ELSEVIER

Contents lists available at ScienceDirect

Sustainable Futures

journal homepage: www.sciencedirect.com/journal/sustainable-futures



Leisure, tourism, and the importance of proximity to water: Insights from the resident population of Portugal

Luís Silveira ^{a,*} , Mónica Brito ^b

- a University of Coimbra, CEGOT, Faculty of Arts and Humanities, Colégio São Jerónimo, Largo da Porta Férrea, 3004-530 Coimbra, Portugal
- ^b University of Évora, CEGOT, CIDEHUS, Colégio do Espírito Santo, Largo dos Colegiais, n.º 2, 7004-516 Évora, Portugal

ARTICLE INFO

Keywords: Leisure activities Residents Proximity to water Blue tourism Tourist destinations

ABSTRACT

This study investigates the relationship between proximity to water and human activity, focusing on how leisure opportunities influence both residential preferences and the choice of tourist destinations. The central hypothesis is that areas offering a high quality of life, including access to water and leisure, are more attractive to residents and visitors alike. To explore this, an online questionnaire was conducted among residents in Portugal. The results reveal that water plays a significant role in residential decision-making, alongside other factors such as landscape appeal, leisure availability, well-being conditions, and environmental tranquillity. Most respondents reported visiting water-related tourist destinations within the previous 12 months. These findings suggest that proximity to water contributes to tourism appeal and residents' quality of life, offering valuable insights for policymakers and territorial planners aiming to enhance well-being and attract visitors.

1. Introduction

Tourism is now consolidated in multiple societies in many parts of the world. Given the importance of international arrivals for the economies of destinations, research has centred on tourists and not so much on what should be a balanced binomial of tourists - destinations (residents). To what extent can't and/or shouldn't the leisure time of the residents of a given destination be used for reflection by local managers and practical adaptation and sustainable enrichment to create an adequate tourism supply?

This article aims to increase awareness about the relationship between humans and water, particularly among tourists and residents. It investigates water's role in choosing a residence, activities near or within it, and holiday destinations. The study uses a survey among Portugal's residents, collecting 2930 valid responses, to strengthen knowledge about this relationship and apply it to everyday leisure and tourism practices.

Many people claim they cannot swim, but it is well known that mobility in water is intrinsic to us and that our lives began with it. The benefits of contact with water in humans begin practically from birth [10]. Sun and beach tourism is often seen as an escape from work hours and an old-fashioned way to improve appearance. At the end of the 19th century and in the early decades of the 20th century, tanning, a process

associated mainly with beaches and coastal areas, also became an attraction for areas close to water, where the beneficial medical properties of exposure to sunlight were already known and later added to the social aspect or status [9,53]. However, our water connection extends beyond that, and holiday destinations in water-rich areas can also be based on everyday life and leisure time.

This article applies the definition of blue tourism by Brito & Silveira [11], which encompasses all tourism activities in aquatic environments such as seas, rivers, and lakes. Blue tourism focuses on water as a crucial resource, emphasising wellness, health, and sustainability. This posits that territories prominent in blue tourism, referred to as blue spaces, enhance the well-being of their inhabitants. Suggests that areas favourable for residents are also attractive to tourists, as highlighted by NECSTOUR [41] (Network of European Regions for Sustainable and Competitive Tourism). The findings could assist planners and managers in developing tourism resources that resonate with local lifestyles and the appreciation of water-based environments.

2. Literature review

2.1. The evolution and importance of leisure time

The concept of leisure is generally understood to encompass time

E-mail addresses: luis.silveira@uc.pt (L. Silveira), mbmb@uevora.pt (M. Brito).

https://doi.org/10.1016/j.sftr.2025.101372

^{*} Corresponding author.

freely chosen and controlled by the individual. This contrasts with time spent on compulsory activities, such as work or other forms of employment, and time dedicated to fulfilling basic needs, such as eating and sleeping. To provide a comprehensive overview, it can be stated that contemporary society is structured on two principal temporal axes: the axis of work and the axis of free time. The time dedicated to fulfilling basic needs (e.g., sleeping, eating, shopping) is distinct from the remaining time, which is classified as leisure time. Leisure time comprises recreational activities, such as reading, watching television, or taking a late afternoon walk, which may occur within the domestic environment. It also encompasses activities outside the domestic environment, such as tourism, a prominent feature of contemporary society [50,59].

From the late 19th century, the importance of free and leisure time for human recovery gained prominence due to the Industrial Revolution. This revolution increased factory working hours, with authors and their books serving as the foundations of these changes.

If Adam Smith wrote The Wealth of Nations at the end of the 18th century, arguing that industry and labour should be seen as the only form of prosperity; that idleness was not productive and should, therefore, be repudiated ([54], first edition in 1776), other authors followed, leading changes in the opposite direction.

In 1880, Lafargue [31] published The Right to Be Lazy, denouncing a society where working hours exceeded 12 hours a day. In 1935, Russell [49] set forth a practical connection between work and leisure in his work In Praise of Idleness. The notion of work would be redefined as a means of economic subsistence, while leisure would become the central element of people's lives. In 1961, Hourdin [27] presented the concept of free time. He argued that the emergence of free time resulted from the shift away from the notion of obligation associated with industrial labour. This led to the emergence of a new human being who engaged in leisure activities such as sports, hobbies, holidays and television.

In the 1980s, Stockdale [55] proposed a conceptualisation of leisure that encompasses three forms: firstly, leisure as a temporal, spatial or mental state in which choice is the dominant attribute; secondly, leisure as a state opposed to work; and thirdly, leisure as a qualitative concept, whereby related activities possess their intrinsic meaning for each person. Pronovost [[45], first edition in 1996] posits the formation of a distinct sociology of leisure. The author asserts that the study of leisure is a complex and pivotal aspect of contemporary society, warranting autonomous investigation. In a later publication, the French philosopher Lipovetsky [34] introduced the concept of a hyperconsumption society. In such a society, consumption is not merely a facet of social life; it absorbs and integrates larger portions. It is organised according to individual goals and criteria, and an emotional and hedonistic logic leads each person to consume. The objective is not to compete with others but rather to experience pleasure. Jameson [28] refers to postmodern culture as being fully integrated into the logic of consumption. Previously associated with aesthetic enjoyment, creativity or criticism, leisure has become another product of the cultural industry, emptied of depth and historicity. This author suggests that leisure, in postmodernism, is more an instrument of passive integration of the subject into the logic of capital rather than a space for resistance or creativity. Rojek [46] explores the intersection between leisure and consumption, arguing that, in contemporary society, leisure is deeply commodified. He criticises leisure as free time, showing how the market and consumer culture structure it. Rojek [46] also reflects on how leisure is used as a means of self-expression and identity construction, but within the limits of cultural capitalism. Baudrillard [6] goes beyond the idea of consumption as a response to needs. For him, consumption, including leisure, is a system of signs and social differentiation. Leisure is not experienced only as rest but as a form of communication and status. Nazareth [40] emphasises the economic impact of leisure, which is the passage from a compacting economy/time violation to an economy in which leisure is understood as a basic need.

The discussion of leisure's significance persists today, with numerous

influential works globally. Han's [25] The Burnout Society highlights how modern society's drive for productivity and competition leads to widespread exhaustion and psychological issues like depression and burnout. He advocates for the essential roles of contemplation, rest, and leisure in maintaining mental well-being and creativity. In Vita Contemplativa: In Praise of Inactivity [26], Han further encourages embracing inactivity to allow life's unique qualities to emerge through serendipitous moments between actions. Similarly, Odell's [43] How to Do Nothing: Resisting the Attention Economy redefines productivity by urging a reconnection with nature and a deeper self and world re-evaluation. Zuzanek [64] emphasises that leisure should be seen as a meaningful challenge that enhances well-being and work-life balance, not just a mere benefit.

While there are companies and countries where the concept of a four-day working week is being discussed and implemented, there are other geographical contexts where the time dedicated to work and general day-to-day occupation is perceived or experienced as the norm or expected. This is concurrent with an increase in the prevalence of mental health issues, physical fatigue and burnout. In the contemporary era, the accessibility of work is facilitated by the proliferation of mobile phones and the advent of checking incoming emails, even when one is ostensibly engaged in leisure activities (such as a walk or a meal with friends). The necessity and fundamental importance of leisure time for maintaining individual and societal balance are increasingly emphasised. However, the relevance of this concept also seems to be continually questioned, in the sense that in some countries, working hours do not seem to be decreasing.

2.2. Blue tourism

The global phenomenon of tourism has become increasingly dense and segmented (there are now dozens of types of tourism), providing destinations with a greater degree of categorisation and specialised attention in tourism research and planning. Blue tourism represents one such case, which has been the subject of growing interest, albeit recently and to a limited extent. Further studies are required to support this area, and this article aims to contribute.

Lee et al. [33] define blue tourism as comprising activities related to marine and coastal environments, with urban residents identified as a key potential market for such tourism, particularly in terms of accommodation and fishing goods. Picken [44] posits that blue tourism encompasses marine, coastal and freshwater tourism activities that contribute to sustainable economic practices within the framework of the blue economy, thereby promoting the protection of aquatic resources. Mani and Lamče [37] define blue tourism as sustainable travel practices focused on coastal and marine environments, emphasising environmental awareness and responsible consumption within the tourism industry or activity. These concepts emphasise elements that are more centred on environmental protection. Hajad et al. [24] posited that blue tourism encompasses a range of activities, including marine, coastal and freshwater tourism, which are designed to promote sustainable economic practices. This is achieved by minimising waste and encouraging social inclusion and innovation, thereby contributing to the growth of the blue economy.

A general cross-cutting matrix of environmental and territorial protection characterises blue tourism. This article, however, concentrates on the concept of blue tourism, which, in addition to valuing economic and ecological sustainability, emphasises the potential for enhancing the well-being of residents of blue spaces and visitors alike. Consequently, blue tourism is defined as all tourism practices developed in aquatic environments. Its principal resource is water, not solely associated with the seas and oceans (coastal areas). It also encompasses its various forms (seas, rivers, lakes, etc.) and the practices developed in adjacent territories. In these environments, an intrinsic concept of wellness contributes to promoting health and well-being [11]. The blue spaces, which are the locations where this activity takes place, are territories where

water plays a pivotal role in fostering the health and well-being of its inhabitants. Such territories include coastal areas, such as seas, as well as inland territories where rivers and lakes play a central role [11,12,22,61,62].

Furthermore, conventional conceptualisations of blue tourism fail to acknowledge the salutogenic effects of water in its various forms, the economic viability of its utilisation for the advancement of tourist destinations, and the quality of the tourist experience. It is, therefore, vital to gain a deeper understanding of its therapeutic potential to promote the health and well-being of tourists and residents in a context of sustainability [11,12,58]. Understanding the day-to-day decisions and leisure activities related to and practised in water or adjacent territories can provide essential knowledge for developing local and regional policies. Furthermore, it can give territorial and tourist planning with more precise information to leverage the respective processes, potentially leading to solutions to promote the well-being of residents and tourists.

2.3. Humans and their relationship with water

The relationship between humans and water is fundamentally intrinsic, rooted in our basic biological need for survival. Historically, this necessity has influenced the development of communities and cities near accessible water sources. Despite advancements in technology that allow humans to live farther from direct water sources through pipelines and other transport solutions, the value of being close to oceans, lakes, and rivers continues to be highly regarded. Kauko et al. [29] highlight that the proximity and quality of water can raise the value of residential properties by up to 60 %, particularly for those near the coast, illustrating water's critical role in residential selection. Similarly, Kim et al. [30] note that water quality and management significantly affect residential choices, enhancing property value and recreational opportunities, thus improving household utility and welfare. Furthermore, water quality is vital in determining life quality, influencing health, sanitation, and overall living conditions. This, in turn, affects population distribution and urban planning, as Amaral et al. [2] discussed.

It has been demonstrated that residing near a water source can facilitate the development of cultural opportunities, enhance overall health and well-being [3], and expand the range of recreational activities available [47]. Additionally, the unique relationship between humans and their surrounding aquatic environment has been shown to elicit feelings of joy and enjoyment [21]. Crouse et al. [14] further elaborate on the health and well-being benefits of proximity to water. They posit that residing close to water sources is associated with a reduction in mortality risks, an enhancement in mental well-being, and an increase in opportunities for physical activity among urban populations.

Concerning the frequency of leisure time in places near or on the water, the few existing studies focus on a time scale of six months or one year. Curtis [15] refers to the situation in Ireland, noting that over 56 % of Irish adults engage in leisure activities associated with the sea or freshwater every year. This suggests a notable level of participation in water-based leisure activities. In their study, Diogo and Pereira [16] indicate that most boat anglers in the Portuguese region of the Azores fished all year round, with an average of 19.6 fishing trips per year. Thus, it is clear that a significant portion of leisure time is spent in or near water. In a study of the population of New South Wales (Australia), Mitchell and Haddrill [38] found that approximately 59.4 % of respondents indicated that they had been in or on the water at various water sites within the past six months. This suggests a high level of regular leisure time spent near water. The most frequently utilised types of water facilities were rivers, streams or canals (53.5 %), beaches (45.7 %), public swimming pools (45.5 %), private swimming pools (40.7 %), dams (40.6 %) and lakes (27 %).

Swarbrooke [57] found a notable increase in maritime leisure activities, which are diversifying and expanding in various coastal locations. Traditional pursuits like paddling, swimming, sailing, diving,

angling, and boat trips are complemented by innovative activities such as coasteering, wild swimming, paddle boarding, and sea kayaking, reflecting a shift towards more adventurous marine engagements. This expansion in maritime activities offers tourists varied interactions with the aquatic environment and leads to a significant number of them developing a dependency on these activities. This newfound interest often influences their subsequent holiday choices, with many seeking destinations that cater to their preferred maritime pursuits.

Gon et al. [23], under the logic of the relationship between residents' leisure boating and the ability to generate benefits for the territories, state that interviewed residents of two municipalities in Italy believe that leisure boating has a long tradition and has offered improvements to the municipalities as tourism destinations. They consider leisure boat tourism a catalyst for tourism development and an attraction for international tourists. Other authors, in their respective studies, mention that activities carried out in coastal environments or near water include swimming [13,18,19,35,36,52], boating [13,35,52,56], walking, [18,19,36,51], fishing [35,52,56], wildlife viewing [18,52], diving [19], playing in interactive fountains, and watching fountains [13], wading [56], cycling [19], playing [56], picnicking, dog walking, and relaxing [36], meeting friends, and sitting at benches or cafes [51].

Tourism, defined as leisure outside one's usual environment, often selects destinations based on several attributes once the necessary infrastructure for travel and accommodation is in place. According to Bergamo [8] and Evstropieva and Lesnykh [20], tourist hotspots often include coastal areas, regions with high environmental quality, and historically significant locations. Lapointe [32] suggests that these destinations typically feature natural beauty, cultural significance, and accessibility, such as coastal regions, historical cities, and national parks, enhancing the overall travel experience. Essentially, destinations can be categorised into two main types: those that emphasise cultural elements and those that focus on natural elements. Features like thematic neighbourhoods centred around cultural heritage and natural capital, as well as areas promoting social interactions and enriching tourist experiences, are common in these settings [4,39,42].

3. Methodology

The bibliographical collection and analysis were crucial in supporting this article's discussion on leisure time, blue tourism, human-water interactions, and the significance of water in residential choices. These references also examined the frequency of leisure activities conducted on or near water and the selection of tourist destinations. The study's empirical foundation relies on a quantitative methodology executed through a survey targeting the resident population of Portugal born up to 2008. This survey, conducted using the LimeSurvey online platform from 23 November 2022 to 26 April 2023, aimed to explore the relationship between residents and visitors to blue spaces/territories and water. The survey included five sections, focusing on 1) water's role in choosing residential locations, 2) tourist destinations, 3) characterising interactions with water, 4) its impacts on health and well-being, and 5) respondent demographics. All participants gave their informed consent for inclusion before participating in the study. This article discusses findings from the first, part of the second, and fifth sections.

Given the large target population, the questionnaire was chosen as the most suitable method for collecting data on tourism metrics, an essential tool in estimating dynamics within large populations [7]. Surveys effectively measure public attitudes and orientations, providing valuable insights into tourism trends and preferences [1]. The survey was conducted using a non-probabilistic sampling method. The survey was disseminated via social networks with the assistance of numerous public and private institutions, including municipal authorities, higher education institutions, and senior universities, which promoted the data collection tool among their employees and through their networks. The use of non-probability sampling in tourism surveys can result in biased results. However, recent methodological advancements aim to enhance

the quality of analysis and inference by applying probability sampling frameworks [63]. The application of the survey (via internet access and computer literacy to answer an online questionnaire) and the size of the target population make it highly improbable that any resident in Portugal will answer the questionnaire. This limits the generalisability of the results. In instances where probability sampling is impractical, non-probability sampling methods, such as opt-in panels and targeted sampling, can be employed to collect data from specific populations in the context of tourism surveys [5]. Using non-probability sampling in tourism surveys offers a cost-effective, straightforward implementation and rapid data collection process, rendering it an appropriate methodology for exploratory research [48].

4. Results and discussion

The majority of respondents were female (66.1 %) and fell within the 35-64 age range at the time of the questionnaire administration (81.9 %), with the most significant age group being 45-54 (38.9 %) (Table 1). In 2023, the resident population in Portugal was distributed by age group as follows: 15-24 years old 12.1 %, 25-34 years old 12.6 %, 35-44 years old 14.3 %, 45-54 years old 17.6 %, 55-64 years old 16.3 %, 65 years old or older 27.2 %. Although there are differences between the survey results and the resident population in the country, except for the 65+ age group (constraints of the use of non-probability sampling and online questionnaire application), the 35-44, 45-54 and 55-64 age groups are the most represented in both parameters.

Approximately 45.9 % of the respondents had obtained a bachelor's degree, while 30.8 % had completed secondary education. Most respondents were employed (88.4 %), with approximately 55.9 % earning a monthly income between €801 and €1,600 after tax. Regarding sociological composition, 48.3 % of the respondents reported being married, while singles accounted for the second-largest group at 24.3 %. Household composition varied widely: 28.9 % of respondents lived in four-person households, 28.7 % in three-person households, and 22.4 % in two-person households. Regarding geographical distribution, respondents were asked about their district and municipality of residence, but for a more systematic organisation, results were categorised according to Portugal's seven tourist regions (Map 1). The data shows that the three regions most represented are the Centre, with 27 % of respondents, Alentejo, 21.5 %, and the North, 16.9 %. Faro was the most prevalent in districts, accounting for 13.5 % of responses and overlapping geographically with the Algarve region.

The type of residence significantly influences individuals' daily lives, lifestyles, and leisure practices, including those activities pursued outside their usual residence due to either similarity or differentiation.

To understand respondents' living environments, they were asked about their residential settings (Table 2). The majority (40.6 %) reported living in urban areas, which in Portugal generally means agglomerations with populations over 10,000 (Table 2). The next largest group (25.1 %) resides in urban parishes or villages on the outskirts of urban areas, followed by those living in towns (21.2 %), defined as urban centres with populations between 2,000 and 10,000.

It is reasonable to suggest that proximity to water sources such as rivers, oceans, lakes, and reservoirs is seen as enhancing the quality of life in any given locality. A significant majority of respondents, 81.5%, fully agreed that being near water benefits any community, while an additional 15.8% agreed to some extent (Fig. 1). Together, these figures amount to 97.3%, underscoring a strong community preference for living near water. This is consistent with the fact that 84 % of respondents reported living within 5km of a water source. Notably, even among the 16 % (Table 4) who live further away, proximity to water is still considered valuable. These findings align with previous research by Kauko et al. [29], Rouwendal et al. [47], Crouse et al. [14], Kim et al. [30], Amaral et al. [2], Andrews et al. [3], and Flutter [21], reinforcing the perceived value of water proximity in enhancing residential desirability.

Those who indicated a level of agreement with the statement by selecting either the option '5- Totally agree' or '4- Partially agree' were subsequently invited to provide an account of the reasons underlying their high level of agreement. Among the suggestions for possible selection, 83.6 % of respondents preferred specific activities that can be carried out near water, such as hiking, water sports and other leisure activities. Seventy-two per cent (72 %) of respondents valued the view/landscape with water as an opportunity for contemplation and enjoyment. Additionally, 68.8 % of respondents expressed the belief that swimming and other water-based activities have the potential to enhance individual well-being (Table 3).

Table 2Type of place of residence.

Type of place	%
City	40.6
Town	21.2
Urban parish/village (on the outskirts of a town or city)	25.1
Rural parish/village (where the unbuilt spaces are larger than the built ones)	12.0
Isolated location (the nearest house is more than 2 kilometres away)	0.5
Other	0.3
NA	0.3

Note: sample = 2930

Source: Created by the authors from the survey

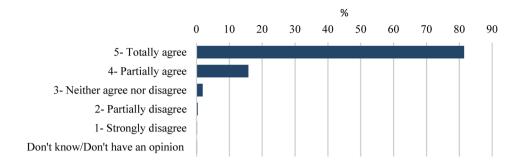
Table 1 Biographical data of the respondents.

Biographic data								
Age groups (%)	NA	15-24	25-34	35-44	45-54	55-64	65 or +	
	0.3	6.2	8.0	23.0	38.9	20.0	3.7	
Gender (%)	NA	Male	Female	Other				
	0.5	33.2	66.1	0.1				
Education (%)	NA	Basic	Secondary	CTeSP	Bachelor	Master/PhD		
	0.3	3.5	30.8	2.7	45.9	16.8		
Employment Situation (%)	NA	Retired	Student	Domestic / carer	Unemployed	Self-employed	Employee	
	0.7	1.4	5.9	0.1	0.6	2.8	88.4	
Monthly income (%)	NA	Not app.	Up to €800	€801-1200	€1201-1600	€1601-2000	€2001-3000	+€3000
	3.4	5.7	19.8	33.5	22.4	8.9	5.1	1.3
Household members (%)	NA	One	Two	Three	Four	Five or more		
	0.3	14.1	22.4	28.7	28.9	5.6		
Marital status (%)	NA	Single	Married	Divorced / Separated	De facto union	Widowed		
	0.3	24.3	48.3	11.2	14.8	1.2		
Region of residence (%)	NA	North	Centre	Lisbon	Alentejo	Algarve	Azores	Madeira
	0.3	16.9	27	12	21.5	13.5	7.1	1.7

Note: sample = 2930

Source: Created by the authors from the survey

Proximity to water as an added value



Note: sample = 2930

Fig. 1. Degree of agreement that proximity to water is an added value for any location. Source: Created by the authors from the survey.

Table 3Reasons for agreeing with the proximity of water as an element that adds value to a locality.

Reasons for agreeing on proximity to water	%
For the activities it allows (e.g. more space for walks, water sports, other leisure activities)	83.6
The view/landscape	72.0
Improved well-being	68.8
Tranquillity	54.9
Better health conditions	48.0
Affirmation of a certain social status	4.4

Note: sample = 2930

Source: Created by the authors from the survey

Despite Kauko et al. [29] highlighting that proximity and water quality significantly influence residential property value and desirability, this study found that only 4.4 % of respondents aspired to the status associated with living near water. However, the assertion by other researchers like Kim et al. [30], Amaral et al. [2], and Andrews et al. [3] that living close to water enhances health and well-being is supported by this study's findings. A significant 68.8 % of respondents felt that such proximity improves their well-being, and 48 % reported enhanced health benefits. Furthermore, 83.6 % acknowledged that living near water facilitates various activities, echoing Kim et al. [30] regarding increased recreational opportunities.

The survey also reveals that the Portuguese population surveyed highly values the views and tranquillity afforded by water proximity, with 72 % appreciating the landscape and 54.9 % the tranquillity

(preferences somewhat distinct from those documented in earlier studies). It demonstrates a strong appreciation for the aesthetic and peaceful environment water provides, underscoring the multifaceted benefits of water proximity beyond just economic or status considerations.

Approximately 55.9 % of respondents reported living near a water-course like a river or stream, and 40.8 % indicated they reside near the ocean (Table 4). For this study, living more than five kilometres from a water source was not in proximity, as greater distances may limit engagement in leisure activities, especially for shorter periods such as late afternoons. As such, the presence of water does not factor into leisure decisions due to the distance. When asked about the exact distance from the nearest water feature, 16.3 % of respondents stated they lived within 101 to 500 metres, 20.0 % within 501 to 1,000 metres, and 16.7 % within 1,001 to 2,000 metres. These ranges, covering most of the responses, demonstrate varied yet significant proximity to water among the participants.

When asked about the importance of water proximity in their choice of residence, $36.6\,\%$ of respondents either partially or fully agreed that it was a significant factor in their decision to live near water. About $15.8\,\%$ of respondents remained neutral, neither agreeing nor disagreeing with the statement. Notably, $26.5\,\%$ of respondents reported that they did not participate in the decision-making process regarding their current place of residence, often due to their youth, highlighting a significant portion of the population where this factor was not applicable.

Among the respondents who considered water proximity a significant factor in choosing their residence (36.6 % of all respondents), the most cited reasons were personal satisfaction and lifestyle preferences.

Table 4 Place of residence and proximity to water.

Water and choice of residence (%)								
Proximity to water form ¹ (%)	Watercourse	Ocean	Res./ Dam	Pond	Lagoon	Lake	Not near water	
	55.9 40.8	40.8	17	5.7	2.9	1.5	16	
Distance to water ² (m)	DK/NO	Less than 100m	101- 500m	501-1000m	1001-2000m	2001-3000m	3001-4000m	4001- 5000m
	4.4	7.7	16.3	20.0	16.7	11.9	6.1	16.9
Proximity importance in deciding where to live ³ (%)	DK/NO	NA	Other	1- Totally disagree	2- Partially disagree	Neither agree nor disagree	4- Partially agree	5- Totally agree
	2.2	26.5	3.1	11.8	4	15.8	17.4	19.2

Note

- 1 sample = 2930
- 2 sample = 2461
- 3 sample = 2930

Source: Created by the authors from the survey

The opportunity to engage in leisure activities was the top reason, noted by $51.3\,\%$ of these respondents. Closely following were the enjoyment of views or landscapes (49.3 %), improved general well-being (48 %), and the tranquillity associated with living near water (46.1 %) (Table 5). Additionally, 34 % valued proximity to family and friends, and $31.7\,\%$ considered closeness to the workplace as important, though these practical considerations were less dominant. This suggests that the most frequent motives for choosing a residence near water are linked to individual enjoyment and personal benefits rather than obligatory factors such as employment.

Over the last 12 months, respondents were asked about the frequency of their leisure activities near or on water outside of holiday periods, following the approach used by Elliott [17]. According to Table 6, nearly half of the respondents (45.6 %) engaged in water-related leisure activities at least once a week, with 24.9 % doing so several times a week and 4.7 % daily. Despite a stated preference for proximity to water (Fig. 1), the actual frequency of leisure time spent near or on water was lower than expected. Over half of the respondents (54.4 %) reported not spending leisure time in such locations or doing so at most once or twice a month. These findings align with previous studies by Curtis [15], Mitchell and Haddrill [38], and Diogo and Pereira [16], which suggest more frequent engagement in water-related activities over more extended periods, such as one-month or six-month intervals.

However, the percentages show that some practices are quite popular when practising activities near or in the water over one year (Table 7). Among the total number of respondents, 92.9 % experienced activities by the water in the last 12 months and 68.4 % experienced activities in the water. The activities most practised near the water were walks (78 %) and sunbathing (51.2 %), which most eligible respondents identified. It is worth highlighting a set of activities which were strongly selected and associated with mobility/physical exercise, namely walks (78 %), hiking/trekking (42.8 %), walks with pets (20.1 %) and running (10.6 %). Walking is in line with the results of the authors Maguire et al. [36], Elliott [18], Etminani-Ghasrodashti et al. [19], and Sayginer and Kurtsan [51], and walks with pets are consistent with the results of the study by Maguire et al. [36]. However, Portuguese respondents seem to value hiking/trekking and running activities more highly than previous studies have shown.

Concerning activities in the water, among the 68.4 % of respondents who practised activities, 90 % did bathing/swimming, which is consistent with one of the most frequent practices in tourism (sun and beach), also due to Portugal's geographical position and climatic characteristics (spring, summer and autumn are usually favourable to this practice). Using boats for leisure activities is also significant (23 %). These results follow the findings of several previous studies [13,18,19,35,36,52,56].

Considering the significance attributed to the element of water in

Table 5Reasons for choosing to live near water.

Motives	%
For the activities it allows (e.g. more space for walks, water sports, other leisure activities)	51.3
For the view/landscape	49.3
Better well-being	48.0
Tranquillity	46.1
Proximity to family and/or friends	34.0
Proximity to the workplace	31.7
Better health conditions	28.2
Accessibility	14.9
The cost of housing	8.7
Avoiding confusion when accessing these sites	8.0
For no specific reason	8.0
On the recommendation of residents	1.6
Affirmation of a certain social status	0.8

Note: sample = 1075

Source: Created by the authors from the survey

Table 6Frequency of leisure time in places near or on the water.

Leisure time	%
Every day	4.7
Several times a week	24.9
Once a week	16.0
Once or twice a month	18.6
A few times in the last 12 months	29.5
Not once in the last 12 months	6.2

Note: sample = 2930

Source: Adapted by the authors from Elliott (2017) and the survey

Table 7Activities carried out near or in the water.

Activities by the water ¹	%	Activities in the water ²	%
Total	92.9	Total	68.4
Walks	78.0	Boat trips (such as sailing, dinghy, etc.)	23.0
Walks with pets	20.1	Maritime-tourist boats (organised fishing trips, maritime wildlife watching trips, tours, etc.)	10.6
Hiking/Trekking	42.8	Paddling (rowing, stand-up paddle, canoeing, etc.)	12.4
Running	10.6	Water sports (surfing, jet skiing, etc.)	6.7
Cycling	7.2	Recreational diving	9.1
Horse riding	0.4	Bathing/swimming	90.0
Golf	0.2	Other	0.2
Adventure sports (climbing, biking, etc.)	5.5		
Games and team sports (football, volleyball, etc.)	5.1		
Recreational fishing	7.2		
Shellfish gathering	2.7		
Hunting	0.9		
Activities of environmental interest	6.1		
Sunbathing/beach practice	51.2		
Visiting a natural or cultural attraction	15.9		
Quiet/relaxation activities (reading, etc.)	23.8		
Playing with children	25.9		
Enjoying the scenery from the car	30.3		
Eating or drinking/picnics	24.1		
Socialising with friends	38.0		
Watching wildlife (birdwatching, etc.)	8.7		
Other	0.5		

Note:

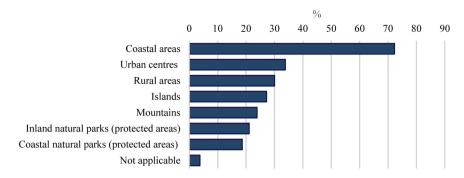
Source: Adapted by the authors from Elliott (2017) and the survey

terms of residential and everyday leisure practices, it was concluded that these preferences could also be extended to non-everyday leisure time, namely during holidays. In this regard, the types of territory selected for holidays exhibit considerable diversity, encompassing urban centres and coastal nature parks, among other options. Nevertheless, coastal areas are the most frequently selected, with 72.3 % of respondents indicating that they have already chosen or usually choose them for their holidays. The following most frequent typologies, in descending order of frequency, are urban centres (33.9 %), rural areas (30.1 %), islands (27.2 %) and mountainous areas (23.9 %) (Fig. 2). These results are in line with the findings of the studies by Aranzabal et al. [4], Notarstefano [42], Bergamo [8], Lapointe [32], Moussa [39], and Evstropieva and Lesnykh [20], which show that, after providing transport, accommodation, restaurants and other conditions necessary for tourism, there are two significant elements of attractiveness, namely territories with a

 $^{^{1}}$ sample = 2723

 $^{^2}$ sample = 2005

Types of territory



Note: sample = 2930

Fig. 2. Types of territory usually chosen for holidays. Source: Created by the authors from the survey.

strong cultural or natural character.

Concerning the frequency with which residents of Portugal select destinations for their holidays that are situated near the water, 46.1 % do so with some regularity, 24.3 % indicate that they do so on every occasion, and 21.8 % make such choices on an occasional basis (Fig. 3). In summary, 70.4 % (more than two-thirds) of respondents indicated that they select their destinations based on the presence of water.

Ultimately, to ascertain the relationship between the biographical variables and the responses about the significance of water for residing in proximity to it and for selecting holiday destinations, the variables were grouped for factor analysis by principal components. This resulted in the emergence of a factor designated as the 'Relevance of water in the choice of residence and/or holiday destination'. An index was constructed by summing the responses to the items included in the factor, and the categorisation was divided into high, medium, and low relevance. The relationship between these indices and the characteristics of the respondents was subsequently analysed according to this categorisation, which revealed that 93.2 % of respondents associated proximity to water with high relevance (Table 8).

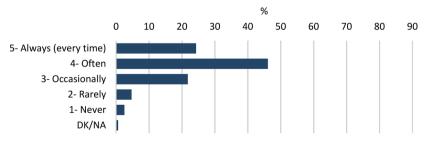
Table 9 presents the results of a correlation analysis between the respondents' perceptions of the relevance of water in the choice of residence and/or holiday destination and various demographic characteristics. It includes key statistical measures such as Chi-squared values, degrees of freedom (df) and significance levels (Sig.). Notably, there is a significant correlation between the district of residence and the perceived relevance of water, as indicated by the Chi-square result (64.709) and the low significance value (0.014). It is stated that respondents from different districts ascribe disparate degrees of



Map 1. Tourist regions of Portugal.

Source: Adapted by the authors from Turismo de Portugal [60].

Holidays in places with water



Note: sample = 2930

Fig. 3. Frequency of holidays or visits to places where water is an element in the last 12 months. Source: Created by the authors from the survey.

Table 8Index - Relevance of water in the choice of residence and/or holiday destination.

	Freq.	%	% valid	% cumulative
Low relevance	1	0,0	0,1	0,1
Medium relevance	133	4,5	6,8	6,8
High relevance	1831	62,5	93,2	100,0
Total	1965	67,1	100,0	
Not mentioned	965	32,9		
Total	2930	100,0		

Source: Created by the authors from the survey

Table 9Correlation between the Index - Relevance of water in the choice of residence and/or holiday destination and the respondents' characteristics.

	Cases		Chi-Squa	re	
	n	%	Value	Df.	Sig.
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.1 Age group	1963	67,0	10,749	10	0,377
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.2 Gender	1956	66,8	2,626	2	0,269
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.3 Education	1965	67,1	5,729	6	0,454
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.4 Employment situation	1957	66,8	2,184	6	0,902
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.5 Net monthly income (on average)	1828	62,4	6,336	10	0,786
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.6 Household members	1962	67,0	9,014	8	0,341
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.7 Marital status	1963	67,0	12,715	8	0,122
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.8 District of residence	1963	67,0	64,709	42	0,014
Index - Relevance of water in the choice of residence and/or holiday destination * V.1.9 Type of place of residence	1963	67,0	10,344	10	0,411

Note: sample = 2930

Source: Created by the authors from the survey

importance to water when selecting their residence or holiday destination.

Residents of the districts of Horta, Angra do Heroísmo, and Ponta Delgada, which make up the Azores archipelago, along with Faro in the Algarve region and Funchal in the Madeira region, were most likely to recognise the significance of water in their residential choices. Characterised by their proximity to the ocean, these areas see the marine environment as a crucial element of local life. This proximity significantly impacts the local economy, particularly through fishing and tourism, and shapes the lifestyle of the inhabitants. In these regions, the presence of water offers recreational and aesthetic benefits and supports economic activities, making it a key factor in choosing a place to live. Specifically in Faro, the allure of the coastline and the related tourism industry emphasise the critical role of water in residential decision-making processes.

Considering the significance of water resources in selecting holiday destinations, the findings indicate a higher prevalence in Bragança, Viseu and Guarda districts. These districts are situated in the interior of Portugal, where access to the coast or extensive bodies of water is more

restricted. These districts' high level of agreement can be attributed to the desire to escape the drier climate and predominantly mountainous landscapes. It can be posited that residents of these areas may place a higher value on holiday destinations that offer access to the sea, rivers or lakes. Such destinations, such as beaches and nautical activities, contrast the everyday environment and the leisure opportunities associated with water. Notably, the coastal districts of Porto (part of the North region), Lisbon and Coimbra (part of the region Centre) assign considerable significance to the presence of water when selecting holiday destinations. The districts of Lisbon and Porto are the most populous in the country and the two largest cities. These findings can be attributed to the fact that, despite having regular access to water in their daily lives, residents still seek out water destinations during their holidays. This can be seen as a way of alleviating the effects of an urban and fast-paced lifestyle. In any case, although water is already part of the everyday environment, there is also diversity in responses during holidays, with individuals selecting water destinations and other types of locations, such as cultural or mountainous areas.

In contrast, no statistically significant correlation was observed between the remaining demographic characteristics, including age, gender, education, and income. It is suggested that these factors do not significantly influence the perceived importance of water in such decisions.

5. Conclusion

This study highlighted the deep connection between human beings and blue spaces, emphasising the importance of water in both the choice of residence and holiday destinations. The results show that a large majority of residents in Portugal consider proximity to water to be a decisive factor that significantly influences their quality of life and wellbeing. This reflects not only an aesthetic or recreational preference but also an appreciation of water's therapeutic and calming potential. In addition, the survey revealed that regions that are valued for living in because of their proximity to water are frequently chosen as tourist destinations. This trend underlines the importance of considering the sustainable management of water resources and the development of infrastructure that promotes environmental conservation and economic potentialisation through tourism.

In terms of theoretical implications, this study contributes to human geography, the sociology of leisure, and tourism planning by exploring the relationship between blue spaces and human well-being. It emphasises that proximity to water is not just a geographical issue but a critical factor shaping residential and tourist behaviour. The findings are consistent with existing literature associating proximity to water with perceived well-being and quality of life, contributing to the growing body of literature on the salutogenic effects of natural environments and their significance in urban planning. The concept of 'blue spaces' is developed to encompass not only the physical aspects of the environment but also the psychological and social impact on residents and visitors. The study challenges conventional leisure theories by demonstrating that the geographical context can influence preferences and behaviour in recreational activities, establishing a connection between leisure and therapeutic spaces. It is also suggested that territories with access to blue spaces have a competitive advantage in attracting residents and tourists, creating a theoretical bridge between quality of life, tourism, and territorial planning.

The findings of this study have practical implications for urban planners, tourism managers and politicians. Urban planning policies should prioritise creating and maintaining public spaces close to bodies of water, such as rivers, oceans and lakes. By investing in infrastructure and leisure spaces in coastal areas or in proximity to rivers, cities can enhance their residents' quality of life while increasing their appeal to visitors, which can generate substantial economic and social benefits.

It is essential to emphasise the importance of incorporating water proximity into tourism marketing strategies and products. Water-related activities, such as water sports and wellness programs, can help attract tourists and residents. It is also worth highlighting the need for sustainable management of water resources, ensuring that infrastructure and development protect aquatic ecosystems and their environment. This includes environmental conservation policies and sustainable tourism practices. Creating accessible blue spaces can promote population health and well-being by facilitating access to water and encouraging outdoor recreational activities near rivers and lakes. It is also necessary to consider demographic profiles in policy formulation, as different demographic groups have varying needs regarding recreational activities and water contact. This suggests that urban development and tourism policies should adapt and respond to these differences to optimise the positive impact on different population segments.

It should be noted that this study presents some limitations. The non-probability sampling method employed for the online questionnaire may introduce a degree of selection bias, given that the sample was voluntary, widely publicised, and, therefore, not necessarily representative of the general population. The data collection method also excludes individuals with limited internet access or low digital literacy, which may affect the generalisability of the results. The geographical distribution of respondents, particularly in coastal areas like Faro, may influence the results. The questionnaire used subjective agreement scales, which may not capture more detailed nuances about individuals' behaviours and decisions. The study's focus on Portuguese residents limits its applicability to other geographical contexts with different environmental, cultural, and socioeconomic characteristics.

In terms of guidelines for future research, it is necessary to investigate regional differences in greater depth. Although the present study identified variations between coastal and inland regions, future studies could explore motivations and perceptions in different regions in greater detail, including contextual variables such as socioeconomic development and accessibility to water resources. This could provide richer insights into regional dynamics related to proximity to water. In addition, future research could focus on other geographical contexts to assess whether the results observed in Portugal apply to other regions, especially countries with different environmental and cultural characteristics. A comparison between coastal and inland countries, or between more or less industrialised regions, could offer a more robust overview of the relationship between water, well-being and residential or tourist choices. Finally, considering the growing importance of environmental and sustainability issues, it would be relevant to investigate the role that sustainability and water management play in the decisions of residents and tourists. Future studies could explore how the perception of sustainable practices, such as preserving coastal zones and rivers, influences preferences for areas close to water, both for living and visiting.

Ethical statement

This study was based on the application of a nested survey on the Limesurvey platform and via the University of Coimbra account. All nested surveys must comply with the university's own ethical requirements. The target population was also informed at the beginning of the questionnaire that no data would be collected that would personally identify each participant.

CRediT authorship contribution statement

Luís Silveira: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Mónica Brito:** Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors report there are no competing interests to declare.

Data availability

Data will be made available on request.

References

- I. Ali, A. Azman, S. Mallick, T. Sultana, Z. Hatta, Social survey method, in:
 M. Islam, N. Khan, R. Baikady (Eds.), Principles of Social Research Methodology, Springer, 2022, pp. 167–179, https://doi.org/10.1007/978-981-19-5441-2_12.
- [2] M. Amaral, F. Faleiros, E. Guimarães, Distribuição espacial do consumo residencial de água tratada na cidade de Uberlândia - MG: estudo de casos para os meses do ano de 2015, Caminhos de Geografia 21 (74) (2020) 152–161, https://doi.org/ 10.14393/RCC217450004
- [3] L. Andrews, R. Bachman, S. Fernandez, Living on water, in: Y. Yang, A. Taufen (Eds.), The Routledge Handbook of Sustainable Cities and Landscapes in the Pacific Rim, Routledge, 2022, pp. 1–11, https://doi.org/10.4324/9781003033530.
- [4] I. Aranzabal, P. Aguilera, A. Rescia, M. Schmitz, F. Pineda, Spatial analysis of impacts and potentialities for leisure activities. Bases for territorial ordination of tourism uses, in: C. Brebbia, P. Pascolo (Eds.), Management Information Systems 2002, WIT T Press, 2002, pp. 13–24, https://doi.org/10.2495/MIS020021.
- [5] R. Baker, J. Brick, N. Bates, M. Battaglia, M. Couper, J. Dever, K. Gile, R. Tourangeau, Summary report of the AAPOR Task Force on non-probability sampling, J. Surv. Stat. Methodol. 1 (2) (2013) 90–143, https://doi.org/10.1093/ ISSAM/SMT008
- [6] J. Baudrillard, On consumer society, in: J.R. Elliott, D. Attridge (Eds.), Rethinking the Subject, Routledge, 2018, pp. 193–203.
- [7] J.G. Beaman, T.-C. Huan, J.P. Beaman, Tourism surveys: sample size, accuracy, reliability, and acceptable error, J. Travel. Res. 43 (1) (2004) 67–74, https://doi.org/10.1177/0047287504265514.
- [8] O. Bergamo, A tourist territory between the lagoon and the sea: A strategy for a dynamic and lasting development, in: G. Campeol (Ed.), Strategic Environmental Assessment and Urban Planning, Springer, 2020, pp. 99–105, https://doi.org/ 10.1007/978-3-030-46180-5 8.
- [9] Ž. Bolanča, I. Bolanča, M. Buljan, I. Blajić, J. Penavić Zeljko, M. Šitum, Trends, habits and attitudes towards suntanning, Coll. Antropol. 32 (2) (2008) 143–146. https://hrcak.srce.hr/file/54880.
- [10] F. Borioni, V. Biino, V. Tinagli, C. Pesce, Effects of baby swimming on motor and cognitive development: A pilot trial, Percept. Mot. Skills. 129 (4) (2022) 977–1000, https://doi.org/10.1177/00315125221090203.
- [11] a M. Brito, L. Silveira, Blue Tourism, in: J. Jafari, H. Xiao (Eds.), Encyclopedia of Tourism, Springer, 2023, https://doi.org/10.1007/978-3-319-01669-6_920-1.
- [12] M. Brito, L. Silveira, Blue planning a planning model for the development of Blue Tourism in Blue Spaces, Tourism Recreat. Res. (2023) 1–21, https://doi.org/ 10.1080/02508281.2023.2167909.
- [13] Z. Chong-Miao, X. Pengcheng, D. Wei-Wei, C. Xiaochang, Exposure parameters and health risk of cryptosporidium and giardia in the recreational water activities for urban residents in China, Environ. Sci. Pollution Res. 29 (1) (2022) 1573–1581, https://doi.org/10.1007/S11356-021-15463-4.
- [14] D.L. Crouse, A. Balram, P. Hystad, L. Pinault, M. Van den Bosch, H. Chen, D. Rainham, E.M. Thomson, C.H. Close, A. Van Donkelaar, R.V. Martin, R. Ménard, A. Robichaud, P.J. Villeneuve, Associations between living near water and risk of mortality among urban Canadians, Environ. Health Perspect. 126 (7) (2018) 077008, https://doi.org/10.1289/EHP3397.
- [15] J. Curtis, Demand for water-based leisure activity, J. Environ. Plann. Manag. 46 (1) (2003) 65–77, https://doi.org/10.1080/713676706.
- [16] H. Diogo, J. Pereira, Recreational boat fishing pressure on fish communities of the shelf and shelf break of Faial and Pico Islands (Azores Archipelago): implications for coastal resource management, Acta Ichthyologica et Piscatoria 43 (4) (2013) 267–276. https://doi.org/10.3750/AIP2013.43.4.02.
- [17] L. Elliot, Bluehealth Linking Environment, Climate & Health Community Level Survey (BCLS), Bluehealth202, 2017. https://bluehealth2020.eu/projects/bcls/.
- [18] L. Elliott, M. White, James, J. Grellier, S. Rees, R. Waters, L. Fleming, Recreational visits to marine and coastal environments in England: where, what, who, why, and when? Mar. Policy. 97 (November 2018) (2018) 305–314, https://doi.org/ 10.1016/J.MARPOL.2018.03.013.
- [19] R. Etminani-Ghasrodashti, M. Paydar, L. Ardeshiri, Recreational cycling in a coastal city: investigating lifestyle, attitudes and built environment in cycling behavior, Sustain. Cities. Soc. 39 (2018) 241–251, https://doi.org/10.1016/J. SCS.2018.02.037. May 2018.
- [20] O. Evstropieva, S. Lesnykh, Experience of organisation of tourist-recreation zones in territories with special conditions of environmental management (by the example of Lake Baikal), Gosudarstvo I Pravo 6 (2023) 99–108, https://doi.org/ 10.31857/s102694520025924-7.
- [21] L. Flutter, Homes, happenings and everyday lives. Afloat on London's waterways, in: C. Bates, K. Moles (Eds.), Living with Water. Everyday Encounters and Liquid Connections, Manchester University Press, 2023, https://doi.org/10.7765/ 9781526161734.00012.
- [22] R. Foley, T. Kistemman, Blue space geographies: enabling health in place, Health Place 35 (2015) (2015) 157–165, https://doi.org/10.1016/j. healthplace.2015.07.003.
- [23] M. Gon, L. Osti, H. Pechlaner, 12. Leisure boat tourism: residents' attitudes towards nautical tourism development, Tourism Rev. 7 (3) (2016) 180–191, https://doi. org/10.1108/TR-07-2016-0025.

- [24] V. Hajad, I. Ikhsan, D. Setiawan, Implementation of blue economy policy in the tourism sector in Aceh Province, Spirit Publik: Jurnal Administrasi Publik 19 (1) (2024) 62–86, https://doi.org/10.20961/sp.v19i1.85222.
- [25] B. Han, A Sociedade do Cansaço, Relógio DÁgua, 2014. https://www.relogiodagua.pt/produto/a-sociedade-do-cansaco/.
- [26] B. Han, Vita Contemplativa: In Praise of Inactivity, Polity Press, 2024. https://mit pressbookstore.mit.edu/book/9781509558018.
- [27] G. Hourdin, Uma Civilização dos Tempos Livres, 1970. Moraes editores, https://doutrotempo.com/produto/uma-civilizacao-dos-tempos-livres-10e/.
- [28] F. Jameson, Postmodernism and consumer society, in: H. Foster (Ed.), The Anti-Aesthetic: Essays on Postmodern Culture, Bay Press, 1983, pp. 111–125.
- [29] T. Kauko, R. Goetgeluk, Straub, H. Priemus, Presence of water in residential environments - value for money?, in: The 10th European Real Estate Society (ERES) conference, 2003, pp. 1–33. OTB, https://repository.tudelft.nl/record/uu id:3c3a0d7a-f783-4eb1-acd6-6cb56f67cc4b.
- [30] H. Kim, P. Boxall, W. Adamowicz, Analysis of the economic impact of water management policy on residential prices: modifying choice set formation in a discrete house choice analysis, J. Choice Model. 33 (December 2019) (2019) 100148, https://doi.org/10.1016/J.JOCM.2018.07.001.
- [31] P. Lafargue, O direito à preguiça, 3rd ed., Teorema, 1991. https://antigona.pt/products/o-direito-a-preguica?srsltid=AfmBOooQAOxRjwb8f7ZrsdI_uWvdpKd2szNzO-vsue-rsK24NH6dU47c.
- [32] D. Lapointe, Tourism territory/territoire(s) touristique(s): when mobility challenges the concept, in: M. Stock (Ed.), Progress in French Tourism Geographies - Inhabiting Touristic Worlds, 2021, pp. 105–116, https://doi.org/10.1007/978-3-030-52136-3
- [33] Seung-Rae. Lee, Jae-Hwan. Jo, Jin-I Baeg, An analysis of urban residents' preference on blue tourism, J. Fisheries Business Administr. 36 (3) (2005) 25–35. https://koreascience.kr/article/JAKO200511722575977.page.
- [34] G. Lipovetsky, A felicidade paradoxal ensaio sobre a sociedade do hiperconsumo, Edições 70 (2007). https://www.almedina.net/a-felicidade-paradoxal-ensaio-so bre-a-sociedade-do-hiperconsumo-1563808294.html.
- [35] J. Loomis, L. Bair, Recreation use values for water-based recreation, Oxford Research Encyclopedia of Environmental Science, 2023. Retrieved 7 Oct. 2024, from, https://oxfordre.com/environmentalscience/view/10.1093/acrefore/97 80199389414.001.0001/acrefore-9780199389414-e-797.
- [36] G. Maguire, K. Miller, M. Weston, K. Young, Being beside the seaside: beach use and preferences among coastal residents of south-eastern Australia, Ocean. Coast. Manage 54 (10) (2011) 781–788, https://doi.org/10.1016/J. OCECOAMAN.2011.07.012.
- [37] A. Mani, N. Lamçe, Sustainable and blue tourism in the light of e-commerce development and economic growth – A meta-analysis, Eur. J. Business Innov. Res. 11 (8) (2023) 87–107, https://doi.org/10.37745/ejbir.2013/voll1n887107.
- [38] R. Mitchell, K. Haddrill, From the bush to the beach: water safety in rural and remote New South Wales, Austr. J. Rural Health 12 (6) (2004) 246–250, https://doi.org/10.1111/J.1440-1854.2004.00628.X.
- [39] L.-S. Moussa, The 'putting territories into tourism', a tourism diagnosis tool case of the Wilaya of Algiers, Geo J. Tourism Geosites 35 (2) (2021) 456–463, https://doi. org/10.30892/CTG.35225-672.
- [40] L. Nazareth, The Leisure Economy: How Changing Demographics, Economics, and Generational Attitudes will Reshape Our Lives and our Industries, John Wiley & Sons, Inc, 2007. https://www.wiley.com/en-us/The+Leisure+Economy%3A+ How+Changing+Demographics%2C+Economics%2C+and+Generational+ Attitudes+Will+Reshape+Our+Lives+and+Our+Industries-p-9780470157503.
- [41] NECSTOUR, Barcelona Declaration of Tourism and Cultural Heritage: Better Places to live, Better Places to Visit, NECSTOUR, 2018. https://necstour.eu/better-places-to-live-better-places-to-visit.
- [42] G. Notarstefano, The territories of tourism: a reflection about the experience of the Tourist Districts (Local Tourism Systems) in Sicily, PASOS Revista de Turismo y Patrimonio Cultural 11 (4) (2013) 597–602, https://doi.org/10.25145/J. PASOS.2013.11.053.
- [43] J. Odell, How to do Nothing: Resisting the Attention Economy, Melville House, 2019. https://www.goodreads.com/book/show/42771901-how-to-do-nothing.
- [44] F. Picken, Tourism and the blue economy, Tourism Geogr. (2023) 1–9, https://doi. org/10.1080/14616688.2023.2291821.
- [45] G. Pronovost, Introdução à sociologia do lazer, Senac, 2011. https://www.fnac.pt/mp8615837/Introducao-A-Sociologia-Do-Lazer.
- [46] C. Rojek, Leisure and consumption, Leisure/Loisir 30 (2) (2006) 475–486, https://doi.org/10.1080/14927713.2006.9651368.
- [47] J. Rouwendal, R. Marwijk, O. Levkovich, The value of proximity to water in residential areas, in: TI 2014-047/VIII Discussion Paper, Tinbergen Institute, 2014. https://papers.tinbergen.nl/14047.pdf.

- [48] J. Rueda, B. Cobo, L. Castro, Use of machine learning techniques in non-probabilistic samples, in: 5th International Conference on Advanced Research Methods and Analytics (CARMA2023), Editorial Universitat Politècnica de València, 2023, pp. 241–247, https://doi.org/10.4995/carma2023.2023.16416.
- [49] B. Russell, In praise of idleness, Routledge, 2005. https://www.routledge.com/In-Praise-of-Idleness-And-Other-Essays/Russell/p/book/9780415325066?srslt id=AfmBOooz aSTv1hTogJcnyhLeScWw.gkFcy8bZLAdCZzIVgfxmMIobxk.
- [50] N. Santos, L. Silveira, A society that has leisure more and more as a basic need. The evolution of leisure seen by the Portuguese perspective, Cadernos de Geografia 40 (2019) 23–35, https://doi.org/10.14195/0871-1623_40_2.
- [51] C. Sayginer, K. Kurtsan, An extended decision-making model of coastal recreational area use during COVID-19 through goal-directed behavior and perceived benefits framework, Pertanika J. Social Sci. Humanit. 30 (2) (2022) 541–556, https://doi. org/10.47836/pissh.30.2.07.
- [52] I. Schneider, Urban water recreation: experiences, place meanings, and future issues, in: L.A. Baker (Ed.), The Water Environment of Cities, 2009, pp. 125–140, https://doi.org/10.1007/978-0-387-84891-4 7.
- [53] K. Segrave, Suntanning in 20th Century America, McFarland, 2005. https://archive.org/details/suntanningin20th0000segr/page/n7/mode/2up.
- [54] A. Smith, A riqueza das Nações, Fundação Calouste Gulbenkian, 2006. https://gulbenkian.pt/publications/riqueza-das-nacoes-i/.
- [55] J.E. Stockdale, What is Leisure? An Empirical Analysis of the Concept of Leisure and the Role of leisure in people's lives, Sports Council, 1985. https://www. amazon.com/What-Leisure-Empirical-Analysis-Concept/dp/0906577500#detail Bullets feature div.
- [56] N. Sunger, S. Teske, S. Nappier, C. Haas, Recreational use assessment of water-based activities using time-lapse construction cameras, J. Exposure Sci. Environ. Epidemiol. 22 (2012) 281–290, https://doi.org/10.1038/JES.2012.4.
- [57] J. Swarbrooke, Actividades de lazer em ambientes marinhos, in: Em P. Swarbrooke (Ed.), The Impact of Tourism on the Marine Environment, Goodfellow Publishers, 2020, https://doi.org/10.23912/9781911635574-4442.
- [58] D. Tonazzini, J. Fosse, E. Morales, A. González, S. Klarwein, K. Moukaddem, O. Louveau, Blue Tourism. Towards a Sustainable Coastal and Maritime Tourism in World Marine Regions, Eco-union, 2019.
- [59] J. Tribe, The Economics of Recreation, Leisure and Tourism, 4th ed., Butterworth-Heinemann, 2011. https://www.sciencedirect.com/book/9780080890500/the-economics-of-recreation-leisure-and-tourism.
- [60] Turismo de Portugal, Destinos, Visit Portugal, 2025. https://www.visitportugal.com/en/destinos.
- [61] S. Völker, T. Kistemann, The impact of blue space on human health and well-being salutogenetic health effects of inland surface waters: A review, Int. J. Hyg. Environ. Health 214 (6) (2011) 449–460, https://doi.org/10.1016/j. iiheb.2011.05.001.
- [62] M. White, L. Elliott, M. Gascon, B. Roberts, L. Fleming, Blue space, health and well-being: A narrative over-view and synthesis of potential benefits, Environ. Res. 191 (2020) (2020) 1–14. https://doi.org/10.1016/j.envres.2020.110169.
- [63] C. Wu, M. Thompson, Non-probability survey samples, in: C. Wu, M. Thompson (Eds.), Sampling Theory and Practice, 2020, pp. 319–331, https://doi.org/ 10.1007/978-3-030-44246-0-17.
- [64] J. Zuzanek, Time, Leisure and Well-Being, Routledge, 2021. https://www.routledge.com/Time-Leisure-and-Well-Being/Zuzanek/p/book/9780367522834?srsltid=AfmBOoo1m2n5UTEdI07doH92xCckhP6D1QOtdcioiUwQtV18nKqsT9yz.

Luís Silveira: Assistant Professor in the Department of Geography and Tourism of the University of Coimbra and researcher of CEGOT (Centre of Studies in Geography and Spatial Planning), Group 3 Tourism, Heritage, and Territory. PhD in Tourism, Leisure, and Culture, specialising in Tourism and Development, from the University of Coimbra. He is a member of the International Coastal and Marine Tourism Society (ICMTS) and a member of the Ocean Forum - Working Group on Recreational Boating and Nautical Tourism. He developed research activities at the University of Helsinki (Finland) and at the Auckland University of Technology (New Zealand). His research interests focus on low-density tourism, nautical tourism, and cultural tourism, under the vectors of Transport, Events, Recreational Boating, Coastal Activities and UNESCO Classified Sites.

Mónica Brito: Assistant Professor in the University of Évora (Portugal) and researcher of CEGOT (Centre of Studies in Geography and Spatial Planning), Group 3 Tourism, Heritage, and Territory and researcher of the Interdisciplinary Centre for History, Culture and Societies (CIDEHUS). PhD in Tourism, Leisure, and Culture, specialising in Tourism and Development, from the University of Coimbra. She is a member of the Ocean Forum - Working Group on Recreational Boating and Nautical Tourism. Her research interests focus on blue tourism, health and wellbeing tourism, tourism planning and development, and tourism Innovation and entrepreneurship.