types or segments.

Type 1 has a higher percentage of women and students, the second type with the youngest people between 18 and 24 years old, most have postgraduate degrees, 43.4% have a net family income of more than 2000 euros, most visit natural parks at most once a year. Type 2—like Type 1 in terms of sex, with a lower percentage of young people and students, only 14.4% have a net household income of up to 1000 euros, more than 80% are employed, 63.2% visit at least twice the natural parks. Type 3 is the type with the highest percentage of women, 43.3% are between 25 and 44 years old, at least 80% have higher education and are self-employed, 66.7% have a net family income between 665 and 2000 euros, most visit parks natural at most once a year. Type 4 is more balanced in terms of sex, 15% are young, with a high level of education, segment with more self-employed people, most visit at most once a year. Type 5, mostly constituted by women, the majority is older than 45 years old, with higher education, employed people, visits PA until three times a year.

The overall object of the current research was to analyze the effective demand of tourists to PNRVT using cluster segmentation approach. Consequently, the study links the visitors' preferences and develops a comprehensive analysis of the profile of visitors of a PPA, a theme where few empirical research has been conducted [18].

This study uses the segmentation by desired benefits to understand how the expectations of different tourists and visitors of the PNRVT differ. The survey reveals that

Table 6 Range of desired benefits of five segments of PNRVT

	Type 1 (%)	Type 2 (%)	Type 3 (%)	Type 4 (%)	Type 5 (%)	χ^2
Playing fields	6.0	15.7	1.7	2.5	7.8	14.6*
Cycle track	15.7	51.8	16.7	13.9	17.8	47.0*
Camping park	13.3	51.8	16.7	5.1	21.1	60.9*
Playground	15.7	41.0	8.3	5.1	6.7	54.8*
Reception center and the park's product store	21.7	72.3	20.0	3.8	27.8	103*
Interpretive center	21.7	75.9	18.3	12.7	51.1	98.4*
Rural tourism enterprises	32.5	62.7	23.3	15.2	17.8	57.6*
Food (restaurant, bar,...)	86.7	90.4	60.0	20.3	14.4	174*
Accommodation	94.0	78.3	43.3	12.7	7.8	199*
Boat trip	10.8	77.1	90.0	5.1	33.3	180*
Tourist train travel	19.3	90.4	91.7	21.5	37.8	158*
Tourist entertainment activities	36.1	78.3	35.0	21.5	47.8	60.2*
Picnic park	19.3	66.3	48.3	7.6	45.6	76.9*
Nature observation activities	48.2	91.6	20.0	31.6	96.7	157*
Nature guides	34.9	81.9	13.3	5.1	71.1	150*
Pedestrian routes	57.8	95.2	58.3	15.2	78.9	124*

Source Research data. * Significant at the 0.01 level

the sample obtained can be divided into five types exhibiting different preferences and behavioral characteristics. The results of this research benefit the appropriate allocation of limited resources, considering that the simple use of descriptive statistics hides the heterogeneity of visitors' preferences. In addition, the overwhelming majority of people want to visit the park (99.4%) indicating the success of this initiative and are motivated to have peace and calm and be away from the crowds. In the absence of a common tourist strategy, knowledge of the expectations of potential visitors regarding infrastructure, products, and services and the profile of potential visitors will inform political and economic agents, contributing to the positioning of the PNRVT in the tourist market [22, 50].

The main limitation of this study concerns the fact that the surveyed and convenience sample includes potential visitors to the PNRVT, not actual visitors, and a small sample size, impeding representativeness. The PPA management agency should take into account that domestic and international ecotourist markets can make a great contribution to the development of the country's image, positioning Portugal as a destination for ecotourism [18, 37]. Finally, sustainable tourism is seen as a key activity for the development of the Tua Valley. In this region, endogenous resources,

Table 7 Sociodemographic characteristics of visitor segments

Segments	Type 1	Type 2	Type 3	Type 4	Type 5	Chi-square
<i>Gender</i>						
Male	30.1%	31.3%	30.0%	44.3%	30.0%	5.57
Female	69.9%	68.7%	70.0%	55.7%	70.0%	
<i>Age groups</i>						
18–24	12.1%	4.8%	5.0%	15.2%	15.6%	12.7
25–44	36.1%	42.2%	43.3%	32.9%	32.2%	
45–54	36.1%	39.8%	31.7%	36.7%	40.0%	
55 or more years	15.7%	13.2%	20.0%	15.2%	12.2%	
<i>Highest level of education</i>						
Up to 9 h grade completed	1.2%	4.9%	1.7%	5.1%	0.0%	23.2*
Secondary school completed	19.3%	8.4%	18.3%	25.3%	13.3%	
Higher education (Bachelor)	22.9%	32.5%	31.7%	34.2%	40.0%	
Postgraduate/MBA/Master/PhD	56.6%	54.2%	48.3%	35.4%	46.7%	
<i>Professional situation</i>						
Student	14.5%	6%	6.7%	11.4%	14.4%	23.0
Employed	71.1%	82%	81.6%	68.3%	67.8%	
Self-employed/employer	8.4%	7.2%	5.0%	12.7%	5.6%	
Unemployed	2.4%	2.4%	1.7%	3.8%	6.7%	
Retired	1.2%	1.2%	3.3%	2.5%	2.2%	
Other	2.4%	1.2%	1.7%	1.3%	3.3%	
<i>Net household income (monthly)</i>						
< 665 euros	3.7%	6.0%	5.0%	5.0%	7.8%	23.4
665–1000 euros	16.9%	8.4%	26.7%	26.6%	20.0%	
1001–2000 euros	36.1%	41.0%	40.0%	35.4%	42.2%	
2001–3500	36.1%	37.3%	15.0%	24.1%	24.4%	
> 3500 euros	7.2%	7.2%	13.3%	8.9%	5.6%	
<i>Frequency of visits to PA</i>						
At most once a year	53.4%	36.7%	52.8%	51.5%	36.4%	14.1
Two or three times a year	21.9%	36.7%	32.1%	20.6%	37.5%	
More than three times a year	24.7%	26.6%	15.1%	27.9%	26.1%	
<i>Visit motivations</i>						
Rest	4.16	3.92	4.03	3.87	3.69	a)

(continued)

Table 7 (continued)

Segments	Type 1	Type 2	Type 3	Type 4	Type 5	Chi-square
Learn/expand knowledge	4.09	3.74	3.93	4.00	3.48	18.20**
Meet new people	2.96	2.46	2.59	2.45	2.36	10.59*
Contact with local residents	3.25	2.80	3.10	2.95	2.64	16.35**
Avoid responsibilities/ rest the mind	3.78	3.80	3.72	3.68	3.40	4.10
Move to a different environment/have new experiences	4.24	4.01	4.09	4.17	3.90	4.42
See a specific location	4.02	3.58	3.67	3.82	3.70	12.06*
Have peace and calm/be away from the crowds	4.18	4.07	4.11	4.39	4.01	1.25
Be with friends/develop friendships	3.67	3.36	3.49	3.38	3.19	8.46

The highest percentages are highlighted in bold

Source Research data. * Significant at the 0.05 level; ** Significant at the 0.01 level;

a) Chi-square statistic of Kruskal–Wallis test

namely gastronomy and landscape, have enormous potential and are increasingly valued.

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