



LINKING WELL-BEING, NATURE AND TOURISM: A PARTICIPATORY APPROACH

Alba Font Barnet

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Linking Well-Being, Nature and Tourism: A participatory approach

ALBA FONT BARNET



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Linking Well-being, Nature and Tourism

A participatory approach

Alba Font Barnet

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Departament de Geografia

Universitat Rovira i Virgili

Director

Dr. Marta Gemma Nel-lo Andreu

Departament de Geografia

Universitat Rovira i Virgili

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I STATE that the present study, entitled “**Linking well-being, nature and tourism. A participatory approach**”, presented by **Alba Font Barnet** for the award of the degree of Doctor, has been carried out under my supervision at the Department of Geography of this university.

Vila-seca, 3rd September of 2023

Doctoral Thesis Supervisor

UNIVERSITAT ROVIRA I VIRGILI
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Alba Font Barnet

PREFACE

When I'm asked about my relationship with nature, I'm taken back to memories of my childhood and the Mediterranean Sea. Experiences that my inner self wanted to remember forever, and which probably has indirectly contributed to my choice and understanding of the subject of this research.

I remember that when I was a child, we went to the sea on some early mornings—whether it was winter or summer—with my grandparents before they took my brother and I to school. Walking along the seashore at sunrise was one of my favourite activities.

Making tomato preserves pots from our vegetable garden was another essential summer activity; I continue this hobby today—I even have happy hens! — and it has become one of my greatest pleasures to be in contact with nature every day. I am sure that in the past, farming, working the land, making fair wood in the forest and going fishing were the most popular ways of finding well-being in nature.

Travelling along the Pilgrim's Way to Santiago with my aunt, whom I consider to be my mother, was a transformative experience. In 2011, out of a desire to cure my grandmother of cancer, we decided to walk 250 kilometres of the way. It was there, between monasteries and mountains, that I connected with my shoes and started to find my inner self at a very young age.

When I started university in 2014, I imagined working as a guide in the *Parc Nacional d'Aigüestortes i Estany de Sant Maurici*, which is the only national park in Catalonia; this is where my great-uncles had many adventures when they were young tourists. I remember being shown sepia photographs they took at the Ratera Waterfall in the 1950s.

My first trip to Latin America was in 2017, when I travelled to Costa Rica to support the III International Congress of the International Network of Researchers on Tourism, Development and Cooperation (COODTUR) under the coordination of Dr. Marta Nel-lo from the University of Rovira i

Virgili (URV), who is also my thesis supervisor. I worked as a technician of COODTUR, and I took advantage of the trip to stay for a few months to complete the internship for my geography degree. I remember repeating the words of geographer Pau Vila to myself: ‘If geography is done with the feet as much or more than with the head, then let’s do it.’

I have not stopped since that time.

I took part in some cooperation projects since 2018. I remember the first one in the protected area of the Tatacoa desert in Colombia —oh, the memories of rain in a muddy pick-up truck! I am certain that these and other personal, academic and professional experiences contributed to my choice of subject.

In October 2019, when the IV COODTUR Congress was being held in the city of Temuco, Chile, Marta Nel-lo, Jordi Andreu (research technician at URV) and myself were informed that a grant to conduct this PhD research was opened. We discussed the topic and trends in research on protected areas in the hotel hallway during our free-time, and we decided that well-being, protected areas and tourism were the aspects I would explore in my doctoral thesis. I won the grant, and I joined the Research Group for Territorial Analysis and Tourism Studies (GRATET) of the Department of Geography of URV in April 2020.

I have had many experiences in the course of the thesis that have brought me even closer to nature and water and in one way or another, to each and every dimension of well-being.

In the Ebro Delta Natural Park, I had the opportunity to go kayaking at sunset while flamingos were flying to find a place to sleep. I also have learnt about the marine biology of the Mediterranean in the Catalan coast. I enjoy snorkelling more and more to know what species I would see and disconnect from the stressful moments of everyday life.

As I was completing my research stay in Costa Rica, I wrote these words:

It is from this bench that I say goodbye to Cahuita. From the bench of the Aracelly Cabins, which are not in the water but very close to it. The bench where I sit at sunrise and drink the first coffee of the day. The waves wet my bare feet. Some mornings the turtles swimming in the water stick their heads out and I wish them a good day. Other mornings I listen to the call of the Congo monkeys from the forest, they seem to want to join the party with the turtles and me. Day and night I breathe the Caribbean. Sleeping to the rhythm of the waves. Dreaming but waking up. And always looking at Cahuita National Park and the Barrier Reef.

(Cahuita; January 11, 2022)

During my second research stay in southern Portugal at the end of 2022, I felt the cold water of the Atlantic and learned to experience it in a satisfying way. I went swimming for the last time at the end of November, which was too late for me, as I am like most ‘sun and beach’ tourists, who only enjoy the water in summer season. The Atlantic temperatures and waves are unlike those of the Mediterranean, and I learned to get out of the ocean by understanding the rhythm of the waves, as the navigator, explorer and writer Mr. Tristan Gooley, explains in his book *How to Read the Water*.

In Mexico at the beginning of 2023, I discovered—among other things—that lagoons can have up to seven colours ranging from blue to green, as like the one located in Bacalar. I agree with the anthropologist Loren Eisley, who once asserted that ‘if there is anything magical on this planet, it must be in the water’.

This thesis is the result of the sum of experiences, research stays, local and international projects and lessons learned from more than three years of research on the topic of well-being, nature and tourism.

I hope it will be of interest to you.

ACKNOWLEDGEMENTS

I would like to thank all the people and institutions that made the completion of this thesis possible.

Thank you to Dr. Marta Nel-lo, for her support, accompaniment, dedication and guidance as supervisor throughout the entire thesis process, and also for trusting and believing in me since April 2016, when you suggested that I work with you within the COODTUR Research network. We have been working together for more than seven years. I am beginning to lose count of the number of cooperation and research projects we applied for and participated in, how many times we have flown across the ocean and the numerous ideas that have not yet come to fruition. I am grateful to you for helping me to start my research journey.

To Dr. Carlos Morera, who was the supervisor for my research stay in the National University of Costa Rica, thank you for being a source of inspiration in conservation and management of protected areas for some time now and for bringing me closer to the community of Cahuita and explaining the contributions of Afro-descendants in the cultural landscape of the Caribbean to me.

To Dr. José Custódio Santos, who was the supervisor for my research stay in the CinTurs Research Centre of the University of Algarve, and Dr. Margarida Custódio Santos; both are professors and researchers with whom we shared our research and fieldwork and the development of surveys conducted in the Ria Formosa Natural Park. Thank you for your time and kindness, as well as your suggestions for our research.

To Dr. Ligia Sierra, who was the supervisor for our research stay at the University of Quintana Roo (UQRoo), and Dr. Bonnie Campos; both are professors and researchers at UQRoo and partners of the cooperation project which aim to training workshops for the local communities of Chetumal and the Manatee Protected Area. I knew you for some years through the COODTUR Network, and I feel lucky to have shared this research experience with you. Thank you both for your hospitality.

This doctoral thesis is a collective work, with the participation of local communities from different countries in the generation of data and the involvement of other researchers in our projects and scientific articles.

In Catalonia, I would like to thank the Natural Parks of the Ebro Delta (PNDE) and the Natural Park of Els Ports (EPNP) for their collaboration. Thank you for the joint organisation and dissemination of workshops and for your active participation in projects. Special thanks to Inmaculada Juan and Xavi Abril, technicians at EDNP; and Josep M. Forcadell, technician at EPNP. Also, thanks to all the participants in whole case studies, especially Marc Espasa, the Director of the Patronat de Turisme of Salou, and Elisabet Caparó, the technician at the same. I would like to thank students from the Degree of Tourism to join and participate in both Blue Spaces and Cami de Ronda projects. And especially thanks to Trini, Meritxell and Sergi for their research involvement in these projects.

In Costa Rica, thank you very much to the community of Cahuita for allowing me into your culture. In particular, thank you to Mr. Enrique Joseph, the President of the Association for the Integral Development of Cahuita; Mrs. Raquel Russel, the coordinator of the Cahuita National Park Local Council; the park rangers; and the Association of Women Entrepreneurs of Cahuita. I would also like to thank for the excellent reception to managers and technicians of the Santa Elena Cloud Forest Reserve in Monteverde and the Monteverde Institute, and to the National University of Costa Rica, and especially to School of Geographical Sciences.

In Portugal, I want to thank CinTurs for welcoming me into the research group, the managers of the Ria Formosa Natural Park who participated in meetings and workshops and all those who participated in the surveys.

In Mexico, thank you to the communities living and working in the Bay of Chetumal. In particular, thank you to the managers of the Manatee Protected Area and to the Biofauntasticas women's social entrepreneurship group, as well as the professors and facilities at UQRoo.

Returning to my country, I am truly grateful to the Research Group on Territorial Analysis and Tourism Studies (GRATET) for allowing me to participate in important research projects and for incorporating me into a group with so many facilities. Special thanks to Dr. Salvador Anton, the main researcher of GRATET; to Dr. Trini Rovira and Jordi Andreu, both of whom are research support staff; and to the rest of research colleagues.

Also, to the Department of Geography and the Faculty of Tourism and Geography and their teachers. Thank you to my professors and colleagues for training me as a geographer and giving me an opportunity to not only start in research, but also in teaching. Special thanks to Cristina, Josep and Rubén for their help in administrative works.

Thanks to my family, to those who are no longer here—especially to my grandmother Josefa and my great-uncles M. Teresa and Josep—and to those who are and who have always accompanied me or added to this path of life: Pepi, Xavi, Toni, Antonio, Genís and Jessica. Special thanks to Sergi, with whom, in addition to sharing research, teaching and professional work, we share hens, dogs and home; you have been my greatest partner during these past three years, and I am very grateful to have you and your family. Thank you to my foster family during my stays in Costa Rica, who were always present, even when I was at thousands of kilometres away; thank you for opening the doors of your home to me in such a humble and sincere manner. Thank you to Elsie and Gaby, my *ticas* mother and sister.

And finally, thank you to my friends for their support in the day-to-day advances of my research and fieldwork. Above all to my best friends, Fabi, who visited me while I was in Portugal, and Andrea and Oksana, the artists who created the illustration for the cover of this thesis.

Thank you all for your support.

RELATION OF OUTPUTS

This research is based on the compilation of scientific publications developed within the Tourism and Leisure Doctoral Programme (Research Area: Sustainable Development and Impacts of Tourism) at the GRATET, which is part of the Department of Geography at the URV, from April 2020 to August 2023.

During these three years and five months, I have been employed full-time as a pre-doctoral research staff-in-training at the Universitat Rovira i Virgili and supported by a FI Predoctoral Research Grant (case numbers 2020FI_B_00911, 2021FI_B1_00163 and 2022FI_B2_00014), which were offered by Agency for Management of University and Research Grants of the Generalitat de Catalunya and co-financed by the European Union and the European Social Fund.

Six scientific publications were involved in this research: two were indexed scientific articles published in *Anatolia* and the *Journal of Ecotourism*; two were book chapters, one of which was published by Good Fellow Publishers and the other by Nova Publishers, the latter belonging to the SPI Index Rank; one was a conference publication at the TMS Conference and was peer-reviewed; and one was a scientific article under review that was submitted to the *Journal of Adventure Education and Outdoor Learning*.

This thesis is divided into four parts. Part I corresponds to the introduction and includes the presentation of the research and the general theoretical framework. Two of the three subsections of the theoretical framework fully correspond to the following publications:

- 1) **Font–Barnet, A., & Nel-lo Andreu, M. (2021).** Research on tourism, well-being, and nature: A bibliometric analysis. *Anatolia*, 34(2), 163–175. <https://doi.org/10.1080/13032917.2021.2002699>. [Q2] **Emerging Scientific Citation Impact. SJR (0,493). SNIP (0,674).**

- 2) **Font–Barnet, A.,** Nel-lo Andreu, M. G. (2021). Well-being experiences in nature: An emerging tourism form. In N. Pappas & A. Farmaki (Eds.) *Tourism dynamics: New perspectives and changing directions* (pp. 22–40). Goodfellow Publishers.
<https://doi.org/10.1080/10.23912/9781911635932-4921>

As case studies, two natural parks in the south of Catalonia were studied in depth, and two research projects were conducted in the province of Tarragona on the blue spaces of the Cape of Salou and the Camino de Ronda, a well-known coastal trail in the Mediterranean. The results of these projects have been published in three scientific publications, and a fourth is under review, all of which will be discussed in the second part of this document, entitled ‘Part II: Case Studies’.

- 3) **Font–Barnet, A,** & Nel-lo, M. (2021). The multidimensional benefits to well-being provided by protected areas: A case study in Ebro Delta Natural Park, Spain. In J. A. Scott (Ed.), *Protected areas: Management, Benefits and Social Impacts*. essay, Nova Science Publishers.
 ISBN: 978-1-53619-276-6. **[SPI Index].**
- 4) **Font–Barnet, A.,** Nel-lo Andreu, M. G., & Rovira–Soto, M. T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. *Journal of Ecotourism*, 1–16.
<https://doi.org/10.1080/14724049.2022.2136188> **[Q1].**
Emerging Scientific Citation Impact. SJR (0,665). SNIP (1,444).
- 5) **Font–Barnet, A.,** Nel-lo Andreu, M. Rovira–Soto, M. T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists’ involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16–18, 2022.
<https://doi.org/10.34623/eryw-0423>. **[Outstanding Research Award for this paper].**

- 6) **Font–Barnet, A.**, Nel-lo Andreu, M., Rovira–Soto, M. T., Saladié, S., López, M. (under review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia. *Journal of Adventure Education and Outdoor Learning*.

This thesis is also the result of research stays, research and transfer projects, experiences and lessons learned from more than three years of research, all of which is detailed below.

Three international research stays lasting a total of eight months were undertaken to develop short case studies. In ‘Part III: Advancing a Framework’, the main characteristics and findings of these short case studies are briefly described.

- **First research stay:** Group of Landscape and Territory, Faculty of Geographic Sciences, National University of Costa Rica.
Country: Costa Rica
Period: September 29, 2021 through February 4, 2022
Funding: Santander Iberoamerica Research Scholarship offered by the Universitat Rovira i Virgili.

- **Second research stay:** Centre for Research in Tourism, Sustainability and Well-being (CinTurs) based at the University of the Algarve.
Country: Portugal
Period: October 1, 2022 through December 31, 2022
Funding: Secretariat of Universities and Research of the Department of Business and Knowledge of the Generalitat de Catalunya, the European Union and the European Social Fund

- **Third research stay:** Academic Centres of Geography and Geomatics and Anthropological Studies of the Circumcaribe of the University of Quintana Roo.
Country: Mexico
Period: January 10, 2023 through February 10, 2023
Funding: Cooperation project, ‘Tourism, well-being and blue spaces: Creativity techniques for the design of tourism experiences. Transfer and training in Chetumal–Bacalar, Quintana Roo, Mexico’; financed by Area of Social Impact, Cooperation and Volunteering URV Solidària.

I also had the opportunity to participate in the following research projects related to the scientific topic, some of the results of which are available in the aforementioned publications.

Participation in research and transfer projects:

- **Project:** The adaptability of complex tourist destinations in the present era of social, economic and environmental transformations: innovative paths towards destination resilience (ADAPTOUR). PID2020-112525RB-I00.
Principal Investigators (PIs): Dr. Salvador Anton–Clavé and Dr. Aaron Gutiérrez
Period: 2021–2025
Funding: Ministry of Science and Innovation (Spain)
Role: Work team member. Objective 5: To evaluate policies and strategies aiming to increase well-being, prosperity and social inclusion.

- **Project:** The Camí de Ronda on the Costa Daurada i les Terres de l'Ebre: An excellent key for sustainable and well-being tourism 2022PRD-DIPTA-URV32.
PIs: Dr. Marta Nel-lo and Alba Font–Barnet
Period: January 2022 through December 2022
Funding: Collaboration agreement between Diputació de Tarragona (DIPTA) and Universitat Rovira i Virgili (URV).
Role: Coordinator and researcher. Established parameters for the diagnosis of trails located in L'Ametlla de Mar and Salou and profile frequency and perception of users' well-being through surveys and management proposals.

- **Project:** Blue spaces and coastal well-being: A source of health, wellbeing and balance for the territory. 2021PRD-DIPTA-URV.
PIs: Dr. Marta Nel-lo and Alba Font–Barnet
Period: September 2021 through March 2022
Funding: Collaboration agreement DIPTA-URV, co-financed by Salou Council
Role: Coordinator and researcher. Optimised benefits of blue spaces in municipality of Salou; participatory cartography, focus groups and surveys. Action research conference.

- **Project:** Well-being tourism. Co-creation of tourist experiences.
PI: Dr. Marta Nel-lo
Period: October 2020 through June 2021
Funding: Collaboration agreement DIPTA-URV
Role: Research team member. Focus groups, training and experience co-design workshops applied in Ebro Delta Natural Park, Els Ports Natural Park and Salou.

- **Project:** Analysis of territorial policies in the management of tourist destinations in the era of mobility (POLITUR). CSO2017-82156-R.
PIs: Dr. Salvador Anton-Clavé and Dr. Antonio Paolo Russo
Period: 2018–2020
Funding: Ministry of Economy and Competitiveness in Spain
Role: Work team member. Objective 2: Review territorial dimension of destinations in current tourism policies for improving sustainability.

Participation in international cooperation projects:

- **Project:** Tourism, well-being and blue spaces: Creativity techniques for the design of tourism experiences. Transfer and training in Chetumal–Bacalar, Quintana Roo, Mexico.
PIs: Dr. Marta Nel-lo and Alba Font–Barnet
Period: October 2022 through March 2023
Funding: Area of Social Impact, Cooperation and Volunteering URV Solidària.
Role: Coordinator and researcher. Training workshops. Partnered with the Universidad Autónoma de Quintana Roo.

- **Project:** Towards an effective and equitable tourism governance of local communities. The case of the Barra del Colorado National Wildlife Refuge (Costa Rica).
PI: Dr. Marta Nel-lo
Period: April 2022 through September 2022
Funding: Area of Social Impact, Cooperation and Volunteering URV Solidària.
Role: Research team member. Fieldwork, focus groups, training workshops. Partner: Universidad Nacional de Costa Rica.

I also participated in the following international scientific conferences presenting communications:

- **TMS ALGARVE CONFERENCE 2022: Sustainability Challenges In Tourism, Hospitality and Management**

Organisers: ESGHT/CINTURS University of the Algarve

Place and date: Olhao (Portugal), November 16–18, 2022

Presented communications: Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement (ID 322), authors: Font–Barnet, A., Nel-lo, M., Rovira–Soto, M. T., López, M.; Rediscovering Mediterranean landscapes through coastal well-being walks in Southern Catalonia (ID 343). Authors: Nel-lo, M.; Font–Barnet, A.; López, M.

Publication: <https://doi.org/10.34623/eryw-0423>.

- **VII Congreso Iberoamericano sobre uso sustentable de la biodiversidad y manejo de áreas protegidas.**

Organisers: Universidad Centro Panamericano de Estudios Superiores (UNICEPES) y la Red Iberoamericana de Medio Ambiente (REIMA A.C.)

Place and date: Virtual, November 16–18, 2022

Presented communications: Oportunidades y potencialidades para el bienestar en el Parque Natural del Delta del Ebro, España, authors: Font–Barnet, A., Nel-lo, M.

Publication: ISBN: 978-9942-38-854-1.

Finally, it is important to note that as part of my training for the correct development of the thesis and the transfer of results, I attended several courses on qualitative methods, writing scientific articles, database analysis, etc., as well as seminars and research forums organised by both my home university and the foreign universities where this research was conducted.

Moreover, I participating in local conferences to explain the topic of this research and the advances of my thesis. In addition, teaching was carried out in the two geography and tourism degree courses of the URV during the thesis period, as a complementary activity to the pre-doctoral research grant.

ABSTRACT

This doctoral thesis explores the relationship between wellbeing, nature and tourism from both a theoretical and methodological perspective to understand and demonstrate the important contribution of nature to the well-being of society through conservation, community management, public use and tourism. The thesis is the result of the sum of scientific publications, and also projects and case studies applied to coastal protected areas and blue spaces. The research is developed around five specific objectives. The first is to provide a literature review of the relationship between tourism, well-being and nature, and the second is to identify the multidimensional well-being benefits of protected areas. The third objective is to provide a methodological proposal for co-designing well-being experiences in nature. The fourth is to explore the motivations and well-being benefits of users of blue spaces and coastal paths. And finally, to develop a framework of proposals, recommendations and guidelines to promote, integrate and enhance the benefits of protected natural areas. Based on an action research approach, this work has been developed in several cases in Europe and Latin America through a methodological process in which local stakeholders (residents, protected area managers and the tourism and well-being sector) have been actively involved. This research provides evidence on the well-being of users of protected areas, blue spaces and coastal walks in a multidimensional way, but the challenge is to make nature and coast a good place to live and visit. This requires proactive and inclusive planning processes that protect the environment while improving quality of life and promoting recreational and tourism activities that are sustainable, healthy and accessible.

RESUM

Aquesta tesi doctoral aprofundeix en la relació entre el benestar, la natura i el turisme des d'una perspectiva teòrica i metodològica. L'objectiu principal és entendre i demostrar la important contribució de la natura al benestar de la societat des de la conservació, la gestió comunitària, l'ús públic i el turisme. La tesi es el resultat de la suma de publicacions científiques, i també de projectes de recerca i casos d'estudi aplicats a espais protegits i espais blaus de zones litorals. La recerca es desenvolupa entorn a cinc objectius específics. El primer és aportar un marc teòric general sobre la relació entre el benestar, la natura i el turisme, incorporant la revisió de la literatura científica i avanços en programes i polítiques en aquest àmbit. En segon lloc, identificar els beneficis en benestar que aporten els espais protegits d'una manera multidimensional. El tercer objectiu és definir una proposta metodològica per co-dissenyar experiències de benestar a la natura. El quart és explorar les motivacions i el benestar dels usuaris d'espais blaus i de senders litorals. I, per últim, proporcionar un conjunt de suggeriments, recomanacions i pautes per promoure, integrar i potenciar els beneficis que aporten els espais protegits a nivell de benestar. El disseny metodològic de la recerca es basa en un enfocament d'acció-investigació, en el qual hi han participat activament els agents locals (residents, gestors d'espais protegits, el sector turístic i del benestar) de diversos casos d'Europa i Amèrica Llatina. Els resultats aporten evidències sobre el benestar que ofereixen els espais protegits, els espais blaus i els senders litorals de forma multidimensional. El repte és fer de la natura i litoral un bon lloc per a viure i visitar, i per a això es necessiten processos de planificació proactius i integradors que protegeixin els ecosistemes, millorin la qualitat de vida i promoguin activitats recreatives i turístiques que siguin sostenibles, saludables i accessibles.

RESUMEN

Esta tesis doctoral explora la relación entre el bienestar, la naturaleza y el turismo desde una perspectiva tanto teórica como metodológica. El objetivo principal es comprender y demostrar la importante contribución de la naturaleza al bienestar de la sociedad a través de la conservación, la gestión comunitaria, el uso público y el turismo. La tesis es el resultado de la suma de publicaciones científicas, y también de proyectos y estudios de casos aplicados a áreas protegidas y espacios azules de zonas costeras. La investigación se desarrolla en torno a cinco objetivos específicos. El primero es aportar avances de investigación, programas y planificación sobre la relación entre la naturaleza, el bienestar y el turismo. En segundo lugar, se identificarán los beneficios multidimensionales que ofrecen las áreas protegidas. El tercer objetivo es proporcionar una propuesta metodológica para el co-diseño de experiencias de bienestar en la naturaleza. El cuarto es explorar las motivaciones y los beneficios de los usuarios de los espacios azules y los senderos costeros. Y, por último, proponer sugerencias, recomendaciones y directrices para promover, integrar y mejorar los beneficios que ofrecen las áreas naturales protegidas. El diseño metodológico de la investigación se basa en un enfoque de investigación-acción, en el cual han participado activamente los agentes locales (residentes, gestores de áreas protegidas, del sector turístico, así como el del bienestar), de varios casos de Europa y América Latina. La investigación aporta evidencias sobre el bienestar que aportan las áreas protegidas, los espacios azules y los senderos costeros de forma multidimensional. El reto es hacer de la naturaleza y la costa un buen lugar para vivir y visitar. Para ello se necesitan procesos de planificación proactivos e integradores que protegen los ecosistemas, que mejoran la calidad de vida y que promueven actividades recreativas y turísticas que sean sostenibles, saludables y accesibles.

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PART I. INTRODUCTION

1. Research Presentation

The first chapter focusses on the overall presentation of the research, the topic, the goal and the structure. First, the general context of the topic that concerns this doctoral thesis— ‘The well-being, nature and tourism’— is presented. Then, the research design, including the hypothesis, research questions, objectives and methodological approach are described. The thesis structure is also explained.

1.1. Context

We live in an era of constant change - an urbanising world, an age of rapid environmental, social and economic change, a growing population and technological abuse. By 2050, the urban population will have doubled from 3.5 billion today to more than 7 billion, while pressure on resources, land and the climate is increasing daily. This calls for the conservation of land, the protection of scarce resources and the development of green spaces to combat the so-called 'nature deficit disorder' and to promote the health and well-being of the population (Louv, 2005; IUCN-WCPA, 2020).

While some of us live in a world of progress in terms of well-being, global inequalities and imbalances persist, and global health problems continue to be highlighted through development strategies to achieve universal health coverage, end poverty and reduce inequalities. This is set out in the third Sustainable Development Goal - 'Good health and well-being' - and a universal right to health is enshrined in the Constitution of the World Health Organization.

Societies' search for and work towards an optimal state of health and well-being is a global reality. People are looking to escape their surroundings and experience nature outside the urban context, seeking a balance between the virtual and the real in their daily lives and futures (Cherian & Biefeld, 2018; Lackey et al., 2019; Louv, 2011).

As research recognise, natural environments can have direct, positive impacts on well-being, with stimulating effects for human health and general well-being (Bowler et al., 2010; Cvikl, 2016; Romagosa et al., 2015; Ryan et al., 2010). Spending time by the sea has long been associated with a higher level of physical activity and provides benefits for mental well-being (Lloret et al., 2021; Nicolosi et al., 2021). And evidence is increasing around how protected areas are key territories for the various social, economic and environmental services they generate (Aronson et al., 2016; Smith & Pucko, 2017).

Tourism and travel trends suggest that the market for trips focussed on well-being has grown exponentially, while tourism in protected areas has grown progressively over the past 100 years, all within a sector that has steadily matured into one of the largest industries in the world (Azara et al., 2018). Currently, research on tourism, well-being and nature is a leading topic under scientific study, along with the planning and promotion of natural areas and tourist destinations (Bushell, 2009; Hartwell et al., 2018; Uysal et al., 2016).

Natural places and protected areas are recognised as destinations with all the elements and challenging new experiences needed to promote the health and well-being of tourists, as well as that of local communities and the destinations themselves (Russell et al., 2013). The protection of natural areas is important not only for the health of nature, but also for human health and well-being (EUROPARC Federation, 2018).

Every year, experts predict what the trends in tourism activity will be; undoubtedly, from the beginning of COVID 19, short to medium term forecasts are crucial to address new challenges and identify new opportunities for adaptation and innovation (Global Environment Facility, 2020; Riley, 2020; Rogan, 2020). The awareness and importance of self-care and well-being, travel in natural environments, the growing focus on outdoor experiences and the search for authentic, sustainable experiences were some of the most frequently predicted trends (Galvani et al., 2020; Gómez & Múgica, 2020; Nault, 2020; Tourwriter, 2020; UNWTO, 2020a).

According to EUROPARC-Spain (2021) and McGinlay et al. (2020), the situation experienced with the COVID-19 pandemic has helped people rediscover associations between human well-being and access to natural spaces; and the increase in visitor numbers at European Protected Areas has revealed this reality. Natural areas are among the clearest beneficiaries of the new tourism trends, because they combine relaxation with environments offering direct, positive impacts on human health and well-being.

This context reflects the topic of interest addressed in this thesis. Faced with this reality of continuous change, where the health of nature and people are two pieces that are related that can be connected or not, there are still many unknowns. From generating knowledge about the contribution of protected areas to human well-being, from community management and sustainable development of the regions to knowing how tourism, outdoor activities and infrastructure planning keys can all be combined to achieve this well-being through experiences in natural environments.

Without questioning the advances and scientific approaches discussed in the general theoretical framework, the aim of this thesis is to contribute to scientific advances to better understand this topic, make known good practices and provide tools to improve the management of natural areas to enhance the well-being benefits provided by nature.

1.2. Research Design

This section describes the research design of this dissertation, which is understood to be a strategy or a plan, and how—including methods—to answer a set of research questions (McCombes, 2019).

1.2.1. Hypothesis, Research Questions and Objectives

In recent decades, tourism studies have increasingly focussed on well-being practices, and adopted a multidisciplinary approach to theory, policy and practice. Scientific research shows that a connection with nature can contribute to the well-being of society, that protected areas are suitable places to develop such well-being, and that tourism is a way to achieve it.

Based on this, the following hypothesis is put forward to be answered in this doctoral thesis:

There is a positive relationship between nature and well-being, and the participation, involvement, interaction and engagement of users (i.e. visitors and residents) with natural areas is key to achieving this.

The research questions are the central question of the study, including knowledge of the subject matter, the population and the variables to be studied. The questions therefore relate to the overall objective of the thesis, **which is ‘to demonstrate the important contribution of protected areas to the well-being of society from conservation, community management, public use and tourism’**, composed of five specific objectives (Table 1).

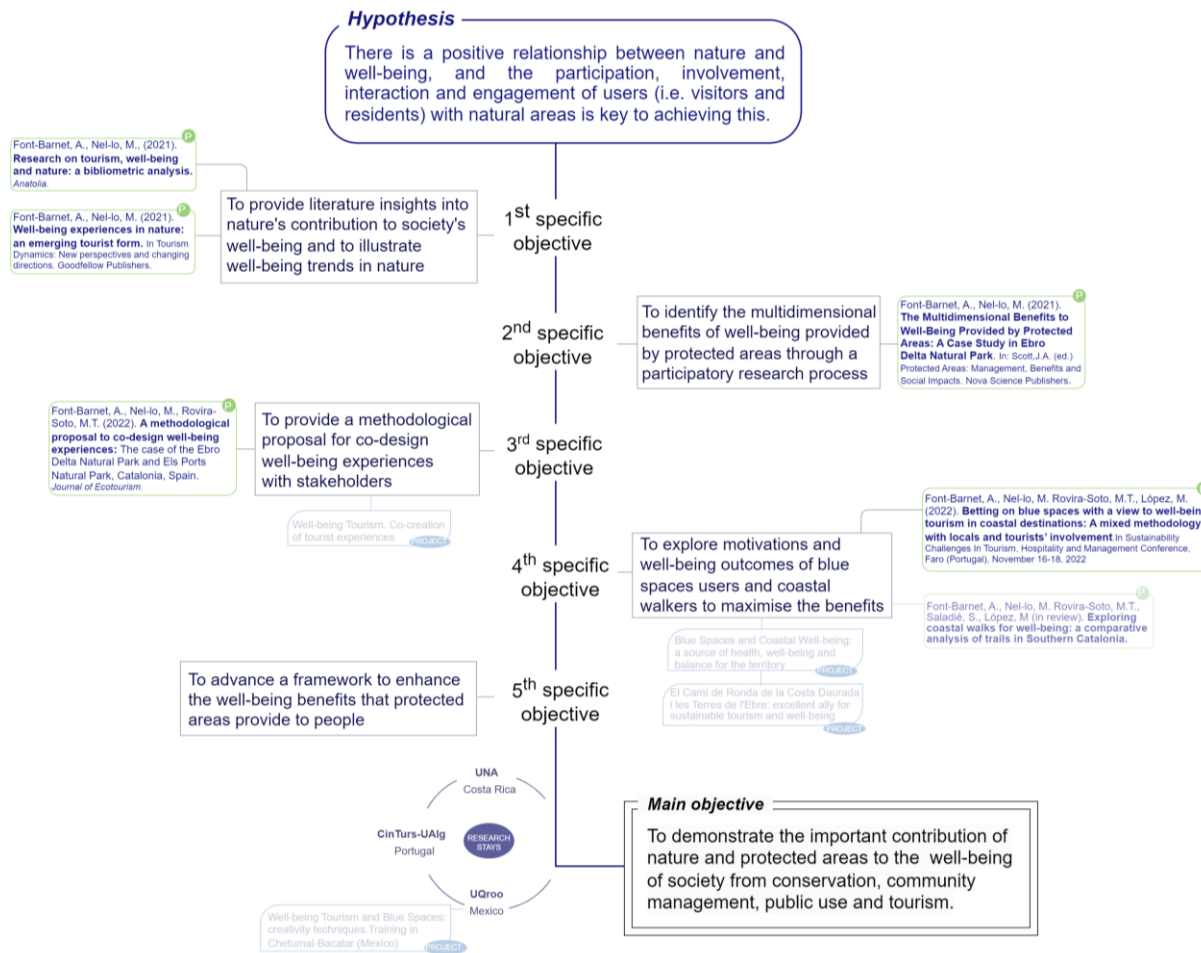
Table 1. Correspondence between research questions and specific objectives.

Research Questions	Specific Objectives
RQ1. What scientific advances and practical programs stand out in terms of the contribution of nature and protected areas to the well-being of society?	SO1. To provide literature insights into nature’s contribution to society’s well-being and to illustrate well-being trends in nature.
RQ2. What multidimensional well-being benefits are provided by protected areas? RQ3. How can the well-being benefits of nature be identified?	SO2. To identify the multidimensional well-being benefits of protected areas through a participatory research process.
RQ4. How can well-being and nature-based tourism experiences in natural areas be co-designed?	SO3. To provide a methodological proposal for co-designing well-being experiences with stakeholders.
RQ5. What proposals can be made for maximising the potential benefits of blue spaces and coastal trails?	SO4. To explore the motivations and well-being outcomes of blue space users and coastal walkers
RQ6. Can this research provide a basis to enhance the well-being benefits that nature provides to society?	SO5. To advance a framework to enhance the benefits that protected areas provide for the well-being of people.

Source: Authors’ own production.

As can be seen in [Figure 1](#), the research objectives are closely linked to scientific publications and/or research projects carried out during thesis development.

Figure 1. Hypothesis, aims, publications, projects and research stays.



Source: Author's own production.

The first specific objective is to provide literature insights into nature's contribution to society's well-being and illustrate well-being trends in nature. This responds to the fact that to date, no bibliometric studies of this type have been recorded on the subject proposed in this thesis, although the practices of well-being tourism in nature have increased exponentially in recent years. Therefore, on the one hand, a content analysis of the scientific research produced related to 'tourism', 'well-being' and 'nature' available in Web of Science and Scopus databases is presented as collected in the first scientific article, derived from this doctoral thesis which was published in the indexed journal *Anatolia* (Font-Barnet & Nel-lo, 2021a).

On the other hand, the research is intended to demonstrate and exemplify the trends of wellness tourism in nature with good practices, as it was collected in the publication by Good Fellow Publishers (Font-Barnet & Nel-lo, 2021b). In this book chapter, tourism experiences in relation to wellness and nature, a current trend, an interconnected relationship and an emerging form of tourism around the world, are first described; then considering the physical, mental, social, environmental, spiritual and emotional dimensions of well-being, we provide examples of experiences in natural spaces that pursue these dimensions.

The second specific objective is to identify the multidimensional well-being benefits provided by protected areas through a participatory research process, the results of which were published by Nova Publishers (Font-Barnet & Nel-lo, 2021b). With this book chapter, we aim to evaluate the natural, cultural and enogastronomic heritage of the Ebro Delta Natural Park (EDNP), Catalonia, Spain, to rethink the traditional as something new and to identify opportunities for well-being in the territory within the framework of a methodological process of participatory co-creation.

The third specific objective of this research consists of providing a methodological proposal to co-design well-being experiences with stakeholders. The resulting article was published in *Journal of Ecotourism* (Font-Barnet et al., 2022a). This article is part of a research project titled 'Well-being tourism: Co-creating tourist experiences' – Code

number 2020CM23; funding entities: Diputació de Tarragona and University Rovira i Virgili (DIPTA-URV) –, which was carried out between November 2020 and June 2021. The goal of this project was to design new tourist well-being experiences within the framework of a methodological participatory process, identifying opportunities for well-being in three destinations in the Tarragona Province in southern Catalonia. Two of these destinations are Protected Natural Areas (PNAs); these are the focus of this research, the aim of which is to explain the development process of co-designing well-being tourist experiences in the Ebro Delta Natural Park (EDNP) and the Els Ports Natural Park (EPNP).

The fourth specific objective is to explore motivations and well-being outcomes of blue spaces and coastal trails. This objective has been carried out through the development of two projects, both in collaboration with DIPTA-URV.

On the one hand, the ‘Blue Spaces and Coastal Well-being’ project carried out a set of results: mapping blue spaces; analysing the benefits of living near the coast and using blue spaces from the point of view of residents, tourists and visitors; and identifying opportunities and making proposals to maximise the benefits of the health and well-being provided by blue spaces in coastal destinations. These results were presented as a publication at the International Congress ‘TMS ALGARVE 2022 International Congress: Sustainability Challenges in Tourism, Hospitality and Management’ (Font-Barnet et al., 2022b).

On the other hand, and the ‘El Camí de Ronda’ project was carried out by URV researchers as a continuation of this project. Well-being in the context of this project was framed in terms of how walkers perceive the mental, physical and social benefits they experience along Mediterranean coastal paths. The results in the form of a paper were submitted to the *Journal of Adventure Education and Outdoor Learning* in March 2023 and is currently under review. The aim of this article is to provide a comparison of well-being outcomes of walkers according to their profiles, motivations and perceptions in two coastal trails. In the present study, we refer to a

comparative analysis of two tracts located in the Tarragona Province in southern Catalonia, both of which belong to the ‘Camí de Ronda’ Coastal Trail (CRCT), but each of which differs in terms of landscape values and tract characteristics. With all this, the goal is to contribute and transfer scientific results in a field of study that has scarcely been addressed to help managers optimise the potential of the road and improve user experiences.

Finally, **the fifth specific objective consists of advancing a framework to enhance the well-being benefits provided by protected areas** from conservation, community management, public use and tourism. First, the structure and key concepts of this framework are presented and, while explaining the guidelines and principles it pursues, it is exemplified with short case studies that have been studied throughout this doctoral thesis, not only in Catalonia, but also in Costa Rica, Portugal and Mexico, where research stays were conducted.

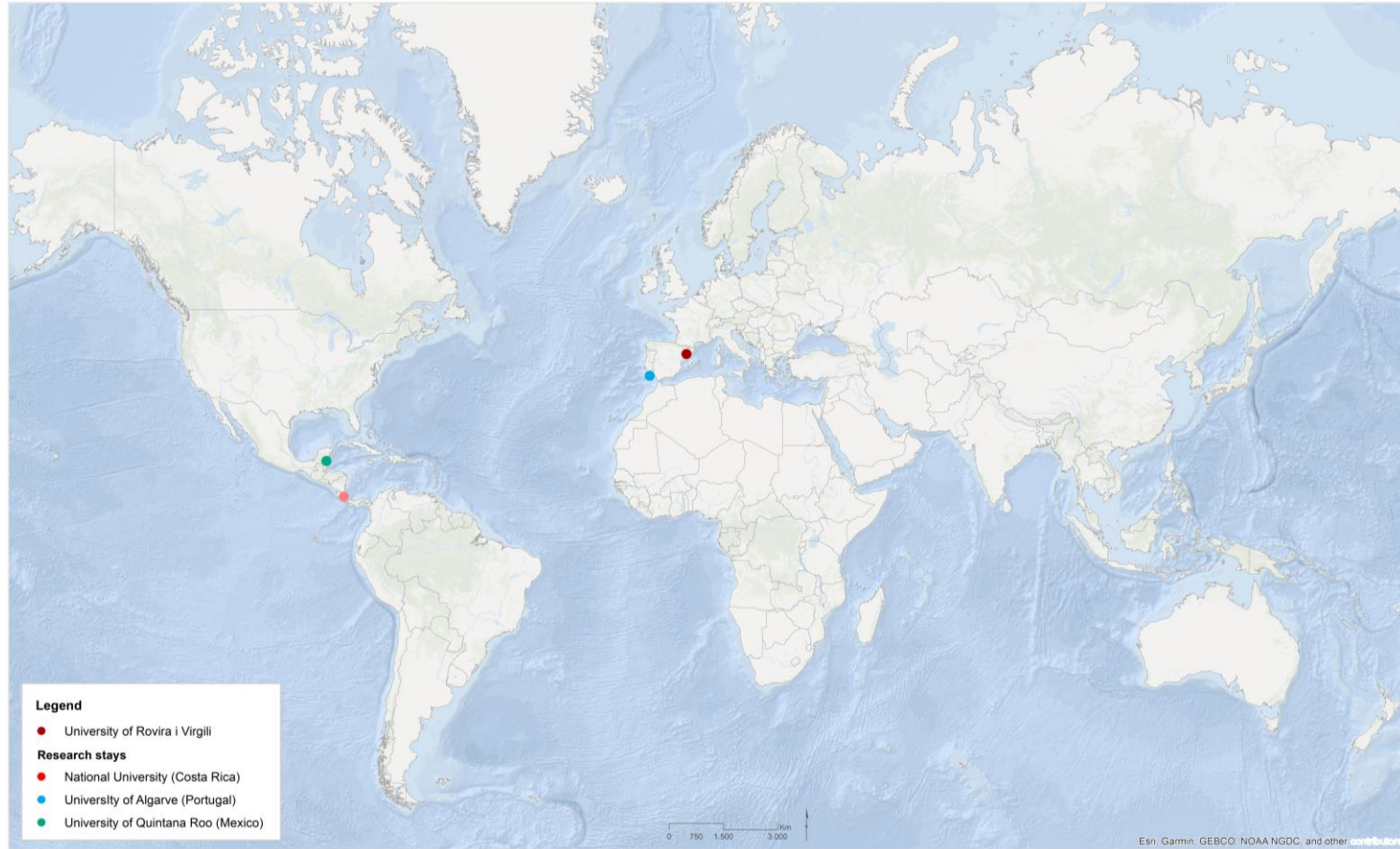
Moreover, a cooperation to development project carried out in Mexico, which was entitled ‘Well-being Tourism and Blue Spaces: Creativity techniques for experience design. Training in Chetumal–Bacalar’, was addressed to local communities for social entrepreneurship.

1.2.2. Research Stays and Study Areas

This doctoral thesis was developed from the PhD programme in Tourism and Leisure at Rovira i Virgili University, which is located in the Tarragona Province in Catalonia during the period of April 2020 through August 2023. The cases of two natural parks located in the south of Catalonia—EDNP and EPNP—were studied in depth, and two research projects were implemented in this province around the blue spaces at the Cape of Salou and the Camí de Ronda, a well-known coastal trail in the Mediterranean; the results of these projects can be found in four scientific publications in the second part of this document, which is entitled ‘Part II: Case Studies’.

During the thesis period, however, three international research stays totalling eight months were undertaken to develop short case studies (Figure 2).

Figure 2. Research stays.



Source: Author's own production.

The first stay was chosen at the **Landscape and Territory Group of the National University of Costa Rica (UNA)** from September 29, 2021 to February 2, 2022), under the supervision of Dr. Carlos Morera Beita, who has a long career researching protected areas and is currently a member of the Committee of the System of Protected Areas of Costa Rica (SINAC). The School of Geographic Sciences at UNA includes the study of landscape and territory from the perspective of geography as a science, articulating physical and socio-cultural aspects and emphasising aspects of ecological conservation and sustainability to formulate proposals for the management and handling of resources in the territory. The School deals with topics such as models of management and territorial intervention of resources, territorial models of tourism, methods of evaluation of natural, human and economic resources in the territory, among others.

Costa Rica—a destination with great scientific recognition for its advances and experience in protection sustainability and ecotourism in natural protected areas—is of interest to put into practice in the theoretical framework of the scientific research of this thesis, especially for concerting different forms of co-management of protected areas.

The motivation for this stay was specifically based on establishing case studies among the protected areas of this country, making mobility and field work indispensable with the help of the scientific community and local experts that allow us to respond to the thesis objectives cited above. The selected case studies in Costa Rica were the marine–terrestrial Cahuita National Park (CNP) in the south Caribbean and the Santa Elena Cloud Forest Reserve (SECFR) located in Monteverde in the northern portion of the country’s central mountain range, which is the most important ecotourism destination in Costa Rica.

During these four months of stay, in order to gain an overview of the country and SINAC, other protected areas, such as the Corcovado National Park and the Ostional National Wildlife Refuge, were visited.

The second research stay was at the **Centre for Research in Tourism, Sustainability and Well-being (CinTurs) based at the University of the Algarve (UAlg)** from October 1, 2022 to December 31, 2023. Since the Algarve is the most important Portuguese tourist destination, CinTurs' mission is the development and transfer of knowledge towards the sustainable development of tourist destinations and the well-being of tourists, visited communities and those working in the tourism industry. This stay was supervised by Dr. José António C. Santos, a research professor at UAlg who is currently conducting research in various areas of sustainability, including in Management, Hospitality and Tourism and Heritage Interpretation.

This research, with the participation of other researchers from URV and CinTurs, is focussed on the motivations and well-being of users of the trails in Ria Formosa Natural Park (RFNP) in the Algarve, which involved users through surveys and park managers through meetings and a final discussion group of results.

The third and final research stay took place in an academic institution: **Geography and Geomatics and Anthropological Studies of the Circumcaribe of the University of Quintana Roo (Mexico)** on the Chetumal campus from January 10, 2023 to February 10, 2023. This stay was supervised by Dr. Ligia Aurora Sierra Sosa, Professor–Researcher and Leader of the Academic Body of Anthropological Studies of the Circum–Caribbean. This stay took place within the framework of the development cooperation project, ‘Tourism, well-being and blue spaces: Creativity techniques for the design of tourism experiences. Transfer and training in Chetumal–Bacalar, Quintana Roo, Mexico’; which was financed by URV and coordinated by Dr. Mata Nel-lo from URV, who was also the supervisor of the thesis. During this stay, we learned first-hand about the Chetumal Bay Manatee Sanctuary State Reserve (CBMSR), specifically about community involvement in the management of the reserve and social entrepreneurship in the area.

It is important to note the following considerations regarding the study areas, which are characterised by diversity in terms of nature (i.e. coastal and marine protected areas, bays, deltas, lagoons, or tropical, coastal or cloud forest), country, culture, community involvement in management and landscape (see Appendix 1. Cases studies: photographs).

The selected protected areas are characterised by a distinct trajectory and maturity, where the associated benefits of well-being are rarely integrated into the planning and management of public use, especially in Latin America Cases Studies.

In Costa Rica, which highlights the maturity of ecotourism, the concept of well-being is more integrated into private initiatives in nature-based tourism practices, as in the case of the Santa Elena protected area, while the National System of Protected Areas of Costa Rica has no document that talks about the well-being of protected areas, nor has it taken a position on the Healthy Parks, Healthy People movement.

In the Chetumal Bay area of Mexico, tourism development is practically incipient and the team managing the protected area has several difficulties to cope with (e.g. water management, construction control) with a very limited budget. There is a cooperative that aims to strengthen the community and develop ecotourism activities together, and there are women's entrepreneurship initiatives, but there is still a long way to go.

Although the European protected areas are more influenced by the planning and general guidelines established by Europarc to improve the well-being of society through protected natural areas, this information is only indicative and the guidelines are not yet compulsory or applied equally in all countries. The natural parks studied in Spain are recognised by the European Charter for Sustainable Tourism, one of the most important developments in terms of the sustainability of ecotourism, while those in Portugal are not.

In 'Part III. Framework Proposal', the main characteristics and findings of these short case studies are briefly included.

1.2.3. Methodological Approach

The overall research process of this thesis, which was conducted between April 2020 and August 2023, consists of mixed type and combines qualitative and quantitative techniques with locals' and tourists' involvement applied in different areas of study and communities. This research was developed under the umbrella of a co-creation process between the research team and the stakeholders, the latter being the generators of data and the designers of products resulting from the research, closely related to the idea that the researcher is the tool by which data is gathered by participants (Roller & Lavrakas, 2015).

Co-creation is an innovative approach through which stakeholders actively participate in the design of new offers (Martini et al., 2014). It is understood to be an active, creative and social process that is based on collaboration between producers and users. While it seems like a discussion about business, in the end, if the agents actively participate in the research being conducted, a product is created with the end users of this information; we are engaging in a process of user engagement with stakeholders. In the co-creation process, participants contribute their creativity and skills to solve problems and develop new products (Correa et al., 2018; Füller, 2010).

In this sense, the applied methodology seeks a transformative change through the simultaneous processes of action and research in an interactive way. Action research allows the expansion of knowledge and gives answers to the participants, who at the same time become co-researchers who actively participate in the entire research process, which is the product of constant reflection (Colmenares & Piñero, 2008).

According to Ramaswamy and Chopra (2014), an active, dynamic and social methodology with local agents leads to more creative ideas that are easier to implement and enables a diverse range of people to make creative contributions to formulating and solving a problem (Korošak et al., 2018; Sabiescu et al., 2014).

Participants have the power to influence the conceptualisation, the ‘essence’ of the project, the fundamental decisions and the management of environments for people (Guzmán et al., 2020; Kantsperger et al., 2019; Sanoff, 2011). Participatory design is an attitude, which consists of developing social awareness through actively acknowledging the need for change and identifying problems and demands (Sanoff, 2011). A participatory approach to tourism, for example, implies greater involvement of the community to create high value-added components at the destination (Hatipoglu et al., 2016). Engaging people with different perspectives can help determine the needs, the problems and the reality of a place from the start, thereby leading to more advantageous results with greater essential trust, commitment and transparency between the researcher and the participants. In this sense, transparency, communication and the dissemination of results are objectives that cut across all phases of the thesis and go beyond ensuring informed consent to research ethics. There were opening and closing project or research seminars, which are open to all audiences with the active participation of the research team and stakeholders.

The methods used in this study are designed to ensure that the results meet the real needs of the stakeholders and above all, that the resulting proposals are applicable and usable. Mixed methods will be used in natural areas with different socio-economic and cultural realities, tourist behaviour and management tools, as explained in the previous section. Based on an action-research approach and with the aim of raising awareness of the issue among local communities, protected area managers and the tourism sector, this research was carried out within the framework of a methodological participatory process involving public and private stakeholders. While not seeking to be comparative or to replicate all methods in all case studies, this research combines quantitative and qualitative methods. Focus groups, workshops, walking interviews, surveys and training workshops were the methods chosen after observation, fieldwork and content and cartography analysis (i.e., programmes, plans, websites) in the study areas (Table 2).

Table 2. Applied methods by cases studies.

Methods	European Cases Studies				Latin America Cases Studies			
	EDNP	EPNP	RFNP	SBS	CRCT	CNP	SECFR	CBMSR
Fieldwork, observation and content analysis	✓	✓	✓	✓	✓	✓	✓	✓
Working Group	✓	✓		✓				
Training and co-design workshop	✓	✓		✓		✓		✓
Focus or discussion groups	✓	✓	✓	✓		✓		
Semi-structured interviews						✓	✓	
Structured walking interviews					✓			
Surveys			✓	✓				

EDNP=Ebro Delta Natural Park. EPNP=Els Ports Natural Park. SBS=Salou Blue Spaces. CRCT=Camí de Ronda Coastal Trail. CNP=Cahuita National Park. SECFR= Santa Elena Cloud Forest Reserve. CBMSR= Chetumal Bay of Manatee State Reserve.

Source: Author's own production.

In some cases, as one of the first steps, it was essential to form a **working group** of 6–15 people (Figure 3 as example), who served as representatives of the town's public and private areas who had been monitoring the project together and articulating and agreeing on the different sessions and techniques planned. Here, 'representation' refers to participants representing a wide range of society and interest groups to ensure the involvement of all relevant stakeholders who have an interest (Carr et al., 2012). Round tables were made up of representatives from the local government in municipalities, manager of destination and tourist offices, entrepreneurs and organisations in the fields of health, environment, tourism and nautical and aquatic activity (i.e., sport and recreation) and managers of protected areas where applicable.

Figure 3. Working Group of Salou Blue Spaces.



Source: 'Blue Spaces and Coastal Well-being' project.

As we gathered the perspectives of local stakeholders on the potential opportunities of protected areas or blue spaces for well-being, workshops with working group members and/or stakeholders (e.g., Figure 4) were the key option. According to Ried et al. (2004) and Oen et al. (2016), **workshops** are among the suggested methods to involve stakeholders in tourism planning, which were designed to ensure adequate representation to achieve participation from stakeholders covering a range of different agents, interests and perceptions.

Figure 4. Workshops with stakeholders from Els Ports Natural Park.



Source: "Well-being tourism: Co-creating tourist experiences" project.

Three types of workshops were developed this research: training on the topic of well-being tourism, benefits provided protected areas and blue spaces (1), the identification of tangible and intangible resources to determine the well-being provided by the area (2), and the co-design of well-being tourism experiences (3). The second type of workshop is presented in chapter 3 and the third one, the methodological co-design process, is presented in Chapter 4.

List of workshops:

- Training workshops addressed to working groups of Salou Blue Spaces, Ebro Delta Natural Park and Els Ports Natural Park within the project of ‘Well-being tourism: Co-creating tourist experiences’, divided into joint five conferences between the dates 24/03/2021 and 19/04/2021, virtual.
- Workshop for the identification of resources with working group of Ebro Delta Natural Park. 2 December 2020, virtual.
- Workshop for the identification of resources with working group of Salou, 8 February 2021, virtual.
- Workshop for the identification of resources with working group of Els Ports Natural Park, 16 February 2020, virtual.
- Workshop on co-design of well-being tourist experiences in Ebro Delta Natural Park, 19 May 2021 (3,5h), Ecomuseu del Delta.
- Workshops on co-design of well-being tourist experiences in Els Ports Natural Park, 25 May 2021 (3,5h), Seu del Parc Natural dels Ports.
- Workshop on co-design of well-being tourist experiences in Salou, 7 June 2021 (3,5h), Teatre-Auditori de Salou.
- Training and resource identification workshop for park rangers of the Cahuita National Park Local Council, 15 November 2021, Cahuita.
- Training and resource identification workshop for SINAC park rangers of Cahuita National Park. 16 November 2021, Cahuita.

- Training and resource identification workshop with managers and public use technicians of Ria Formosa Natural Park. 30 January 2023, virtual.
- Training Workshop for the identification of blue spaces in Chetumal, Othon P. Blanco City Council Offices. 20 January 2023. (Figure 5).
- Workshop on co-design of well-being tourism experiences in Chetumal, Offices of the Directorate of Tourism, Othon P. Blanco. 25 January 2023.
- Training Workshop for the identification of blue spaces and local tourism development strategies for the Community of Rio Hondo sugar cane production. Rojo Gómez, 26 January 2023.

Figure 5. Training Workshops in Chetumal.



Source: Municipality of Othon P. Blanco.

Throughout these workshops, the use of collaborative and visual techniques to generate ideas, brainwriting and mind-mapping (e.g. [Figure 6](#)) helped to structure ideas, uncover insights and transform the way stakeholders view their products and resources to create value in a shared participatory manner. Visual thinking is the key to identifying the value and potential of a destination's well-being resources in order to re-evaluate the territory and turn the promotional discourse on its head.

Figure 6. Workshops with park rangers of Cahuita National Park.



Source: Font, A. and Cahuita National Park Local Council.

Creative and collaborative methods are also key to unlocking the full potential of a **co-design process**; and workshops, visual diaries and mind-mapping are innovative and visualising means of collecting information for service and product design (Miettinen, 2009). ‘Co-design’ is a creative cooperative process with roots in participatory-design techniques, in which actors from different disciplines share their knowledge and experiences with the common goal of designing a new product and—more importantly—fostering relationships among participants (Steen, 2013). In various workshops and study areas of the present research, these processes were applied to co-design well-being experiences (e.g., [Figure 7](#)).

Figure 7. Co-design workshops with stakeholders from Salou Blue Spaces (left) and Ebro Delta Natural Park (right).



Source: 'Well-being tourism Co-creating tourist experiences' project.

The collaborative and creative potentials depend on the ability to find common ground, share ideas, use a common language and work together. To achieve user-participant engagement and gain an in-depth understanding about the group, the territory and the activities that take place in it, developing **a focus group and conducting group discussions** are appropriate and richer than individual interviews (Font-Barnet et al., 2021b; Komppula & Konu, 2017). Even though a focus-group (e.g., **Figure 8**) moderator works from a discussion guide (i.e., an outline) of themes and potential questions designed to address the research objectives and questions, it may not be until the moderator is actually in the discussion with a particular group of people that they understand which areas need to be explored more than others (Roller & Lavrakas, 2015).

Figure 8. Group discussion with stakeholders from Salou Blue Spaces.



Source: 'Well-being tourism Co-creating tourist experiences' project.

However, **individual interviews** have also been carried out in this research process. This was the case of the research in Costa Rica, where without having a link with the territory, it was essential to carry out interviews to get to know the stakeholders' opinions and points of view first (e.g., in the co-management system). Five **semi-structured interviews** were conducted in Cahuita, three were conducted in Monteverde and one in Heredia, each of which had a basic structure but considerable flexibility and room to follow up or explore other ideas as they arose—essentially a guided conversation between researcher and interviewee.

List of interviewees:

- Raquel Russell, Coordinator of the Cahuita National Park Local Council. 03 November 2021, Cahuita National Park, offices of Playa Blanca sector.
- Sendoa Quijada, international tourist with reduced mobility in Cahuita National Park, 07 November 2021, Puerto Vargas sector.
- Yeiner Rodríguez, SINAC ranger administrator in Cahuita. 10 November 2021, Cahuita National Park, offices of Puerto Vargas sector.
- Enrique Joseph, president of the Association for the Integral Development of Cahuita. 16 November 2021, Cahuita.
- Laura Chávez, President of the Association of Women Entrepreneurs of Cahuita (ASMOEC). 17 November 2021, Cahuita.
- Laura Barrantes, president of Wellness Costa Rica | Asociación de turismo de bienestar. 3 December 2021, Heredia.
- Selena Avendaño, Monteverde Institute - Center for Community Initiatives, 14 December 2021, Monteverde Institute.
- Yaxine M. Arias, Director of the Santa Elena Cloud Forest Reserve, 15 December 2021. Santa Elena Cloud Forest Reserve.
- Marcela Morales, Certified Forest and Nature Therapy Guide by the Association of Nature and Forest Therapy, 17 December 2021, Monteverde Cloud Forest Reserve.

Walking interviews were conducted in one case in Catalonia, specifically with walkers along the Cami de Ronda Trail. Structured, open-ended interviews of 52 users were conducted with randomly selected visitors who were walking along the trail, during which the interviewer accompanied the interviewee as they walked to facilitate and empathise with them and to not disturb their activity. Results of this case study are presented in Chapter 6.

Finally, surveys were carried out in two case studies. In Salou's Blue Spaces, **247 face-to-face surveys** were carried out by three interviewers with users passing by defined intervention points on different beaches in the town. The information, methods and results of this case of study is presented in Chapter 5, "Betting on Blue Spaces with a view to well-being tourism". In the Ria Formosa Natural Park, **148 surveys** addressed to walkers and cyclists were conducted by research team (**Figure 9**). The surveys were carried out on three trails within the park to identify users' perceptions, motivations and well-being.

Figure 9. Surveys in Ria Formosa Natural Park.



Source: Nel-lo, M.

To conclude this section, the use of different and/or mixed methods in the case studies is an example of the flexibility of the research design, that allowed to change and adapt the methods as necessary during the fieldwork in order to measure the research topic more accurately and to ensure the closeness of the researcher-participant relationship.

1.3. Structure of the thesis

This thesis is organised in four parts and nine chapters, as shown in Figure 10, where the contribution of each article to the structure of this manuscript is also indicated.

Figure 10. Structure of the thesis.



Source: Author's own production.

The thesis is presented as a result of a compendium of publications. Specifically, six scientific publications were involved in this research: two were indexed scientific articles published in *Anatolia* and the *Journal of Ecotourism*; Two were book chapters, one published by Good Fellow Publishers and the other by Nova Publishers, the latter being part of the SPI Index Rank; one was a conference publication at the TMS Conference and was peer-reviewed; and one was a scientific article under review that was submitted to the *Journal of Adventure Education and Outdoor Learning*.

Part I corresponds to the introduction and includes the presentation of the research (Chapter 1) and the general theoretical framework (Chapter 2), which answers the first specific objective. Chapter 2 is divided into three subsections, two of which correspond entirely to Anatolia's paper and Good Fellow's book chapter.

In Part II, we will dive into four case studies in chapters 3, 4, 5 and 6, each of which corresponds entirely to a scientific publication. These case studies combine different methods and areas of study in order to obtain results in relation to Objectives 2, 3 and 4 of this research.

Part III presents a framework proposal (Chapter 7) to improve the well-being of people in protected areas, which specifically responds to Objective 5. In one way or another, the proposed framework is the sum of all the projects, articles, research stays, experiences and lessons learned from more than three years of research.

Finally, Part IV presents the discussion and conclusion of this research. Through the interpretation of the results, the research questions are answered in the discussion section (Chapter 8) and the main findings are highlighted. Limitations and further research are included in the Conclusion in Chapter 9.

2. General Theoretical framework

This section presents the general theoretical framework related to the topic of the thesis, previously introduced in the context of the research.

First, a bibliometric analysis is carried out to measure the scientific evolution of the research field of tourism, well-being and nature (this section corresponds to the first paper related to the thesis published in *Anatolia* magazine). Then, the multidimensionality of well-being is revealed in relation to therapeutic landscapes, protected natural areas, and blue spaces. Scientific advances and practical programs in protected areas are presented. Finally, the well-being experiences in nature are presented as an emerging form of tourism providing new trends and applied experiences worldwide, as reported in the good fellow's publication.

2.1. Research on tourism, well-being and nature

Tourism offering well-being practices in nature has increased exponentially in recent years. The scientific interest in this subject has also grown at a similar rate, from both a theoretical and a methodological perspective. With the aim of contributing to the tourism research field, a bibliometric analysis of 443 records published from 1989 to May 2020 was conducted in order to identify the research area of “tourism, well-being, and nature” and to provide an approximation of the evolution and general features in relation to this topic.

Font-Barnet, A. & Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

2.1.1. Bibliometric analysis

Bibliometric studies enable measuring the evolution of a specific research area through its scientific production and its productivity over a particular period (López-Bonilla et al., 2020). The statistics are based on the number of publications and primarily reflect the quantitative output of a specific research area, and so bibliometric studies are generally used to

quantitatively analyse academic literature (Diem & Wolter, 2013; Liu et al., 2019).

According to Osareh (1996), bibliometric has been used since the 1890s, although is a common literature review technique nowadays (Kabil et al., 2021). Unlike narrative and systematic reviews, many commonalities in the methodological approaches have been used in bibliometric studies that have been applied in tourism and hospitality through data mining, information processing, and visualization technology: examples include article identification, covering contributions from regions, journal rankings, thematic evolution and content analysis, and collaboration network analysis (Hall, 2011; Huang et al., 2020; Jiang et al., 2019; Koseoglu et al., 2016; Leong et al., 2020; León-Gómez et al., 2021; Palácios et al., 2021; Rodríguez-López et al., 2019).

In terms of interactive visual tools in the field of bibliometrics, the idea of constructing science maps based on bibliographic data has intrigued researchers for several decades, and many different techniques and softwares are available for constructing bibliometric maps (Van Eck et al., 2010; Wang et al., 2021). VOSviewer pays special attention to the graphical representation of bibliometric maps, and it is especially useful for displaying large bibliometric maps in a way that is easy to interpret (Van Eck & Waltman, 2010).

The procedure followed in this research focuses on calculating and analysing what is quantifiable in the production of scientific information related to “tourism”, “well-being”, and “nature”. Moreover, it provides a review of the literature in terms of its content (evolution of the subject, trends, and aspects being investigated) and case studies (quantification and geographical distribution). This will help expand understanding of the knowledge of the proposed topic by offering greater clarity in relation to the topic’s temporal evolution, geographical scope, and impact factor according to the category quartile. VOS Software was applied for the co-occurrence of authors’ keywords.

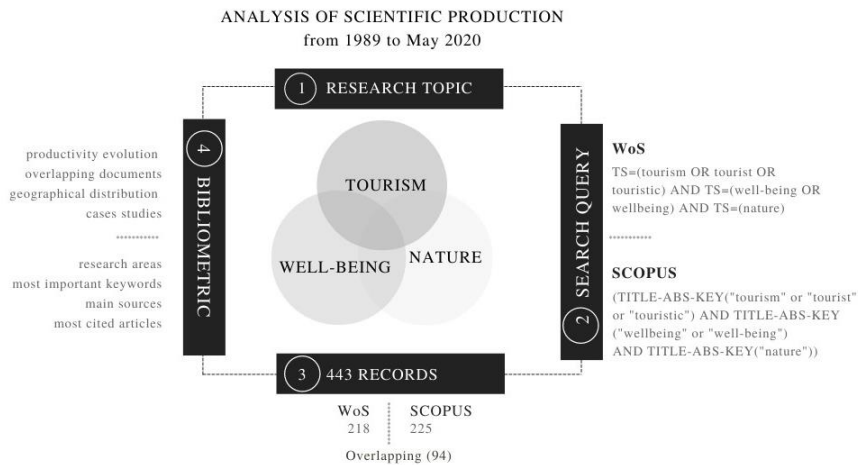
Articles were identified through a search query in the WoS and Scopus databases, which are the main international sources for citation data and contain indexes of scientific production (Larivière et al., 2006; Mongeon & Paul-Hus, 2016). WoS (created in 1990, operated by Clarivate since 2016) and Scopus (created in 2004 by Elsevier) are both databases that include all article types, as well as indices of all authors, institutional addresses, and bibliographic references for each article; they represent a significant strength of the study and for comparison across different scientific fields (Archambault et al., 2008).

As Hicks (2004) and Larivière et al. (2006) observed, social sciences and humanities research is much more interdisciplinary than the natural sciences and engineering, often leaving researchers no choice but to use multidisciplinary databases. Given the social science field and the multidisciplinary approach of the research topic, the WoS and Scopus databases were chosen because they stand out for their international reach and the high-quality standards imposed by the Relative Quality Indices, the JCR InCites Journal Citation Report (available for WoS), and the SJR Scimago Journal Rank (generated by Scopus) (Harzing & Alakangas, 2016). In addition, the editorials, letters, and reviews analysing the same words and topics significantly differ across the two databases, which also justifies the choice of both databases in order to analyse overlapping and non-overlapping publications (Owen, 1997).

The comparison of these two databases has been the focus of several papers, mostly examining the comparability and stability of statistics obtained from these two data sources and/or applying bibliometric indicators (Archambault et al., 2009).

The methodological process consisted of a bibliometric analysis of scientific production from 1989 to May 2020 related to “tourism”, “well-being”, and “nature” in WoS and Scopus (Figure 11).

Figure 11. Methodological process of bibliometric analysis.



Source: Font-Barnet, A., Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

All the data reflect the search status as of 30 June 2020. This research used quantity and performance indicators in order to understand how the field of research has emerged and developed, in terms of both content and geography. With a combination of quantitative and visual methods, seven indicators were selected: productivity evolution, overlapping, geographical distribution, research areas, most important keywords, main sources, and most-cited articles.

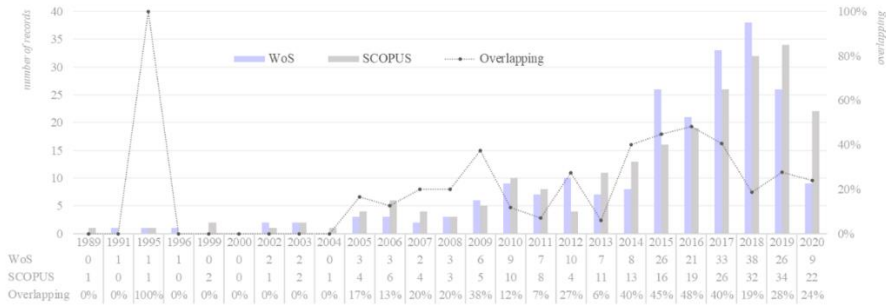
Productivity evolution

The evolution of scientific production in the field of interest can be classified into three periods: before 2000, 2000–2009, and 2010–31 May 2020 (Figure 12).

The first period only contains 6 records, dealing mostly with the environmental impact of tourism and the required planning for ecotourism. The first article was published in 1989 and is available in Scopus; it focused on the negative impact of tourism as it affected the social and economic well-being of host communities (Oliver-Smith et al., 1989). The second record is registered on WoS – a book titled *Tourism, Environment, and Sustainable Development*, in which Butler (1991) highlighted how the lack of planning and the complex nature of tourism were neither environmentally

nor culturally sympathetic to the host area and the community well-being. Burger et al. (1995) authored the third record and the first one that overlapped in the two databases; they focused on the values and resources of wildlife, which requires responsible management so as to ensure biodiversity and the well-being of the population.

Figure 12. Evolution in the number of records and percentage of overlap.



Source: Font-Barnet, A., Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

The second period corresponds with the first decade of the 21st century, with 40 records. Conservation and the planning of wildlife tourism and ecotourism were still leading issues in this period (e.g. Boone et al., 2006; Curtin, 2008; Gunes & Hens, 2007), but research on “intangible and psychological benefits of nature”, “ecosystem services”, or “medical tourism” gradually increased (e. g. Acharya, 2003; Curtin, 2009; Hall & Brown, 2006; Pejchar & Mooney, 2009).

However, this type of research grew exponentially from 2010 to May 2020. While the topics covered in previous periods were not neglected, new concepts and directions of tourism emerged, such as “well-being benefits of protected areas”, “emotional and spiritual dimension of the tourist experience”, or “new forms of tourism, as mindfulness, forest-based, or transformational tourism” (e.g. Choe & O’ Regan, 2020; Ezebilo & Mattson, 2010; Goggin et al., 2017; Knobloch et al., 2017; Lee & Bürger-Arndt, 2013; Little, 2012; Moore, 2010; Pope, 2018).

Overlapping

In terms of overlapping articles, 94 of the 443 records were found in both databases. This represents an overlapping average of 21.22% ($100 \cdot 94 / 443$). Traditional Overlapping (TO), as defined by Gluck (1990), was used in this study; the TO between WoS and Scopus showed a similarity of 21.22% and a disparity of 78.78%. Relative Overlapping (RO), originally used by Bearman and Kunberger (1977), was also used in this study; with this metric, 43.12% of WoS search results are covered by Scopus, while 41.77% of Scopus' records are covered by WoS. In this sense, there is practically no difference: Scopus has a 1.35% lower overlap than WoS.

The two databases had the most articles in common between 2014 and 2017, with 43.3% overlapping records. Because 91% of publications came from the third period, most dealt with the latest and most trending topics, such as the relationship between nature and human health or how tourism in protected areas contributes to the well-being of society (e.g. Litte, 2014; Puhakka et al., 2017).

Geographical distribution

This section presents the geographical distribution of records of tourism, well-being, and nature research with regard to the author's affiliation and the identification of cases studies.

In terms of the country of affiliation of the authors, a total of 13 countries – each with 6 or more articles – led 78.51% of the documents in this search. However, the authors were mainly from the United States, the United Kingdom, Australia, China, and Canada, which accounted for 50% with totals of 57, 43, 33, 22, and 20 records, respectively. Authors affiliated with the countries of Spain, Germany, the Netherlands, New Zealand, and Finland accounted for 14–16% each.

In terms of the geographical distribution of the application of research, in 36% of the articles (349 analysed records), the research was not based on any case study. Of the other 64%, the cases of China, the US, Australia, and Europe accounted for 15.6% of the articles. China was in first place, comprising 6% of the articles with case studies, followed by the USA

with 3.5%. Mexico, the UK, Italy, Canada, and Korea also had case studies, but only for 11% of the articles; Mexico and the UK had a presence of 2.47%, respectively. The remaining 37% of case studies were distributed across 22 countries.

Research areas

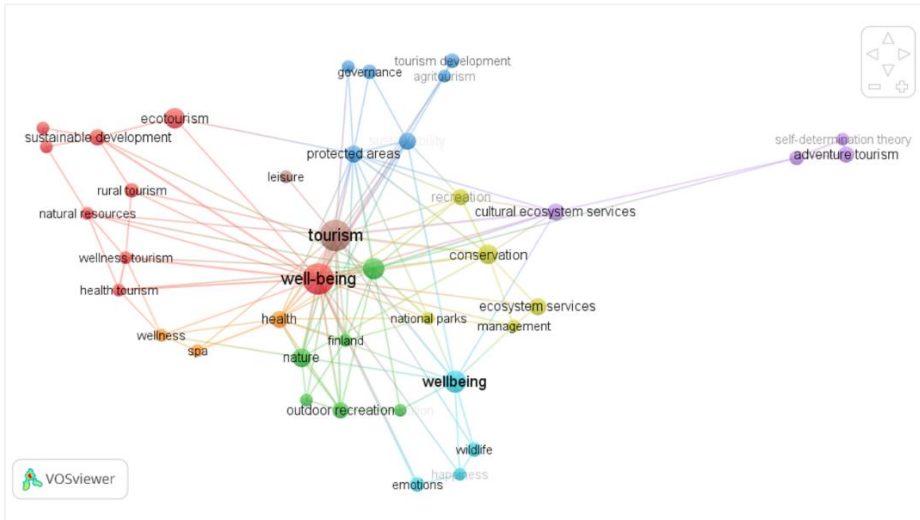
As shown in a previous section, the topics of the studies that link tourism, well-being, and nature can be assigned to various disciplines. The research area is the main classification of records from the perspective of the journal and the database; however, each database uses different concepts and groups to classify their records, which can comprise various categories. If the categories are classified in big areas, the research areas can be regrouped to compare between databases. Thus, both searches were dominated by “social sciences, arts and humanities” (49.9%) or “life sciences” (30.9%), with much less research in the areas of “technology” (7.2%), “health sciences” (6.5%), and “physical science” (5.7%). For the three latter research categories, there were differences between the databases: “health sciences” represented a higher percentage in WoS (7.88%) than in Scopus (3.05%), while “technology” (8.45%) and “physical sciences” (7.75%) were more common in Scopus.

For greater detail, it is important to disaggregate the research categories in WoS and Scopus separately, taking into account all the times that each article can be classified into more than one research category. “Social sciences”, “environmental sciences”, and “business” stood out in both databases as the three predominant categories, but in WoS, the categories of “psychology”, “biodiversity conservation”, and “geography” were also very important, at more than 30% each.

Most important keywords

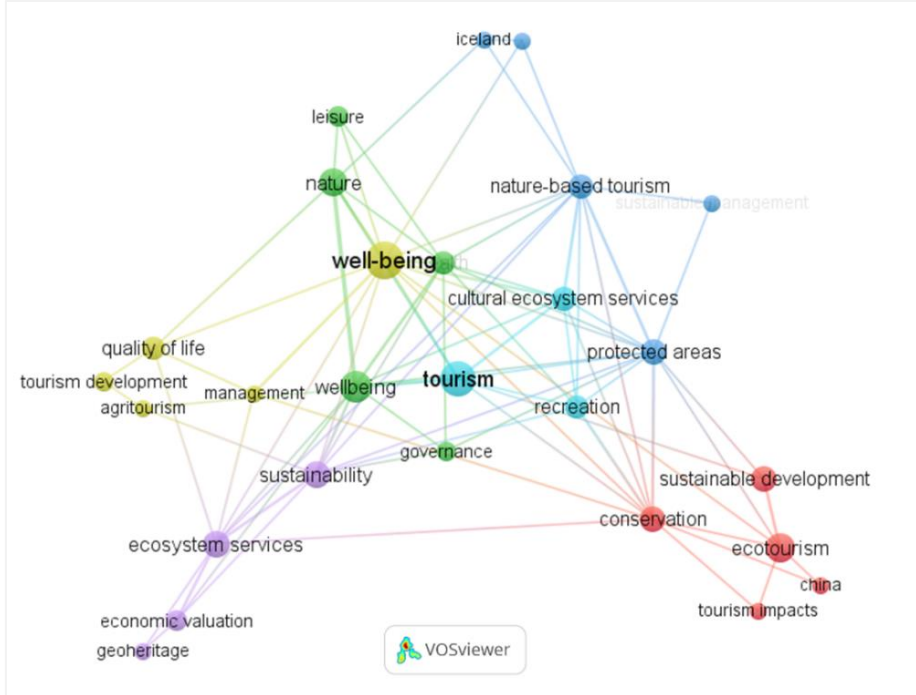
The analysis of the most important keywords used in the publications included in this study is also interesting. Authors’ keywords that appeared at least three times are presented for each search in WoS (Figure 13) and in Scopus (Figure 14), which were obtained with VOS Software.

Figure 13. Keyword co-occurrence networks in WoS search obtained by VOSviewer, 2021.



Source: Font-Barnet, A., Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

Figure 14. Keyword co-occurrence networks in Scopus search obtained by VOSviewer, 2021.



Source: Font-Barnet, A., Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

In WoS, of the 821 keywords, 28 met the threshold, and the following words stand out with 8 or more occurrences: “well-being” (21), “tourism” (17), “wellbeing” (13), “ecotourism” (11), “nature” (11), “sustainability” (9), “ecosystem services” (9), “sustainable development” (8), “conservation” (8), and “protected areas” (8). In total, there were 27 items with 6 clusters, and 83 links, with a great diversity of words and topics. The word “subjective well-being”, with 3 occurrences, did not present any link strength.

In Scopus, of the 840 keywords, 40 met the threshold; the words that stand out the most (more than 8 occurrences) are the same as WoS, with “nature-based tourism” (10 occurrences) in addition. Unlike the WoS search, other standouts included: highly intangible words and concepts, such as “happiness” and “emotions”; keywords related to “governance”, “participation”, and “stakeholders”; or keywords related to interrelated concepts in the field of well-being, such as “health”, “health tourism”, “spa”, and “wellness tourism”. In total, there are 39 items with 8 clusters, and 121 links. The keyword “economic valuation”, with 3 occurrences, does not present any link strength.

Main sources

The analysis of main sources is presented through the main journal bibliometric indicators: the Dispersion Index (DI), and the Impact Factor (IF). The DI highlights the productivity, concentration, or dispersion of scientific articles published in different journals; if the index is equal to 1, the journals are completely heterogeneous (Río-Rama et al., 2019). The search in Scopus resulted in 225 records, of which 149 articles had been published in 114 journals (DI = 1.31), while the search in WoS resulted in 218 records, of which 203 articles had been published in 151 journals (DI = 1.34). For the 94 overlapping records, 81 articles had been published in 61 journals (DI = 1.33).

Table 3 shows the sources that have at least 2 records in this area – a total of 23 sources and 75 records (21.49% of total records). Considering the publishers, Elsevier and Taylor & Francis lead the ranking.

Table 3. Sources with the highest number of records. Source: own design, 2021.

Source title	Publisher	TR	OS	WoS				SCOPUS		
				TR	JIF	JIF CQ	JCI	TR	SJR CQ	SJR
Journal of sustainable tourism	Taylor & Francis	11	82%	11	7.968	Q1	1.51	9	Q1	1.73
Sustainability	MDPI	7	43%	5	3.251	Q2	0.56	5	Q2	0.61
Leisure studies	Routledge	4	75%	4	2.949	Q3	0.78	3	Q2	0.74
Landscape and urban planning	Elsevier	4	25%	4	6.142	Q1	1.96	1	Q1	1.94
Public recreation and lanscape protection		3	100%	3	(*)	(*)	(*)	3	(*)	(*)
Journal of destination marketing and management	Elsevier	3	100%	3	6.952	Q1	1.84	3	Q2	1.70
Tourism recreation research	Taylor & Francis	3	33%	1	(*)	Q2	0.76	3	Q2	0.69
International journal of contemporary hospitality management	Emerald	3	67%	3	6.514	Q1	1.74	2	Q1	2.08
Tourism review	Emerald	3	67%	3	5.947	Q1	1.25	2	Q2	1.00
Ecology and society	The Resilience Alliance	3	33%	2	4.403	Q1	1.07	2	Q1	1.58

Environmental conservation	Cambridge University Press	3	33%	2	3.012	Q2	0.61	2	Q1	1.04
Ecosystem services	Elsevier	3	33%	3	5.454	Q1	1.46	1	Q1	2.05
Journal of environmental management	Elsevier	3	33%	3	6.789	Q1	1.35	1	Q1	1.44
Land use policy	Elsevier	3	33%	3	5.398	Q1	1.31	1	Q1	1.67
Tourism geographies	Routledge	3	33%	1	6.640	Q1	1.31	3	Q1	1.08
Journal of travel research	SAGE	2	100%	2	10.982	Q1	2.99	2	Q1	3.40
Current issues in tourism	Taylor & Francis	2	100%	2	7.430	Q1	1.99	2	Q1	1.73
Plos one	Public Library of Science	2	100%	2	3.240	Q1	0.57	2	Q1	0.99
Land	MDPI	2	100%	2	3.395	Q2	0.78	2	Q2	0.74
European journal of tourism research	International University College	2	100%	2	(*)	Q3	0.37	2	Q3	0.47
Environmental management	Springer verlag	2	50%	1	3.266	Q2	0.62	2	Q1	0.89
Journal of coastal research	Coastal Education & Research Foundation, Inc.	2	50%	1	0,854	Q4	0.23	2	Q3	0.25
Journal of outdoor recreation and tourism	Elsevier	2	50%	1	2.803	Q3	0.85	2	Q2	0.69

TR=Total Records. OS=Overlapping Sources. JCR=Journal Citation Reports 2020. SJR=SCImago Journal Rank 2020. CQ = Category Quartile. (*)=Not provided.

Source: Font-Barnet, A., Nel-lo, M., (2021). Research on tourism, well-being and nature: a bibliometric analysis. *Anatolia*. DOI: 10.1080/13032917.2021.2002699.

The Journal Impact Factor (JIF), the most publicized method today, is a journal-level metric calculated from data indexed in the Web of Science Core Collection. However, WoS has recently reconfigured and greatly expanded the Journal Citation Reports (JCR) 2020, including a new factor, the JCI (Journal Citation Indicator). The JCI's calculation on three years of publications contrasts with the two-year window employed for the JIF, and it is designed to be easily interpreted and compared across disciplines and to complement the JIF (Clarivate, 2021). In Scopus, the IF is the SCimago Journal Rank (SJR), which ranks journals by their “average prestige per article” taking into account the quality of journals that include citations over a three-year period. The two databases use the categories in quartiles to classify the scientific quality of the journals.

In terms of the scientific quality, *Journal of Travel Research*, *Journal of Sustainable Tourism*, and *Current Issues in Tourism* have a JIF greater than all other journals. It is important to note that *Landscape and Urban Planning* and *Journal of Destination Marketing and Management* also have very high JCI and JCR indexes compared to the rest. The 47% of main sources are indexed in Q1–Q3 in the category “Hospitality, Leisure, Sport and Tourism” of the JCR, of which 55% are Q1.

With regard to other journals that are not specific to tourism, they are indexed in in categories related to environmental sciences, physical geography and urban planning in any of the four quartiles of the JCR, with the exception of *Land and PLoS One*, that are indexed in Q2 as ‘Multidisciplinary Science’. In the “Tourism, Leisure, and Hospitality Management” category of the SJR, 22%, 22%, and 4% of main sources are indexed in Q1, Q2 and Q3 respectively. The remaining journals are indexed in Q1–Q2 in the “Environmental Science” and “Social Science” category.

Finally, 52% of the main sources are directly related to “Tourism, Travel, or Hospitality”. The remaining journals are closely linked to the environment, conservation, landscape, or ecosystem systems, while the presence of health and well-being journals is missing, and few conferences have addressed the topic.

Most cited articles

The average citation results of the searches in WoS and Scopus are quite similar. With respect to the 225 records in Scopus, 168 of them received a total of 2488 citations. In other words, papers are cited 9.04 times on average with an h-index of 26. Regarding the articles found in WoS (218), 158 received 3104 citations (14.11 times) with an h-index of 25. For overlapping documents, 81 records received 1356 citations with an h-index of 20.

The citation analysis shows that only 8 records (Bateman et al., 2011; Butler, 1991; Cullen-Unsworth et al., 2014; Curtin, 2009; Iniesta-Arandia et al., 2014; Napier et al., 2014; Pejchar & Mooney, 2009; Sekercioglu, 2002) of the 349 records received more than 100 citations. The top three articles are Pejchar and Mooney (2009), Bateman et al. (2011), and Napier et al. (2014), with 550, 296, and 202 citations, respectively. The first two were in WoS, and the third was in Scopus. The five subsequent articles had less than 150 citations; of these, only Iniesta-Arandia et al. (2014) and Curtin (2009) were found in both databases, with 217 and 203 citations (a sum of the two databases), respectively.

Regarding the citations per year (C/Y) – i.e. the number of citations/age of published article – the 8 articles presented an average of 15.14 C/Y in WoS and 11.93 C/Y in Scopus. The first three articles had an average of 40.5 citations per year, standing out considerably above the rest.

The most cited articles belong to various areas of knowledge, due to the transversal nature of the topic and the corresponding journals. Environmental topics predominate, particularly environmental conservation, ecosystem services, and human well-being. The importance of ecotourism and of nature-based and wildlife tourism for sustainable development is also reflected.

2.1.2. Multidisciplinary nature of the research topic

The use of Scopus and WoS enabled an interdisciplinary and comprehensive approach to the subject, identifying 94 overlapping articles and a disparity of 73.06% between WoS and Scopus in this research.

The earliest publication in the results was in 1989, but the scientific production related to these three key concepts significantly increased in the 2000s. Global research in natural and protected areas is currently focused on ecosystem services and on contributions to the well-being and quality of life of society. At the same time, tourism studies have also focused more on well-being practices in recent decades, adopting a multidisciplinary approach to theory, policy, and practice, but it seems that other articles lack concrete focus on the various dimensions of well-being (physical, mental, social, environmental, spiritual, and emotional).

Increased scientific research on this topic shows that the connection with nature can support the well-being of society, that spatially-protected areas are suitable places to develop such well-being, and tourism can be a way to achieve it. It has been in the latest decade that many European countries began to strengthen their research on this topic, but they did not get ahead of the US, the UK, Australia, and China, which lead in this research, while Latin America and Africa have practically no participation in these research topics. Of the records found here, 64% developed a case study.

The multidisciplinary nature of this subject is reflected in the research areas, especially in the social sciences and life sciences, although it was surprising to find a low presence of the topic of health sciences. In any case, the use of the two databases made it possible to gather results and take into account their nature and function. The occurrence rates of authors' keywords also reflect this.

2.2. Dimensions of well-being related to landscapes, protected areas and blue spaces

The following definitions and approaches indicate that well-being is multidimensional and covers multiple facets of society and daily life. Additionally, other authors share the benefits, facets, and dimensions of well-being related to landscapes, nature, protected areas, and tourism.

2.2.1. Well-being and Therapeutic Landscapes

The World Health Organisation (1946) defined health as a complete state of physical, mental, and social well-being, and not merely the absence of infirmity or illness.

Yeung and Johnston (2019) defines well-being as the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health. Well-being provides a combination of pleasure, hedonism, altruism, and significant experiences. Well-being is not a passive or static state, but an “active exercise”, with intentions, options, and actions related to holistic health and meshing with deeply held values; it extends beyond physical health and incorporates many different dimensions of the entire person. Both body and mind should work in harmony, and the state is not merely marked by the “absence of illness” or the absence of pain, discomfort, or incapacity (Ryan & Deci, 2001).

For some time, debates and discussions have sought to establish a consensus on the definitions of well-being, wellness, health, and spa tourism. It is generally agreed that at minimum, well-being is related to positive emotions/moods, satisfaction with life, feeling good, a healthy life, a state of happiness, being full of energy, and an ability to achieve important personal goals and participate in society. According to the Center for Disease Control & Prevention (n.d.), well-being integrates mental health and physical health, resulting in more holistic approaches to disease prevention and health promotion. In other words, well-being can be understood as “an umbrella term for the different valuations people make regarding their lives, the events happening to them, and the circumstances

in which they live” (Diener 2006, p.400). Going beyond the basics of the concept, Heyne and Camacho (2018) affirm that well-being tourism, from the cultural and local perspectives, is enhanced as businesses engage in local traditions and customs, sell handcrafts, or cook traditional cuisines.

A therapeutic landscape is defined by a landscape where “the physical and built environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing” (Gesler, 1996, p. 96). All the territory is landscape, thereby, a therapeutic landscape can be any place, but this one enable physical, mental, and spiritual well-being, as perceived by the people engaging in it, experience and interpret that space and produce an affective ‘genre’ of ‘healing nature’ (Williams, 2007; Bell et al., 2017).

2.2.2. The Multidimensionality of Well-being

As Abraham et al. (2010) suggest, landscapes—including outdoor natural or designed environments in urban or rural areas—should be understood as a multi-faceted resource for physical (walkable landscape), mental (landscape as a restorative), and social (landscape as a bonding structure) health and well-being.

However, in a discussion about the health benefits of relationships between nature and people, other benefits in addition to these can be included, such as the spirituality and the environment; these are laid out in Maller et al.’s (2002, 2005) classification of the five components of parks’ contributions to human health and well-being. In the spiritual component, parks preserve the natural environment for contemplation, reflection, and inspiration; invoke a sense of place; and facilitate feeling a connection. In the environmental component, parks preserve ecosystems and biodiversity, provide clean air and water, maintain ecosystem functioning and foster human involvement in the nature.

A sixth component is added in well-being and wellness tourism. GWI (2015) affirm that at the core of a destination are the multidimensional values related to wellness with different kinds of activities, which span the physical, mental, social, environmental, spiritual, and emotional. These activities and experiences during a trip make up the diversity that allows different destinations and/or tourism infrastructures to be visited with the purpose of promoting well-being beyond a spa (Albuquerque et al., 2018) (figure 15).

Figure 15. Wellness Tourism segment, products and practices.

Seek		Do	Visit
Physical	Health	CAM Integrative medicine Diagnostics Health check-ups Chronic condition management	Integrative health centres CAM centres Wellness centres
Mental and spiritual	Spa and beauty	Massage Bathing Body treatments Facials Hair and nails	Healthy hotels Wellness cruises Health resorts and sanatoria Spas Salons Baths and springs Thalasso
Mental and spiritual	Mind-body	Yoga Meditation Tai chi Qigong Biofeedback	Yoga studios Martial arts studios
Spiritual and social	Spiritual and connection	Prayer Volunteering Time with family and friends Time alone	Yoga retreats Spiritual retreats Ashrams
Mental and emotional	Personal growth	Retreats Life coaching Stress reduction Reading Music and arts	Lifestyle retreats Wellness retreats
Environmental and spiritual	Eco and adventure	Hiking Biking Taking walks Nature visits	Parks Wildlife sanctuaries Nature preserves
Physical and social	Fitness	Gym visits Fitness classes Stretching Pilates	Gyms Fitness centres
Physical and social	Healthy eating	Nutrition Weight management Detox Culinary experiences	Organic and natural restaurants Health food stores

Source: Albuquerque et al. (2018) from Yeung and Johnston (2014b); GWI (2018).

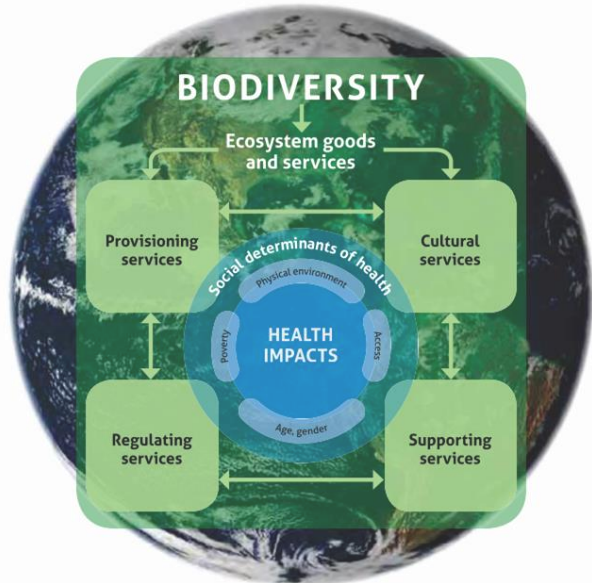
Researchers have shown that natural environments and protected areas can have a direct, positive impact on well-being in a multidimensional way (Bowler et al., 2010; Cvikl, 2016; Font-Barnet and Nel-lo, 2021b; Ryan et al., 2010; Ryse and Meers, 2012;). And a growing body of scientific evidence shows that improvements in well-being are directly linked to living by or near the sea and to so-called 'blue spaces' - a concept that has recently emerged and gained traction (Bell et al., 2015; Garrett et al., 2019; Hooyberg et al., 2020; Wheeler et al., 2012; White et al., 2010;). These advances are presented in more detail below.

2.2.3. The well-being and health benefits provided by protected areas.

'Protected area' refers to any area of land or sea managed for the maintenance of biodiversity and other natural process *in situ*, through constraints on incompatible land usage (Possingham et al., 2006). Geographically, such areas are clearly defined, recognized, dedicated, and managed through legal instruments or other effective means in order to achieve long-term conservation of nature and its ecosystem services, along with its associated cultural values (Dudley, 2008; Day et al., 2012).

The multifunctional nature of protected areas is characterized by a set of ecosystem services, which offer a global vision for understanding the elements individually and in relation to the whole. Services provided by protected areas include the ability of an ecosystem to create opportunities for recreation, culture, and tourism, which has become a practice of cultural and economic importance worldwide (Kettunen & Brinck, 2013). Parks and protected areas contribute to a healthy civil society, thus increasing the economic importance of cultural and natural tourism (Azara et al., 2018; Morera & Nel-lo, 2017). With all of this, a co-dependence is created between biodiversity and well-being (Figure 16).

Figure 16. Co-dependencies at the intersection of biodiversity and human health.



Source: Connecting Global Priorities: Biodiversity and Human Health (WHO, 2015).

According to Leung et al. (2018), the potential benefits of tourism in protected areas are multifold and have long been linked with positive outcomes for well-being thanks to aesthetic, spiritual, health, and other values.

Experts from many fields and disciplines recognize and point to the many benefits of natural protected areas with spaces and services for multiple activities (hiking, walking, cycling, swimming, etc.) in incredible environments and landscapes, providing optimal effects in physical, mental, social, natural, spiritual, and emotional dimensions. Among the benefits include reduced risks for obesity, cardiovascular and pulmonary diseases, depression, stress, anxiety, and sleep problems, along with increased generosity and social connections, so that individuals feel safer and less isolated.

Therefore, visiting a protected natural area that is safe, accessible, and free for recreation is now being seen worldwide as preventive treatment for public health problems (Buckley, 2020; Lemieux et al. 2012; Rashid et al., 2017; Smith & Puczó, 2017; Sparkes & Woods, 2009). In protected areas,

the challenge for tourism (including all its typologies—gastronomical, nature-based, ecological, wellness, medical, etc.) is to improve the health and well-being of social and ecological systems; this requires proactive and inclusive planning processes that protect the environment while improving lifestyles and livelihoods (Eagles et al., 2002; Gabriel, 2019).

In recent years, a movement called Healthy Parks Healthy People (which originated in Australia in 1999 but is now found around the world) is promoting the value of protected areas as fundamental resources for well-being by reducing health inequalities, contributing to individual and community health, and supporting wider aspects of economic health and growth and territorial development (Parks Victoria, 2017). [Figure 17](#) outlines how park management programs contribute to park and human health outcomes.

Figure 17. Healthy parks, Healthy people programs – the basis.



Source: Parks Victoria, 2017.

The first International Healthy Parks, Healthy People Congress was held in Australia in 2010. One of the outcomes of the Congress was the launch of the Healthy Parks Healthy People Global (HPHP Global) programme and website, which brings together all the information shared at the Congress, as well as various cases and experiences from around the world.

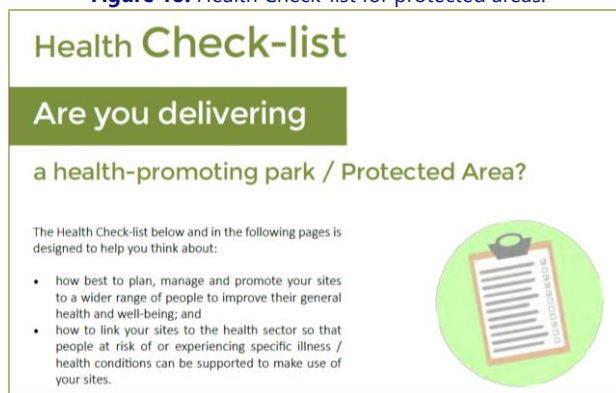
In 2011, the US National Park Service published the Healthy Parks, Healthy People US Strategic Plan, a five-year document designed to lay the groundwork for the programme across the national park system.

At the 6th IUCN World Parks Congress (November 2014, Sydney, Australia), the link between protected areas and health was one of the main themes (see Proceedings). Currently, IUCN has an IUCN-WPA Health and Wellbeing Specialist Group that is actively advocating for greater recognition of the interdependence between healthy and well people and the natural world. The Specialist Group is a key mechanism through which experts can come together to mainstream the health and well-being benefits of nature across all sectors (IUCN-WCPA, 2020).

EUROPARC, as the largest network of protected areas in Europe, seeks to improve cooperation, the exchange of ideas and experiences and the development of best policies and practices from the starting point that the sustainable nature of Europe's parks and protected areas is a key asset for health and well-being.

In 2018, the EUROPARC Federation published the "EUROPARC Toolkit Health & Well-being benefits from Parks & Protected Areas". This toolkit aims to provide advice on how parks and protected areas can support and generate positive health outcomes for people (EUROPARC Federation, 2018). It is a toolkit that provides simple and practical guidance in form as a Check-list addressed to managers of protected areas (Figure 18).

Figure 18. Health Check-list for protected areas.



Source: EUROPARC Federation (2018).

The Jūrmala Communication, agreed by EUROPARC at its conference in Latvia in 2019, calls for the creation of a Healthy Parks Healthy People Europe programme to support parks and protected areas at the national, regional and local level to deliver better outcomes for the health of people and nature. The Healthy Parks - Healthy People Programme will be established in 2020 as a Europe-wide programme to support parks and protected areas at national, regional and local level to deliver better outcomes for the health of people and nature (EUROPARC-Spain, 2020).

Countries such as Finland (National Parks of Finlandia, 2020) or Scotland (NatureScot, 2020) have developed their own strategy and guidelines for the well-being of society and their protected areas, following the guidelines and recommendations of EUROPARC and international bodies.

In Spain. EUROPARC-SPAIN published the Programme Society and Protected Areas for Human Well-being in 2016, which sets out how to reinforce the achievements made and how to address the challenges identified so that the main tools of nature conservation, protected areas, contribute effectively not only to the conservation of ecosystems and their biodiversity for their intrinsic values, but also for their capacity to generate critical services for human well-being (instrumental values). The theme of the wellbeing of protected areas is present both in documents and in dissemination and communication events.

DKV has also collaborated in the cartography of healthy routes and a map of the location of forest baths at the level of the protected natural areas of Spain. It is also worth mentioning the research of Castells, specifically the applied project based on surveys of the perception of the well-being of visitors to the natural parks of the Diputació de Barcelona. Recently, the innovative studies and projects of the Barcelona Institute for Global Health (ISGlobal) have been particularly noteworthy.

2.2.4. Blue spaces and coastal well-being

At this point, it is true that much of the research has focused on the well-being benefits of being near or exposed to green spaces, parks, forests, gardens, protected areas, etc. (Dudley & Campbell, 2015; Li, 2018; Azara et al., 2018; Thompson, 2018), with less attention being paid to the specific effects of blue spaces and coastal environments (Hermanski et al., 2022; Wheaton et al., 2020). However, the blue areas, oceans, marine ecosystems, rivers, lakes and other aquatic areas such as ornamental sources, are also conducive to the health and well-being of society (Völker & Kistemann, 2011).

The Blue Spaces are environments defined by the presence of water and they include inland water areas (rivers, lakes), coasts and marine environments, either natural or urban, which contain visible quantities of still or flowing water (White et al., 2020, Völker et al., 2011), and they are accessible by humans in a close way (being in, over or near the water) (Kelly, 2021). Spending time by the sea is associated with health and well-being benefits and multiple concepts and researchers address it, such as “blue mind” (Nichols, 2014), “blue gym” (Depledge & Bird, 2009), or “blue care” (Britton et al., 2020).

Historically, certain blue spaces have gained a reputation for healing and wellness, including fountains, wells and coastal areas, highlighting the important role of blue infrastructure in the process of building more sustainable cities. An interconnected and diverse set of uses and typologies is becoming an essential tool for mitigating some of the major urban and climatic challenges, from a perspective that is compatible with nature and the health of citizens.

Although, in a simpler and even more romantic way, we could refer to water landscapes, those in which water is part of the character (what distinguishes it from another landscape), either by its presence (coast, river, protective figure), by its action (fruit of its action, a stream, an irrigated landscape) or by its perception (spiritual elements, senses) (Zoido, 2008).

According to Severin et al. (2022), the relationship between the coast and well-being can be placed within the concept of therapeutic landscape, and we could add one more word and refer to water therapeutic landscape.

We can further introduce the concept of 'coastal well-being', which refers to improvements in well-being directly associated with being close to the sea (living or visiting) or participating in activities in or near the sea (Kelly, 2020), such as reducing stress, promoting physical activity and encouraging positive social interactions (White et al., 2010).

Academic interest in this topic has recently increased, although there is still more evidence and a long way to go in this area. In the analysis by White (2013), the benefits of living near the sea are strongly associated with a reduction in negative outcomes (i.e. psychological distress). In this regard, the affective forces of encountering the sea imply a sensory engagement with sight, smell, touch and emotion, being able to see the chromatic effects, feel and hear the water, sounds and birdsong. Nichols (2018), in his book 'blue mind', affirms that when we are at the sea we enter a moderate meditative state, characterised by calm, a sense of happiness and general satisfaction with life at the time. 'Blue care' refers to the use of blue spaces as an intervention to promote health and well-being (Britton et al., 2018). And so far, there is little evidence of direct applicability in destinations (e.g. on the potential of blue spaces for the well-being of communities both at the level of medical health and at the level of opportunities for the blue and tourism sectors) and it is being noted that the maximum potential benefits of blue spaces are not always realised, either because they are inaccessible, because they lack facilities or simply because they are not well known.

The experiences and activities through which well-being is produced or improved in blue spaces also vary from passive contemplation to a range of physical activities such as gardening, walking, swimming, or surfing (Bell et al., 2017) and promotes both physical and mental health (Abraham et al., 2010; Maller et al., 2005, Papathanasopoulou et al., 2016).

Well-being tourism is an expanding market niche worldwide, offering specific commercial opportunities through products that promote or maintain health (Kelly, 2010, Rodrigues et al., 2010). The European Commission's Blue Growth Strategy (European Commission, 2021), which identifies five key areas that offer a high economic growth potential in the marine and maritime sectors in the near future, includes coastal tourism as a key sector.

There is an obvious competitive advantage for coastal destinations with the rediscovery of well-being tourism and blue spaces. Here the natural attraction of the sea, the sun and the beach can embrace the concept of well-being that was lost in the development of the mass tourism market towards the end of the 19th century, from the 1960s in many developed countries (Page et al., 2017).

For many coastal tourist destinations, the strategy for overcoming the stagnation/exhaustion stage of their tourist life cycle has been to set up offers that complement the traditional products of sun and beach to satisfy tourists' new motivations, in other words, transforming their trips into life experiences (Cànoves et al., 2016; Priestley, 2007). Chapter 5 contribute to this research field betting on blue spaces with a view to well-being tourism in a coastal destination.

These water landscapes not only have the potential to offer new experiences closely linked to well-being and the quest for holistic health, but they can also promote interactions outside the traditional tourist season (e.g. hiking, surfing, diving, sea kayaking, wild swimming, etc.), thus addressing challenges such as the very environmental sustainability of tourist destinations.

In Wolf & Wohlfart (2014), authors revealed considerable benefits of activities in Blue Mountains National Park for people's physical health and overall well-being, and walkers and hikers shared many health and exercise-related motivations, as "gaining endurance". In Bell et al., 2017, participants valued more direct interactions with the water, highlighting how such

experiences provided opportunities to master their hobbies within challenging, often unpredictable ambient conditions. In Thompson & Willkie (2021), blue exercise was explored as how impacted well-being and whether its benefits were unique from other types of physical activity. Britton & Foley (2021) analyze how swimmers and surfers perceive feeling healthy, being well, and experiencing a sense of well-being. In Lloret et al., (2021), the results provide evidence that doing non-motorized water sports in the sea has positive outcomes for practitioners' physical and mental health.

Worldwide, walking and hiking trails are among the most popular forms of physical activity (Han, 2021), and walking in nature has been found to provide additional compared to walking indoors or in an urban environment (Marselle et al., 2013). In chapter 6, we aim to help people understand the benefits of sea analysing how walkers experiencing a sense of well-being. We address this research in line with the coastal well-being concept, from the well-being improvement directly related to partaking in activities by the sea, and concretely exploring coastal walks for well-being.

2.3. Well-being experiences in nature: An emerging tourist form

Tourism is a dynamic, constantly evolving activity that requires detecting consumer trends so that companies and destinations can adapt by offering new and improved competitive products and experiences. Natural areas and protected spaces rank among the clearest beneficiaries of today's trends because they combine environments that offer direct, positive impacts on human health and well-being. Against that background, this chapter examines experiential tourism in relation to improved holistic well-being and provides examples of experiences in protected natural areas worldwide that offer physical, mental, social, environmental, spiritual, and/or emotional well-being.

Font-Barnet, A. & Nel-lo, M. (2021). Well-being experiences in nature: An emerging form of tourism. In N. Pappas & A. Farmaki (Eds.), *Tourism Dynamics: New perspectives and changing directions* (pp. 22-40). Goodfellow Publishers. DOI: 10.23912/9781911635932-4921.

2.3.1. Experience, well-being, and nature: An interconnected relationship

Although the growing need to design and offer differentiated tourist experiences has increasingly been taken into account in the tourism sector (Brent-Ritchie et al., 2011; Sugathan & Ranjan, 2019), its origins date back to the mid-1970s (Csikszentmihalyi, 1975). The idea gained significant strength with the work of Pine and Gilmore (1999), who defined *experience* as occurring within a person who is engaged with an event on an emotional, physical, spiritual, or intellectual level. Along similar lines, O'Dell (2007) and Coelho et al., (2018) have referred to an *experience* as subjective, intangible, continuous, highly personal phenomenon. Extending the concept to tourism, Carballo et al. (2015) have proposed that tourists who travel to destinations do not make trips in a merely physical sense, for their true trips are internal and lie in how they perceive the destination, its people, and the impact of the subjective experience. With both of those ideas in mind, Selstad (2007) has defined the *tourist experience* as a combination of novelty and familiarity involving the individual pursuit of identity and self-realization.

To be sure, the tourist experience is a complex psychological process. Holistic and multiphasic, it encompasses an array of processes and dynamics that begin even before the trip and continue during the trip, in the place where the experience occurs, and when the trip, once complete, is continually (re-)evaluated to take stock of what was lived (Park & Almeida, 2017; Highmore, 2002). Creating the tourist experience, as such a complex phenomenon, requires considering multiple elements and intrinsic aspects before an effective, rewarding experience, with a wide range of opportunities at all levels, can be offered. Such an experience has to be unique, stimulate all of the senses, be emotional and immersive, and offer a story to be recounted (Thellier, 2011). In a sense, tourist experiences are only memorable when they are authentic and afford the opportunity to play an active role, forge social relationships, grow personally, and learn (Tung & Brent-Richie, 2011).

The interaction between the tourist, as the chief actor, and the destination, where the tourist experience occurs, is the foundation for constructing the experience (Vada et al., 2019; Same & Larimo, 2012). Although the tangible, physical elements of destinations are important, the key to the tourism experience is ensuring the emotional involvement of tourists, as well as satisfying and responding to different expectations and motivations, including escape, adventure, relaxation, education, training, personal fulfillment, health, and well-being (Li, 2000; Quinlan & Carmichael, 2010) (figure 19).

Figure 19. The nature: linking experience and well-being.



Source: Font-Barnet, A., Nel-lo, M. (2021). Well-being experiences in nature: An emerging form of tourism. In N. Pappas & A. Farmaki (Eds.), *Tourism Dynamics: New perspectives and changing directions* (pp. 22-40). Goodfellow Publishers.

According to GWI (2015), *well-being* refers to the active pursuit of activities, choices, and lifestyles that lead to a holistic state of health. In providing a combination of pleasure, hedonism, altruism, and lived experience, experiential tourism intersects with well-being in both its

hedonic and eudemonic forms. Whereas hedonic well-being involves positive emotions, happiness, and pleasure during an activity, eudaimonic well-being focuses on personal growth, learning, and skills development, which confers positive effects that may persist well after the activity has ended (Pearce & Packer, 2013).

For some time now, researchers have demonstrated that natural environments can have direct, positive impacts on well-being, with stimulating effects for human health and general welfare (Bowler et al., 2010; Cvikl, 2016; Ryan et al., 2010). In that view, so-called “EcoWellness” was defined as a sense of appreciation, respect for, and aware of nature that results in feelings of connectedness with the natural environment and the enhancement of holistic wellness (Ryse & Meers, 2012). In this way, it is stated that there is an interaction between the well-being and experience from the holistic and integrative vision, and nature can become the link and place where to develop experiences to achieve well-being.

2.3.2. Experiences in protected areas by well-being dimensions

Protected areas are delimited, safe places with rich ecosystems nurtured under a consolidated management structure and that provide ample space for recreation (Parks Victoria, 2017; EUROPARC Federation, 2018), that’s why these are key areas for the development of well-being tourist experiences. As such, it is imperative that protected areas are prepared to accommodate the rising interest in nature and guide well-being tourism toward positive outcomes (UNWTO, 2020b).

In turn, the well-being afforded by nature has been emphasized in the planning for protected areas under the worldwide Australia-based Healthy Parks, Healthy People program, which offers activities and strategies for improving human well-being and the conservation of parks at the same time. Because well-being encompasses a diverse set of activities and interests, including preventive health, beauty, fitness, personal growth, and nature (Smith, 2003; GWI, 2018), a wide range of activities for both mind and body can be developed in protected areas, whether for solo or group travelers, all

in wonderful landscapes and surroundings that can offer spiritual as well as emotional benefits and connections with the environment and the self (Azara et al., 2018; Romagosa et al., 2015).

In what follows, we provide a brief tour of well-being tourist experiences that combine the environmental, physical, mental, social, physical, spiritual, and/or emotional dimensions developed in and for natural protected areas.

Parks are essential “infrastructure” that offer a wide range of health benefits on the physical, mental, and spiritual levels (MacKinnon et al., 2019; NEEF, 2019), which can be the basis for new experiences intended to involve tourists emotionally, physically, spiritually, and intellectually (Leung et al., 2018; Mossberg, 2007; Rääkkönen & Grénman, 2017). The multidimensionality of well-being concept in relation to the benefits provided by protected areas can be defined with the following dimensions: (1) physical for active and healthy lifestyle, (2) mental for stress reduction, boost self-esteem and mind-body balance, (3) social for human involvement, inclusion and cohesion, (4) emotional for personal growth, (5) spiritual for contemplation, reflection and inspiration, and (5) environmental for ecosystem protection (6) (Font-Barnet & Nel-lo, 2021b; Gladwell et al., 2013; GWI, 2018; Maller et al., 2002).

Experiential tourism has three main elements: the people, the place, and the activity. The tangible and physical elements are important, but the key aspect—and where the emphasis always lies—is in involving tourists emotionally (Li, 2000). This consists of satisfying and responding to tourists’ various expectations and motivations—such as escape, adventure, relaxation, entertainment, or health (Cutler & Carmichael, 2010)—and offering opportunities for social relationships, personal and intellectual growth, and learning (Coudounaris & Sthapit., 2017; Moscardo, 2008, 2010; Kim et al., 2012; Scott & Le, 2017; Staiff, 2014). To provide a true experience, extensive planning and effort are required, as is thinking carefully through all the steps of the process, and paying attention to detail (Laliberté, 2005; The English National Park Experience Collection (2019).

The experience itself is the sum of small details that connect with emotions. Creating an experience requires considering multiple elements and intrinsic aspects before an effective, rewarding experience, with a wide range of opportunities at all levels can be offered (Font-Barnet & Nel-lo, 2021c).

Environmental dimension

Parks are perfect places to develop the environmental dimension, which emphasizes the value of local ecosystems and human involvement in the natural environment (Maller et al., 2002; Albuquerque et al., 2018). Beyond that, the dimension can afford mental and spiritual benefits (e.g., reduction of stress and personal growth), physical health (e.g., sports and fitness activities), and social opportunities, at least when in the company of others. As an example, the Wider Peak District Cycle Strategy is an interesting proposal developed in public–private collaboration for the UK’s Peak District National Park (Peak District, 2020). According to its promoters, cycling is an ideal activity that provides the speed to explore the diversity of landscapes while remaining slow enough to enjoy the sights, smells, and sounds of the countryside. The aim of the program is to promote cycling due to the benefits that it brings, including education, enjoyment, athletic challenges, and tourism, not to mention sustainable transport, carbon reduction, and economic growth in the area, but above all well-being, social relations and mental health.

Physical and social dimension

Along the same lines, the website of the U.S. National Park Service (USNPS) now includes a section, titled “Trails and Hiking,” about the network of trails and their physical conditions, accessibility, and type (e.g., good for children or pets), as well as the benefits of being in outdoor spaces:

“The warm sunshine on your face, the sound of the wind rushing through the trees overhead, and the soft earthy feel of the trail under your boots. Not only are these experiences enjoyable to have, but they’re good for you, too. Hiking is proven to have many health benefits, ranging from physical exercise you get when out on the trail, to emotional or mental relief that comes from being in nature” (USNPS, 2020).

In fact, the USNPS has identified so-called “green exercise clinics” as a Healthy Parks, Healthy People promising practice. In that sense, a *green exercise* is a physical activity or exercise in direct exposure to nature that positively affects psychological and physical well-being and health (Loureiro & Veloso, 2017).

Among the possible activities, many are usually performed in gyms and closed spaces, including yoga and tai chi, and by “going green,” so to speak, reinforce their numerous benefits for the body and mind (Gladwell et al., 2013). In August 2020, the USNPS (2020) also launched the “Fitness Challenge Campaign” designed to increase levels of physical activity in the short or long term, all to improve physical health, boost self-esteem, promote confidence, and strengthen will, especially in populations that seldom use parks, including minorities, low-income households, and people with disabilities. One set of challenges, for example, could include walking 5 miles in a park or completing activities along a trail, either individually or in a group, the latter as a means to socialize and create bonds in the community.

The National Parks and Wildlife Service of New South Wales, Australia, has put forward some interesting proposals, including high-intensity training workouts with beach sprints along long stretches of unspoiled coastline in Termeil Beach, trail running in Dharug National Park as a pre-workout for competitive races, and, reaping the sea’s medicinal benefits as part of thalassotherapy, swimming at Dudley Beach in the Glenrock State Conservation Area (Gillezeau, n.d.). As that final example shows, thalassotherapy can now be categorized in forms beyond treatments based on marine environments into authentic wellness-oriented experiences (Smith & Puczó, 2017).

Mental dimension

On the topic of medicinal and health benefits, mindfulness has come to characterize various advantages for both individuals and the sites of their experiences (Dutt & Ninov, 2016). Ericson et al. (2014) have proposed promoting mindfulness as a policy that contributes to both sustainability and

greater well-being. Practices of mindfulness consist of taking time to be aware of personal feelings, one's surroundings, and what can be heard, smelled, touched, and/or seen. The practice can be realized by, for instance, spending time in a forest and engaging all of the senses, which can help to ease negative feelings and boost positive ones (WWF-UK, 2020).

Along those lines, forest bathing, as an emerging practice the world over, has perhaps become the most representative trend. Li (2018) defined *shinrin-yoku* ('forest bathing') as a traditional practice of taking energy from the forest to improve one's health and reduce stress. As Japan Travel (2020) promotes, forest bathing is an excellent way to appreciate the landscapes that once stirred such a deep, spiritual connection and remind us that nature has always been regarded as powerful and healing. Japan's most enchanting forests are in Yakushima Island National Park or Yoshino-Kumano National Park, each with a network of ancient forested pilgrimage routes. Of course, forest bathing is an experience that has spread to and been implemented at other national parks around the world, including natural areas in British Columbia, Canada (Ali, 2021); in the UK, which offer a beginner's guide to forest bathing in nature parks across the island (National Trust, 2020); in Victoria, Australia, where the government has developed a map platform with the different experiences for forest bathing on offer (Visit Victoria, n.d.); and in Catalonia, Spain, where there is an important offer of forest baths certified and guided by Selvans Cooperative in natural areas (Selvans, n.d.). Because forest bathing began as a medical prescription in Japan, the USNPS (2020) has extended that philosophy into its "Doctor-Led Activities," which take patients outdoors to harness the healing power of nature and get inspired to make positive changes using various tools and techniques: Park Prescriptions (Parkrx), Walk with a Doctor, Nature & Forest Therapy and Art Therapy.

Emotional and spiritual dimension

For those in search of experiences of emotional well-being in protected areas, the UK's Brecon Beacons National Park offers peace, tranquility, and the quiet enjoyment of healthy exercise, inspiration, relaxation, and spiritual

renewal (Brecon Breacons, n.d.). The park's various amenities—health activities, fitness and leisure centers, spa hotels, and alternative therapy centers—include Peterstone Court, a country house, restaurant, and spa that takes a holistic approach to wellness by using only natural, organic products. Its other offerings include opportunities to relax in a hot tub, detox in a sauna, take a dip in the seasonal outdoor heated pool, or exercise in the gym. In the same vein, Italy's Adamello Brenta Nature Park, the largest protected area in Trentino, offers visitors different options, ranging from wellness and spa getaways in ecological hotels located in the middle of nature to excursions into the park for exclusive treatments to promote well-being (Cristina, 2020).

Meditation, yoga, and personal growth retreats are emerging in natural protected areas as well. For one, the Wellness Tree Retreat near Irton Manor, located at the southeastern end of the North York Moors National Park (NYMNP), offers yoga, meditation, swimming in the pool by candlelight, silent walks through the woods, mindfulness activities, relaxation and visualization workshops, and spa treatments with homemade organic oils. For another, the Tree Relaxation Retreat in Rosedale Abbey, ranked by The Guardian as one of the 25 best yoga vacations and retreats, offers Indian head massages, a bit of yoga, and spa treatments, plus walks in the moorlands and even tea and cake by the fireplace—in a short, a recipe for the perfect remedy (NYMNP, 2020).

However, if tourists seek a complete program of multidimensional well-being experiences, then they can consult the RENEW YOU! program offered by Tenaya Lodge at Yosemite National Park (Tenaya Losge, 2020), which provides weekend experiences involving walks, guided mediation, talks with guest speakers, healthy cooking, relaxing visits to the spa, yoga at sunset, and, to help awaken the traveler's creative side, painting classes with wine hosted by a local artist. They also have other more specific retreat programs for women and couples, as well as stress relief getaways, each designed with the right balance of support and solitude and with the goals of re-establishing simple habits and promoting lasting change.

Last, in the spiritual dimension, volunteer work can also be a mutually rewarding experience for tourists and destinations. As stated on the official webpage of the National Park of Finland (2020), volunteer work for the good of nature is also a great way to combine being close to nature with social relationships.

2.3.3. Linking experiences and well-being benefits of Protected Natural Areas

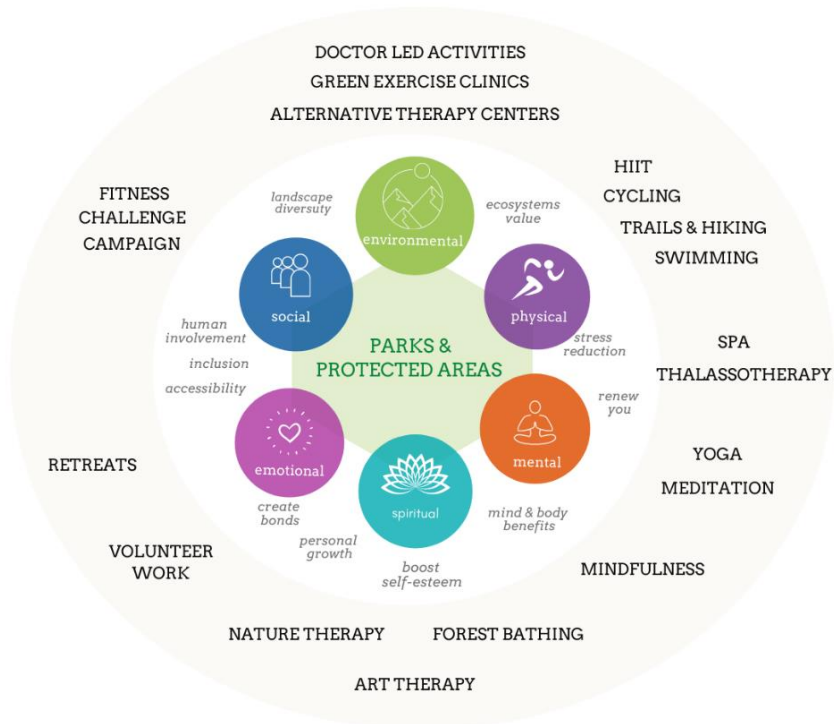
Tourism, as a deliberate activity, is an important context for experiencing well-being (Pearce, 2009), and nature is a perfect place to get it. It is here where the three concepts interconnect, the well-being and restorative benefits of tourist experiences influence tourists' choices and subsequent attachment to destinations in nature (Voigt et al., 2011; Pyke et al., 2016). Concretely, research evidence that protected areas are crucial gateways that connect people with nature and allow them to achieve well-being through very diverse tourist experiences.

Well-being experiences in nature are a growing market, a new trend in tourism, a new dynamic that responds to the current needs of consumers. The COVID-19 pandemic has brought the relationships between environmental sustainability, economic growth, and human well-being into sharp relief, and in the search for a balance between those aspects is an opportunity to rethink the tourist model of destinations (UNWTO, 2020a).

The search for memorable tourist experiences to (re)connect with nature may seek a specific benefit, but by taking place in natural protected areas they end up looking, directly and indirectly, for the other dimensions. From a transversal vision, the environmental dimension of well-being is covered only by the fact of developing activities in nature, but the development of integral, holistic and well-being experiences, allows reaching for many other dimensions.

As [Figure 20](#) summarize, parks and protected natural areas offer multiple benefits for society, being very beneficial places to develop activities for the health and well-being of tourists and residents.

Figure 20. Experiences and well-being benefits of Protected Natural Areas.



Source: Font-Barnet, A., Nel-lo, M. (2021). Well-being experiences in nature: An emerging form of tourism. In N. Pappas & A. Farmaki (Eds.), *Tourism Dynamics: New perspectives and changing directions* (pp. 22-40). Goodfellow Publishers.

The landscape diversity and the ecosystem values of these areas allow, among many benefits, to develop activities that reduce stress, balance mind and body, personal growth and boost self-self-esteem, among others. In addition, protected areas allow the development of group activities in favor of inclusion and creating bonds. A total of 18 experiences, strategies and activities in natural areas have been collected, and these revolve around the multidimensional dimensions and benefits of well-being defined by the GWI (2018): environmental, physical, mental, spiritual, emotional, and, social. Singular and innovative experiences in protected areas have been collected to exemplify that well-being tourist experiences in nature are an emerging form of tourism in much of the world. These initiatives serve as an impetus and an example to other protected areas to continue advancing and adapting to new trends and needs of society.

The experiences and activities described in this analysis show that countries such as the United States, Canada, Australia, and the United Kingdom have adapted and incorporated those benefits of health and both physical and mental well-being in their strategies and proposals for activities and experiences for visitors. The low presence or visibility of such experiences organized and promoted by national park systems in Europe and Central America also deserves attention, for it contrasts with the high value and potential of their many protected areas.

For all this, tourist destinations, backed by the collaboration of all stakeholders, might adapt their offerings to satisfy the emotional, social, and spiritual needs of today's tourists. Alliances with social, educational and health entities should be promoted to complement a program of activities in inclusive well-being in protected natural areas. Today, most protected areas are underused considering their potential, not only for the natural and ecological value of their ecosystem, but for being safe, open, well-managed and in search of accessibility for all.

PART II. CASES STUDIES

3. The multidimensional benefits to well-being provided by protected areas: A case study in Ebro Delta Natural Park

Within the framework of the research project ‘Well-being tourism: Co-creating tourist experiences’, the aim of this chapter is to identify the potential of the Ebro Delta Natural Park (EDNP) to provide multidimensional benefits for well-being, as perceived by local stakeholders. The EDNP is the most important aquatic habitat in Catalonia, with a rich diversity of environments coexisting with rice fields, fishing, agriculture, livestock, hunting and tourism activities. Its complexity has been recognised with international prestige: it is a Biosphere Reserve and a Ramsar Site, with a certificate from the European Charter for Sustainable Tourism. Using qualitative research techniques with visual and co-participatory methods, we conducted focus groups with villagers, the tourism sector and public use managers to identify the EDNP's benefits, taking into account the six dimensions of well-being: physical, emotional, psychological, spiritual, social and natural.

Font-Barnet, A. & Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers. ISBN: 978-1-53619-276-6.

3.1. Study Area

The Ebro Delta Natural Park (EDNP) is a protected natural area created in 1985 that covers an area of 7,802 ha located on the coast in the very south of Catalonia, Spain. It is the largest wetland area of Catalonia and its lands are totally flat, which gives it a distinctive appearance and unique landscape. As can be seen in the map (Figure 21), the river Ebro flows through the middle of the park, the delta consists of large marshes, small islands are located in the river, and lagoons can be found among the 21,000 ha of rice fields. Due to its naturalist and ornithological character, the Ebro Delta is internationally known and is one of the best birdwatching areas in Europe.

Figure 21. Map of the Ebro Delta Natural Park.



Source: Departament of Environment and Sustainability. Cartographic institute of Catalonia. Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

The EDNP has a rich variety of environments and landscapes—including river, sea, bays, beaches, dunes, riparian forest, coastal lagoons, and river islands—in which innumerable plant and animal species live. A total of 764 species of flora and over 400 species of birds have been found in the delta, making it the most important seabird-breeding colony in the Mediterranean. It boasts significant biological diversity due to the convergence of marine, river, and underground waters (Catalunya Tourism, 2020).

This biological wealth draws human presence, which exploits the area in a traditional and sustainable way: its natural resources offer economic benefits for local communities through fishing, hunting, agriculture, stockbreeding, salt pans, and (more recently) tourism.

The park covers five municipalities (Amposta, Deltebre, L’Ampolla, San Carles de la Ràpita, and Sant Jaume d’Enveja) with a total population of 53,717 inhabitants in 2019 (Table 4). However, some of these municipalities are on the edge (such as Amposta) or even outside of the park (such as Aldea and Camarles) but are also part of the park’s promotion.

Table 4. Municipalities of the Ebro Delta Natural Park.

<i>Municipality</i>	<i>Population (inhabitants)</i>	<i>Surface (ha)</i>	<i>Surface of EDNP (ha)</i>	<i>% of EDNP</i>
<i>Amposta</i>	20,738	13,765	1,256.3	16%
<i>Deltebre</i>	11,482	10,348	1,868.74	24%
<i>L’Ampolla</i>	3,205	3,567	392.74	5%
<i>Sant Carles de la Ràpita</i>	14,789	5,323	2,573.53	35%
<i>Sant Jaume d’Enveja</i>	3,503	6,335	1,530.52	20%
Total	53,717	39,338	7,801.83	100%

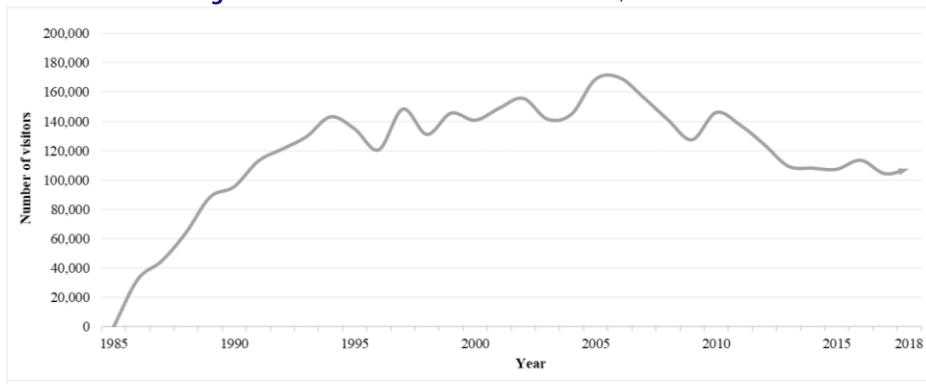
Source: Author’s own production from IDESCAT Statistical Institute of Catalonia, 2019.

Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

The park’s complexity is recognized with internationally prestigious designations: Bureau MAR list, Site of Community Importance for its halophyte plants, Special Protection Area (SPA) for birds, Natura 2000 site and Ramsar site (Convention on Wetlands of International Importance), and Biosphere Reserve. Moreover, it is one of the Top 100 Sustainable Destinations in the world (Natural parks of Catalonia, 2020a).

It also offers economic benefits for local communities through traditional exploitation of its natural resources, including fishing, hunting, agriculture, stockbreeding, and salt pans; more recently, tourism has been added to the list. Since its creation, the park has received 4,151,816 visitors (registered at the park information office), primarily in the summer months and holidays (Figure 22).

Figure 22. Visitors to Ebro Delta Natural Park, 1985-2018.



Source: Author's own production from Ebro Delta Natural Park Public Use Area. Statistical database. 2020.
Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

The birdwatchers come from all over the world to see and photograph unique species of birds; they often come in the months of October and November, when thousands of birds colonize the Ebro delta during their migration or at the beginning of their hibernation, although the birds are present throughout the year. Here is found the world's largest Audouin's gull breeding colony, one of the primary concentrations of common reed bunting (from the Mediterranean sub-species *Witherbyi*), and the Iberian Peninsula's second-largest colony of flamingos and of glossy ibis. The EDNP has twelve elevated viewpoints located in strategic places for ornithological observation, among many other services and facilities that present the important life of birds found here, both in quantity and in diversity.

Apart from its environmental dimension, the uniqueness of the delta can be seen in its local traditions, culture, architectural heritage, and history. The park has a wide network of paths that allow visitors to discover the most interesting places in the Ebro delta, whether on foot, by bicycle, on horseback, or by boat. Cycle tourism is a popular activity, and there are nine itineraries designed for cycling.

According to research carried out by Eurecat (2019), the main reasons that tourists have expressed a desire to visit the Delta during 2019 were: it is not crowded (12.2%), for the landscape and nature (11.0%), and for the

holidays (10.4%). The same research found that the activities performed most often were walking (68.8%), gastronomy (68.7%), and rest/relaxation (62.2%).

With all this, and with the involvement of the population in the development of tourism, in 2007 the park was accredited with the European Charter for Sustainable Tourism, the European quality accreditation that certifies that the development of tourism activity in a given territory is in accordance with environmental sustainability criteria. The core element of the charter is working in partnership with all relevant stakeholders to develop a common sustainable tourism strategy, along with an action plan based on a thorough situation analysis (Balandina et al., 2012). The Ebro Delta Natural Park received renewed certification of the European Charter for Sustainable Tourism for the period 2017–2021 (Juan et al., 2017).

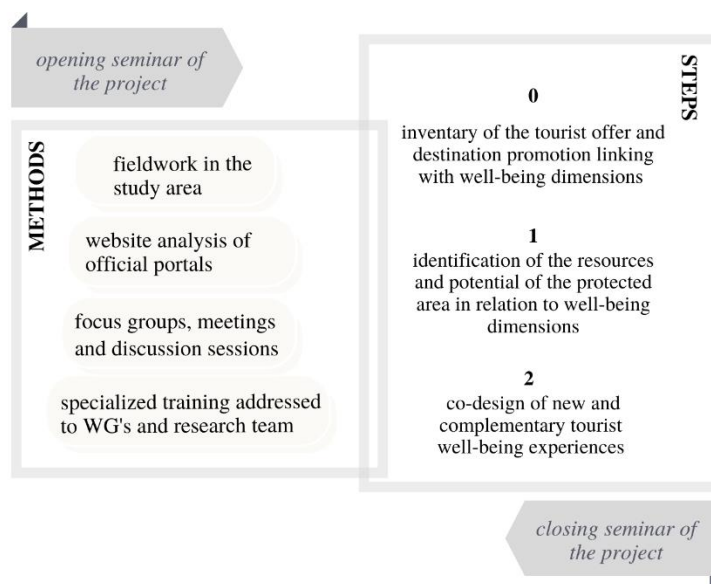
Undeniably, the park offers multiple and various resources that are formed by a mosaic of landscapes, by material and intangible heritages of incalculable value, and by a gastronomy based on products of quality and proximity (among other attractions) that must be rediscovered and seen with other eyes. Thus, this case study has been chosen for its multiple landscapes, its environment, its people, and its diversity of resources, that have not yet been analyzed according to the multidimensionality of well-being.

3.2. Methods

As we aimed to gather the perspectives of local stakeholders on the potential opportunities of EDNP for well-being, we developed a method research design integrating visual methods in data collection and analysis, using both virtual and face-to-face techniques. This chapter encompasses the first step of a much larger project. All the research, and especially this first step, is carried out under the umbrella of a co-creation process between the research team and the EDNP Working Group (WG), the latter being the generators of data and the designers of products resulting from the research.

The overall research process of the project, which is conducted in part of 2020 and 2021, is shown in Figure 23. A total of four mixed methods are carried out in the three different steps that respond to the main objective. To start, transparency, communication, and dissemination of results are objectives that cut across all phases of the project—especially the opening and closing project seminars, which are open to all audiences with the active participation of the research team and WG members.

Figure 23. Methodological process of the project 'Well-being tourism: Co-creating tourist experiences'



Source: Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

Step 0, which can also be called a preliminary step, consists of discovering what is being done in the project area in terms of wellness. Are protected area managers or tourist offices talking about well-being? Are they talking about the benefits that the park's resources bring to residents and tourists? Are there any tourist activities or experiences that promote well-being or some of its dimensions? This is a necessary and indispensable exercise on the part of the research team before conducting any research.

In this step, a total of 9 websites were analyzed: 5 municipality pages (Amposta Tourism, n.d.; Ampolla Tourism n.d.; La Ràpita Tourism, n.d., Deltebre Natural Attraction, n.d.; Sant Jaume Tourism, n.d.), 2 tourist pages of the area (Ebro Delta Tourism, n.d.; Terres de l'Ebre Travel, n.d.) and 2 official pages of the managers of the protected area (Natural Parks of Catalonia, 2020c; Terres de l'Ebre Consortium Environmental Policies (COPATE), n.d.). As a complement to the web analysis and as a way to resolve doubts, local agents of the protected area were called and met with.

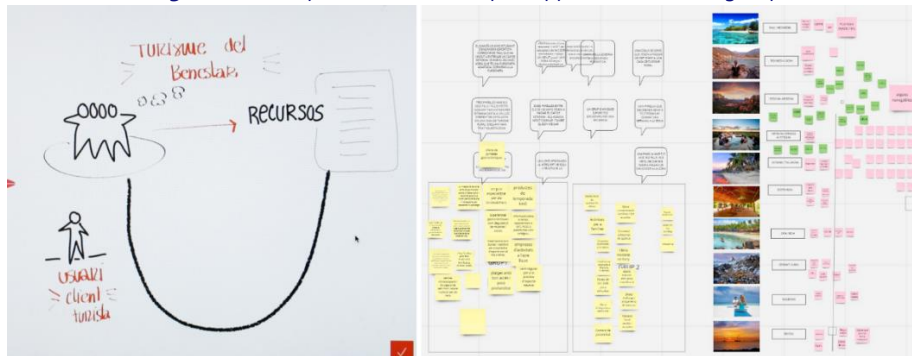
Previous to step 1, the EDNP WG was organized as a multisectoral group with 15 participants. The EDNP WG consisted of 1 representative of the Terres de l'Ebre Tourist Board, 6 tourism technicians from the city councils of the municipalities (Deltebre, Sant Jaume, San Carles de la Rapita, Ampolla, Aldea, Amposta), 3 representatives of the EDNP linked to the area for public use, 1 representative of the Environmental Policies Consortium of Terres de l'Ebre (COPATE), and 4 representatives of the Associació d 'Empreses i Activitats Turístiques del Delta de l'Ebre (AEATDE), which includes the accommodation sector, travel agencies, and 2 ecotourism experience companies.

To continue and to deepen the findings, step 1 consisted of identifying the tangible and intangible resources of the area linked with well-being concepts and dimensions, which we attained through focus groups. The zero and first steps enabled the second phase, which entailed the design of experiences related to this field with focus groups, meetings, and training.

In step 1, one exploratory virtual focus group was conducted with the EDNP WG. This method is a group interaction technique to produce data with a specific audience—in this case, the tourist sector (public promotion and private business) and managers of public use of the protected area. Prior to the focus group discussion among this small but diverse group, participants were informed of the aim of the session (to investigate opinions and attitudes toward the specific topic 'the resources associated with well-being provided by the EDNP protected area').

The discussion session involved two techniques, lasted approximately one hour, and was led by a moderator and facilitator who were experts in creative skills and visual thinking; they encouraged participants to comment on the topics in question. The focus group was carried out through the Zoom application and Miro, an online visual collaboration platform. Both techniques were conducted by an expert in creative skills and in using visual thinking methods and interactive virtual programs (Figure 24).

Figure 24. Example of visual techniques applied in the focus group.



Source: Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas: A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

In this session, the research team and the facilitator asked the participants to identify the resources that are associated with the multiple dimensions of well-being, according to their point of view and their experience in the field of management and promotion of the protected area. We did not ask directly for the resources, but these arose from the two techniques.

In the first technique—where the whole group was randomly divided into two teams—the facilitator gave some examples of different profiles of tourists and visitors who presented different preferences, objectives, and behavior regarding their use of the area (i.e., «*Joan is a young engineering student, as well as an athlete and a trail runner ; he decides to come to train for a weekend in the Ebro Delta. He comes with his friend Adrià, who has a caravan, where they will sleep* » ; «*a family with grandparents and children decide to come and spend the whole day in the area ; they like to eat well and want to do some activities* »).

In the second technique—where the members of each team were changed at random—participants talked about what the EDNP has that is similar to or different from the top 10 well-being destinations around the world (according to TripAdvisor 2018): Bali (Indonesia), Rishikesh (India), Sedona (USA), Hepburn Springs (Australia), Ko Samui (Thailand), Costa Rica, Goa (India), Zermatt (Switzerland), Maldives, and Ibiza (Spain). The aim was to identify the resources, landscapes, and products that make the study area unique and authentic.

3.3. Results: Defining the EDNP multidimensional well-being benefits

This section presents the results of the applied methodology, especially with regard to the two techniques in the focus group of the EDNP WG, complemented with information and citations derived from the web analysis and other meetings with stakeholders in the territory.

For one result of the focus group session, a word- and phrase-cloud is shown below (Figure 25). This is an image made of words that were reflected by the participants throughout the session. A total of 82 resources characterizing the area and its potential in terms of well-being have been identified. The size of a word shows how important it is for participants, how often it appears in the session, or if it was written on a virtual post-it.

In this sense, the following resources are ordered by the number of their repetitions: cycling routes (7), mussels (6), km0 (4), hiking routes (4), water sports (3), and oysters (3). These early results already indicate the two main activities in the territory: gastronomy and the outdoors/outdoor activities. From the contributions in the focus group emerged the idea that protected areas provide places for recreation and activities that allow society to be physically healthy, both with healthy eating and physical activities. Surprisingly, the river Ebro and the sea are not directly identified in the word cloud, while they are the source and basis of the gastronomy and much of the activities in nature. Still, other elements characterize the landscape of

"You will see very different landscapes depending on the season you come. This is due to the rice cycle. You will see blue scenes if you come in spring, green views if you come in summer, yellow landscapes if you come at the end of the summer, and brown scenes if you come in winter. (Deltebre Natural Attraction 2020) "

Finally, in terms of the importance of the social dimension, EDNP is viewed as a family tourism destination that facilitates social interaction in wonderful surroundings to enjoy with family or friends; this ensures interaction and connection between tourists and the local community.

Taking into account all the dimensions/components of well-being (environmental, physical, mental, emotional, social, and spiritual), the **Figure 26** sketches the resources and benefits that this destination currently offers, as shared by the focus group and by the website analyses. As seen in the figure, four of the dimensions are important, represented by the size and shape of the circles and the elements within them; the emotional and the mental dimensions are smaller and have few resources within them.

Figure 26. The EDNP's multidimensional benefits to well-being.



Source: Font-Barnet, A., Nel-lo, M. (2021). The Multidimensional Benefits to Well-Being Provided by Protected Areas:

A Case Study in Ebro Delta Natural Park, Spain. In: Scott, J.A. (eds). Protected Areas: Management, Benefits and Social Impacts. Nova Science Publishers.

According to the GWI (2018), the environmental dimension of well-being is directly accessed when a protected area is visited; concordantly, this dimension is the most highlighted. Outdoor activities and experiences stand out in many ways, as the park is a natural, protected space, with many possibilities for activities and benefits to physical health. It is a flat space with beaches, a river, lagoons, good weather, easy accessibility for all, and with a large network of routes.

"Peaceful walks along the coast, the Delta, or the interior of our coastline. A network of more than 1000 km, made up of low-intensity roads and highways... (Ampolla Tourism 2020)"

These activities allow visitors to enjoy the views and feel personal connection with an environment that provides multiple sensations and benefits, such as increased pleasant emotions, joy, greater optimism, a full presence through breathing, and new colors and smells.

"Gallop on a horse in the middle of nature is an extraordinary sensation... The breeze on the skin, the sunsets... What a feeling of freedom so pleasant (Ampolla Tourism 2020)"

This dimension, which includes nature, outdoor activities, tourism, leisure, and recreation, is also closely linked to the dimension that is labeled "physical", which includes aspects of physical health and personal care. Activities involving connection with nature allow visitors and locals to be in a state of well-being, enjoying the surroundings, seeking personal connection, and feeling in harmony in an environment that stimulates multiple emotions.

However, when we analyze the tourist opportunities of the park from the emotional or mental dimensions, we find no direct activities and resources aimed at or addressing personal transformation, development, or growth. While local initiatives in the emotional and mental dimensions are

emerging—including yoga, meditation, taichi, etc.—they are activities aimed at the local population and are not yet marketed at the level of tourist experience or product. In fact, the mental dimension is barely reflected in the figure, as no tourist activities or experiences in this dimension were cited by the participants in this field or found. It is important to note that the benefits of nature on a mental and an emotional level are many and important: nature stimulates mood, promotes creativity, reduces anxiety, decreases cognitive fatigue, increases concentration, strengthens the immune system, and helps to put aside negative thoughts.

As a result of all this potential, it is strategic to design and incorporate proposals and experiences from this dimension. Even as it is, it can be said that the characteristics that define the area itself (no noise, tranquil, calm, no pollution) make it easier for visitors to reduce stress and to reconnect with themselves and the environment.

The physical dimension is subdivided into three aspects: health, healthy eating, and spa and beauty.

Without a doubt, the food is a key aspect of this destination; the landscape of the protected area and a good part of its local population work directly in the cultivation, sale, and serving of rice, seaweed, mussels, etc. The EDNP offers a rich variety of local, healthy, gastronomic products with a denomination of origin (DO) to make traditional and nutritional dishes that represent the Mediterranean diet.

“The taste of our seafood is a combination of freshwater and salt water, providing nutrients for breeding these species. We have a wide variety of high-quality, local, fresh ingredients and traditional dishes. (Deltebre Natural Attraction 2020)”

One of the main attractive resources that covers the health dimension is the Botanical Garden Ecoherbes, which offers free and guided tours, courses and seminars, and tastings and tea tastings, among their many experiences.

"We are a great natural space next to the Mediterranean Sea and the Ebro Delta where you can discover more than 400 species of aromatic and medicinal plants that grow there." (Ecoherbes Botanic 2020)

However, in terms of spa and beauty (physical dimension associated with, among other things, massage and easy treatment), the component was not identified by the WG as among the options and resources associated with the protected area. Nonetheless, we did find that some hotels offer external services of this type. These are not spa hotels or beauty experiences, but the client can hire services through some hotels. Moreover, within the limits of the park, we did find a medical center, with services in the fields of psychology, dietetics, and physiotherapy, but the center does not have a direct link with the protected area and is not part of the offers to tourists.

In terms of the social dimension, the protected area is recognized and certified as a family tourist destination, as it offers a wide range of activities, experiences, and spaces that make this dimension widely enjoyable. All the benefits offered by the protected space can be enjoyed in the company of others. In this sense, a direct link can be drawn between the dimensions of connection and spirituality, from the point of view that this natural park allows visitors to spend time with family and friends as well as spend time alone.

"Our beaches are perfect to come with family or friends, but you can also come alone and enjoy your own space to relax. This will be a great stress relief activity."

Finally, if we also consider the component of volunteering and altruistic activities, it is important to mention that campaigns of civilization and environmental volunteering are promoted by the management of the park. Since 2001, the Association of Volunteers of the Park has been open to all people who are concerned with knowing, protecting, enjoying, and promoting the natural and cultural heritage of the EDNP. These activities identified within the social dimension contribute to other benefits, such as

cohesion, empathy, better social commitment, and shared activities and moments.

In summary, the diversity of the dimensions of well-being has been reflected in the word cloud and the multidimensional figure both directly and indirectly, but this destination does not currently directly promote the health and well-being benefits of this protected area, nor does it commercialize them through experiences, products, or tourist activities.

3.4. Discussion and Conclusion

The opportunities associated with well-being tourism at this destination are numerous and diverse. Every destination has something unique to offer well-being tourists across the physical, mental, social, emotional, spiritual, and environmental spheres. The gastronomy, the tradition and culture, the birds, the rice fields, the outdoor activities, and the friendly local community can also be considered activities of well-being and health tourism. Such aspects make the EDNP a good place to live and to visit, as it promotes the well-being of permanent residents and the satisfaction of tourists.

This research searched for the unique elements, authenticity, and singularity that the local population perceives about the Ebro Delta Natural Park. The park's gastronomy, diversity of unique natural resources, and offers of outdoor activities are its strengths related to well-being, according to the participants in the focus groups. However, we also found that intangible emotional resources (such as 'calmness') were background aspects that are very relevant in terms of connection, spiritual, personal growth, and contemplation.

The results clearly indicate that the park has great potential in the environmental dimension, as this is the dimension with the most weight and can offer innumerable benefits. The results also highlight the healthy eating component associated with the rich gastronomic diversity, given the multiple culinary events and experiences in the area. The social and spiritual dimensions stand out in the perspective that this is a space for social

cohesion, for sharing time and experiences with family and friends, and for carrying out volunteer activities.

According to our analysis, the components/dimensions that still need to be incorporated and developed in the park are “spa and beauty” and “mind-body”, with all the benefits at an emotional or mental level that these can offer. While local initiatives were observed, they were not associated with the resources and benefits of the park, nor were they marketed as well-being or wellness activities.

The website analysis of the promotion and management pages of the protected area confirms that the word ‘well-being’ does not appear directly, but the pages do use adjectives closely related to holistic health—such as ‘enjoy’, ‘stress reduction’, ‘magic’, ‘positive energy’, ‘tranquillity’, ‘take a pause and relax’, ‘feel’, ‘emotions’, ‘sensations’, and ‘freedom’—as they commercialize and promote the activities and the destination.

This is the current research’s main result: the potential resources of the area are indirectly related to the diversity of well-being dimensions, as this destination does not currently promote the health and well-being benefits that this protected area provides, nor does it sell experiences categorized as “well-being”. Nevertheless, the results show that this area is characterized by a set of opportunities for well-being, and it has a lot of potential among the new trends in well-being tourism, which requires trips to be experiential, sensory, transformative, km0, slow, mindful, or spiritual.

This first phase of the project allows the research team to move to step 2, which consists of working with the WG to design and create new tourist experiences in well-being.

4. A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park

Protected areas (PAs) offer a wide range of health and well-being benefits. These benefits are closely linked to the objective of providing genuine experiences that intend to involve tourists across the physical, mental, social, emotional, spiritual, and environmental spheres of well-being. This article is part of a research project titled “Well-being tourism: Co-creating tourist experiences”, which is being carried out between November 2020 and June 2021. The goal of this project is to design new tourist well-being experiences within the framework of a methodological participatory process, identifying opportunities for well-being in three destinations in Tarragona Province, (south) Catalonia. Two of these destinations are PAs, and these are the focus of this research, which aims to explain the development process of co-designing well-being tourist experiences in the Ebro Delta Natural Park (EDNP) and the Els Ports Natural Park (EPNP). We have developed a co-design method that integrates visual methods in data collection together with the participation and involvement of public and private agents from PAs. The resulting experiences can be included in the proposals that the parks offer to visitors; above all, they will drive efforts to include, reinforce, communicate, and share the health benefits of PAs.

Font-Barnet, A., Nel-lo, M. & Rovira-Soto, M.T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. *Journal of Ecotourism*. DOI: 10.1080/14724049.2022.2136188.

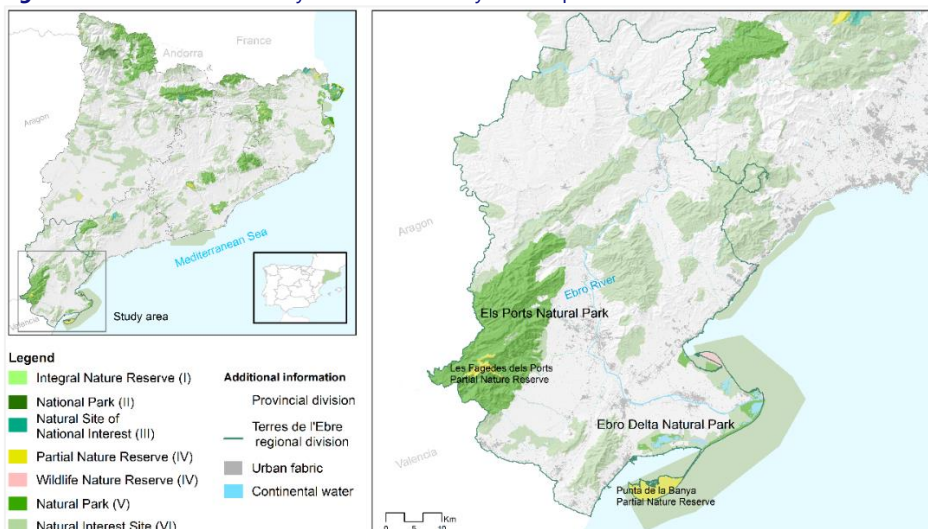
4.1. Study Areas

On the global level, visits to PAs have been increasing since the 1990s, reaching unprecedented numbers (Farías-Torbidoni et al., 2020). According to EUROPARC Spain’s statistics, almost 15 million people visited Spanish national parks in 2019 (EUROPARC-Spain, 2021), and more than 4 million people visited Catalonia natural parks in 2019 (Natural Parks of Catalonia, 2020c).

According to Law 12/1985 on natural areas, passed on 14 June, the System of Protected Natural Areas of Catalonia aims to define, delimit, and protect those areas rich in biodiversity, natural heritage, and in need of special protection for their conservation. The PAs cover a total of 1,054,927 ha of the total area of Catalonia, almost 33% of the territory; 93% of this area corresponds to land area, while the remaining 7% is marine areas. Catalonia's PAs, both terrestrial and marine, are divided into six categories of protection, ordered according to usage restrictions and level of protection), equivalent to those established by the IUCN.

The 14 Natural Parks (NPs) (IUCN category V) represent 8.2% of Catalan PAs and are the category that occupy more surface area (263,268 ha.) than the other categories”. Unlike other types of PAs (e.g., national), NPs have a high level of humanization and, despite this, have maintained natural values and relevant reasons for their protection. Specifically, the study areas are two NPs in southern Catalonia: the Ebro Delta Natural Park (EDNP), which includes the Punta de la Banya Partial Nature Reserve and different Wildlife Nature Reserves, and the Els Ports Natural Park (EPNP), which includes the Integral Nature Reserve of Les Fagedes (Figure 27).

Figure 27. Location of the study areas within the system of protected natural areas of Catalonia.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. *Journal of Ecotourism*. DOI: 10.1080/14724049.2022.2136188.

The EDNP is a PNA created in 1985 and covers an area of 7,802 ha. It is the largest wetlands area in Catalonia and its lands are totally flat, giving it a distinctive appearance and unique landscape. The Ebro Delta is listed in the Convention on Wetlands of International Importance, particularly as a habitat for waterfowl (RAMSAR). The area of the influence of the park covers 9 municipalities, with a total population of 53,717 inhabitants in 2019 (Natural Parks of Catalonia, 2020c).

The EPNP is a mountainous mass characterized by a wealth of natural values and exceptional biogeographical interest. It has been categorized as a natural park since 2001. “*Les Fagedes*” (Beech Forest) Nature Reserve is part of the park, which is the southernmost beech forest in Continental Europe. Of the park’s 35,050 hectares, just over 13,000 are privately owned: the rest are public forests that belong to the town councils or to the Government of Catalonia. and 50,410 inhabitants live in the area of influence covering 9 municipalities (Els Ports Natural Park, 2021).

Both territories are part of Terres de l’Ebre, a region that was declared a Biosphere Reserve by UNESCO, thanks to its richness of landscape, its representativeness of Mediterranean ecosystems, and its model of biodiversity conservation. At the level of European recognition, since 2007 the EDNP has been accredited by the ECTS with 43 accredited ecotourism companies,. In the case of the EPNP, it is now starting the process to be accredited. Both parks are destinations with rich local gastronomy and cultural values (textile craft workshops, traditional agriculture and fish farms), and ideal places for activities and sports surrounded by nature, particularly hiking, cycling, bird watching, water sports, and forest bathing only in EPNP.

In terms of visits, the EDNP had 442,717 visitors in 2019, making it – one of the longest-running parks – the second most visited natural park in Catalonia. Els Ports, the most recent to be declared a natural park, recorded 234,000 visits. In any case, these numbers consider only visits to the ecomuseums and the Park Offices. The EDNP visitor typology was 48% family, followed by 28% couples and 13% friends. In the case of EPNP,

families represented 33% of visitors, followed by 24% friends and 23% couples. In both cases, 70% of the visitors came from Catalonia and 17% from the rest of Spain. The main international market is the French, which in the Delta represented 8% of the total number of visitors. The main reason for travel is the holidays for more than 90% of visitors to both parks (Natural Parks of Catalonia, 2020c).

The inclusion in this study of the two parks is justified in that they are the two most important PAs in the province of Tarragona in terms of number of visits, are part of the “biosphere reserve” and are both betting on a strategy for sustainable tourism for the well-being of the territory and the conservation of its landscape and identity of the local society.

4.2. Methods

Co-design is associated with and implies concepts such as participation, collaboration, cooperation, user engagement and creativity. Participatory design is an attitude; it consists of developing social awareness through active participation in acknowledging the need for change and in identifying problems and demands (Sanoff, 2011). In any case, the methods seek to guarantee that the results satisfy the interested parties’ real needs and, above all, that the results and proposals are applicable and usable.

In order to achieve user/participants-engagement and to gain an in-depth understanding about the group, the territory and the activities that take place in it, developing a focus group is very appropriate (Font-Barnet et al., 2021). Creative methods are also key to unlocking the full potential of a co-design process; workshops, visual diaries, and mind-mapping are innovative and visualizing ways of collecting information for service and product design (Miettinen, 2009).

We have developed a design research method that integrates visual methods into data collection and analysis, using both virtual and face-to-face focus groups involving participants who were public and private agents from two PNAs. The process was created and carried out by the research team with the external support of trainers.

Although the workshop of the co-design process focuses on sessions of 3.5 hours held in the EDNP (May 18, 2021) and EPNP (June 1, 2021), it is part of an eight-month project with key previous phases to successful co-design sessions. The development project started in November 2020 with a virtual open seminar inviting PNAs managers, municipalities, destination management, tourist organizations and entrepreneurs from the various case studies.

In the first phase, the findings of meetings, fieldtrips, website analysis, and literature review from the beginning of the project allowed to develop a first workshop as a previous step consisted of identifying potential resources for well-being in a virtual focus group with working groups (WGs) of PNAs. The WGs were composed of 8–10 representatives of agents from the tourism and well-being sectors of each destination. The research team together with the managers of natural parks determined the key groups, profiles, and agents for this regarding the research topic, with the suggestion that each group be represented by at least one person. The local agents were private companies and organizations offering experiences and products such as forest bathing, natural cosmetics, environmental education, nature guides, ecological groups, hotels, and even experts in natural medicine and psychosocial well-being. Representatives of municipal and tourist offices also participated, as well as the managers of the PNAs.

The second phase of the project consisted of establishing a specific training for the WGs members. Virtual conferences (6.5 hours) were held by experts in the new trends and the benefits of well-being applied to tourism in the following areas: Mindfulness, Forest baths, Natural accompaniment in health, Sport and fitness, Wild gastronomy, and Medicinal plants; additionally, a face-to-face training of 2 days (16 hours) in EDNP was held to analyze the resources of the territory and its interpretation by Naturalwalks (n.d.).

Contextualized the phases of the project, the co-design of experiences has been developed in the third and final phase of the project and it is composed by six steps (figure 28).

Figure 28. Methodological process to co-design well-being experiences.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. *Journal of Ecotourism*. DOI: 10.1080/14724049.2022.2136188.

First, information related to the resources and equipment of the natural park was collected into mental maps, which represent a multidimensional reality formed by the basic ordering of ideas. It is a collective output and a graphic organizer where information is integrated using visualization techniques, that enables creating links among participants (Muñoz-González et al., 2014).

The mental maps were not blank at the start of the session; the elements that had been collected throughout the project, both in virtual sessions and other questionnaires with the working groups, were already

shown. The participants had the challenge of identifying and locating tangible and intangible resources, as well as determining the equipment, services, and infrastructure that would serve as the basis for new experiences. In this last point, concerns, problems, and proposals for improving the management of the natural parks arose.

Then, before starting the process of co-designing experiences, a 30min meditation was conducted to open the minds of the participants and awaken their creativity, led by Tarrés (2021), an expert in mindfulness, well-being, and happiness. From here, the experience began to be designed in groups of two or three people from different activities and sectors.

To design the experience, a form of 9 elements had to be completed. The collaborative form to design the experience is the result of years of research and teaching on this topic; among the many relevant bibliographic references are the guides published by Northern Ireland tourist board (2019), Failte Ireland (2014), and The English National Park Experience Collection (2019). The form lists the essential aspects that need to be thought about, valued, and worked on.

The title of the experience is important; it should be appealing and suggestive, and although it is put as one of the first step, it is not fully defined until the rest of the sections have been worked on. The tangible resources, intangible resources, and equipment on which the proposal will be built must also be identified. Knowing these resources helps write and describe the story.

Specifying and outlining which market and segment to which the experience will be offered is key to meeting the motivations and needs. An important step included in the form that deserves special attention is describing what they will do and what potential tourists will feel in the experience, as well as how emotions and the senses will be incorporated into the experience.

Another step is the organizational aspects, such as timing, frequency, schedule, group size, etc. At this point, it was interesting that the WGs, as

experts who know the area, reflected on how original and innovative their proposal was and what added value the experience would bring compared to those currently offered.

The groups were required to detect possible multisectoral synergies and collaborations in carrying out the experience, and to suggest special promotions and communications in line with the characteristics of the proposal.

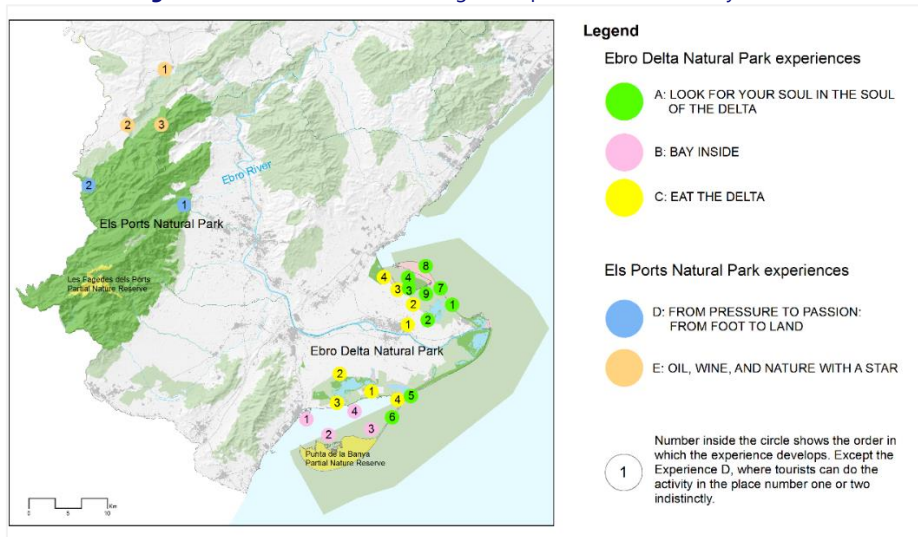
The last point of the form focused on the benefits of well-being. The designers of the experience must assess the dimensions of well-being – spiritual, mental, environmental, emotional, physical, and social – that relate to their experience. Although the members of the working groups had received training in well-being, they were reminded of the meaning of each dimension, which was synthesized objectively.

4.3. Results: Co-designed experiences

This section shows the results of this methodology applied in PNAs: a total of five experiences co-designed among the participants that arose from the 3.5-hour co-design session, which is part of a 7-month project. The proposals for experiences are detailed below and are related to the dimensions of well-being as classified by the participants themselves.

In groups of 2 or 3 people and following the 9 elements of the form explained above, five experiences (three in the EDNP, two in the EPNP) have been created as a result of the whole participatory process. [Figure 29](#) shows the location of these experiences, which are located particularly within and on the limits of the protected territories.

Figure 29. Location of the co-designed experiences in the study areas.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. *Journal of Ecotourism*. DOI: 10.1080/14724049.2022.2136188.

First, the experiences of the EDNP will be presented, which are located mainly in the protected and coastal areas of the natural park—highlighting the ends of the delta, known as the horns, but not at the mouth of the river.

Experience A is titled “Look for your soul in the soul of the Delta”, and the intended value is that visitors live the essence of the delta. It is an experience that encompasses various activities to enjoy with the five senses and is aimed at adults who want to free themselves from tensions and emotional and professional burdens. It includes a combination of bike rides through the rice fields, canoe trips to be in contact with the Ebro River and the silence, a meditation on the sunset on the beach, and tasting of local products (mussels, oysters, etc.).

With a short but powerful title, “Bay Inside” (experience B) is a proposal of peace and serenity in the Alfacs Bay of the delta aimed at both wellness-conscious and stressed people. Lasting 3–4 hours and taking place at sunrise or at sunset, the experience consists of a sailing route with bodily, sensory, and gastronomic experiences. It offers a communion between the body and sailing slowly back inside the bay, embraced by the sea.

Experience C, “Eat the Delta”, is a completely different proposal than the previous ones; it is aimed at companies, both workers and managers. Addressing the well-being of the company’s human team, this experience aims to improve cohesion and multilevel relationships, and ultimately allow tech disconnection and the reduction of stress during a day off in the work week. By bike, by kayak, or on foot, the team will have to achieve common goals by various roles, from looking for mussels and fish to loading sacks of rice to cooking paella.

The experiences designed in EPNP are called “From pressure to passion: From foot to land” (D) and “Oil, Wine, and Nature with a Star” (I).

Experience D also targets an audience under pressure at work. In solitary forests, in contact with water and open spaces, these individuals will seek body consciousness (right part of the brain), connecting with themselves through nature and stimulating the senses for recovery. “*Tocar de peus a terra*” (touch the land with the foot) is a Catalan expression that means you must see the reality of things; you are in another world and you need to value the little things without pressure and in a simple way. Therefore, this experience incorporates simple activities, including picnics in the woods with local products, organic cotton clothes, or olive oil massages to relax and reflect.

Finally, Experience E is a proposal aimed at people with an interest in fauna-watching and a high purchasing power. It is a gastronomic experience, located in a natural place of high spiritual value to pick up the flavors, smells, and sensations of and with the environment. With an interpretive guide, they will observe the fauna, get to know oil mills, and have dinner at a rural accommodation with a local chef who has a Michelin star.

Among the different proposals are a series of common points that should be highlighted. The experiences are aimed at middle-aged adults with medium–high purchasing power, who engage in the experience without children. The experience work with small groups (6–15 people)

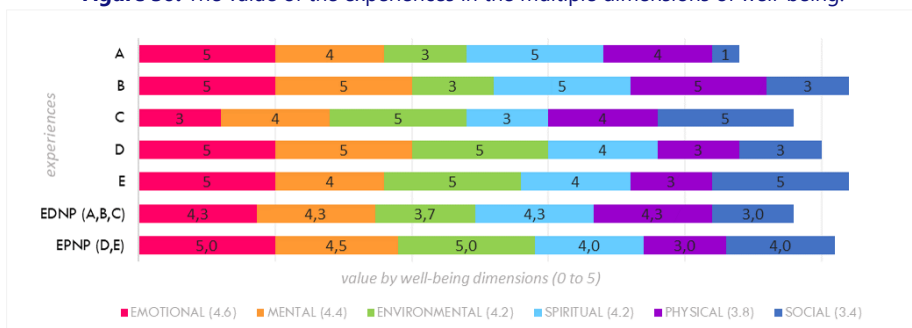
from a segment of tourists who are cared for and spiritual, as well as others who are in a situation of emotional burden or stress, such as workers. In line with the seasonal adjustment of tourism, the proposals are designed to be offered during the high season and during the months of the highest concentration of visitors, specifically during the summer months (June, July, and August), although the preferred seasons are spring and autumn, and some proposals can even happen in winter.

The members of the working groups developed experiences that involve staying one night in the natural park or its area of influence, which spreads out the distribution of economic benefits among employers in the area and increases visitor spending. Finally, most experiences require a new professional profile related to meditation, yoga, etc.

The value of experiences in the multiple dimensions of well-being

The last step for the creation of a well-being experience was to classify the experience along the dimensions of well-being. The 19 participants were asked to rate each dimension from 0 to 5—with 0 being that the experience does not give any value in the dimension, and 5 being that the experience fulfills the dimension to the fullest—depending on the goal, value, and activities that made up the experience. Figure 30 shows that the five experiences are classified as complete and multidimensional, but with differences and aspects to comment on.

Figure 30. The value of the experiences in the multiple dimensions of well-being.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T. (2022). A methodological proposal to co-design well-being experiences: The case of the Ebro Delta Natural Park and Els Ports Natural Park, Catalonia, Spain. Journal of Ecotourism. DOI: 10.1080/14724049.2022.2136188.

The emotional and mental dimensions are the most addressed, with average values of 4.6 and 4.4, respectively. Participants explained that the experiences would increase emotions such as joy, fondness, pleasure, and enjoyment, along with positive thoughts and optimism. Visitors in search of emotional balance would find full presence through breathing, smelling, observing colors, and noticing textures. In addition, at the level of mental well-being, experiences would reduce symptoms of depression, stress, anxiety, fatigue, anger, and irritability, and lead to setting aside negative thoughts and worries.

While all the experiences are in PNAs with great ecosystem diversity, the environmental dimension ranks third (tied with the spiritual dimension), with an average score of 4.2, although the experiences of the mountain area give it the maximum value. It is true that all the experiences promote the care of the environment and nature and are in line with sustainable tourism, but this is not the primary goal of the experiences, especially in the case of EDNP.

The spiritual dimension has a very high value in A and C (both located in EDNP), which aim to support finding inner peace and listening to the self. It should be noted that although experience D has no activity that directly addresses spirituality, this experience is located in a site of high spiritual value with fountains and caves —the Pla de Refoia i Els Montsagres, a mountain called “*Montsagres*”, that is, sacred mountains.

Finally, the social dimension has the lowest average value, primarily because experience A gives it a value of 1. This experience sought the opposite of creating social bonds, but instead to find oneself and attain full individual presence. Experiences C and E stand out in this dimension; they seek to address business and companies’ groups to improve social cohesion and reduce work tensions.

4.4. Discussion and Conclusion

Applying a process of creative and participatory co-design to create well-being experiences has been key in meeting challenges and providing opportunities to the two PNAs in southern Catalonia.

The applied methodology seeks a transformative change through the simultaneous processes of action and research in an interactive way. The main benefits detected are: (1) sharing knowledge from the academy with the territory and creating awareness of the potential and close relationship of PNAs and well-being; (2) the workshop dynamics enable creating collaborations and synergies; and (3) innovative and original experiences created by participants have emerged.

We confirm that the visual and design methods carried out resulted in detailed experiences for well-being responding to the certainly purpose of this research: to create innovative experiences with potential viable application. The meditation session to stimulate creativity was successful in relation to innovative proposals on this topic. The whole participatory process was visually enhanced with activities that were being conducted by a visual thinking expert. These visual results enabled collecting all the emerging ideas that provide value to all participants and their own successful ideas.

We validated the form for the design of well-being experiences with its key components: (1) title of the experience, (2) resources and equipment, (3) market and segment, (4) objectives and value, (5) organization, (6) details and elements that mark its differentiation, (7) collaborations and synergies, (8) communication and promotion, and (9) dimensions of well-being.

Both areas share the category of natural park, which generally aims to make human activity compatible with the preservation of the natural environment. In this sense, all experiences respond to the realities and the potential of each park, and above all, to the needs to diversify the offer and to meet the rising trend/demand of well-being tourism.

The project has made it possible to reread tangible and intangible resources – i.e., the essence of those places – in a multidisciplinary way, with the potential they have in terms of well-being and following the principles of an experience: it must be truly memorable, unique, genuine, and different, combining all the senses, involving interaction with the destination, offering the opportunity for tourists to play an active role (Vada et al., 2019).

Local gastronomy – healthy food and Mediterranean cuisine – and blue spaces are the basis of all experiences. These territories present scenarios that are great opportunities to promote healthy eating habits through the consumption of natural products, helping to promote KM0 products and quality brands of local products, and making it easier to emerge collaboration networks between the tourism and agricultural sectors, with gastronomy becoming the cultural and identity essence. The Mediterranean Sea, the Ebro River and bays are the blue spaces of the EDNP, while the rivers and river pots stand out in the case of the EPNP.

Diverse flora and fauna (especially birds) and nature connection are key aspects for the co-creation of experiences in both PNAs. The territories make up a landscape diversity that enables future offers of highly varied tourist experiences of well-being—be it in the mature forests, immense mountains, and high peaks of the EPNP or the infinite landscapes, pristine beaches, and rice fields of the EDNP.

The activity of classifying the experiences along the dimensions of well-being has served to share knowledge about and promote aware of the various dimensions of well-being, helping learners understand each dimension and justify the details that lead to valuing one dimension more than another. Participants stated that the experiences they created can bring well-being to society, thanks to the nature of the activities and because contemplating natural landscapes promotes the recovery of cognitive functions, thereby reducing stress, finding emotional balance, sharing community, and ultimately finding well-being.

Additionally, the results show that the opportunities and benefits associated with well-being are numerous and directly affect territorial development. Well-being is an engine of economic growth (creation of workplaces, promotion of local products, etc.), as well as is health; it promotes sustainable tourism and the protection of natural and cultural assets. Ultimately, it improves quality of life, for both locals and visitors. All the experiences created here promote the joint work among several companies of the territory, from rural lodgings to experts in well-being and mindfulness, renters of bicycles or kayaks, guides, interpreters, restaurants, wineries, oil mills, and more.

To conclude, the experiences have the common point of being proposals that can be applied greatly and that can be commercialized and promoted in the short term, although they need the support of the public entities managing the PAs and the tourist management organizations. These experiences seek to expand the current offer to strategic segments outside the main current segment which is the family. The research team proposes that a section on well-being experiences is included in the different promotion platforms of the territory; this can strengthen the image of the park as a place for well-being and supports local initiatives, and, above all, it will drive efforts to include, reinforce, communicate, and promote the benefits for the health of the PAs. Future research projects could deal with the development of these experiences, but the execution and follow-up should be encouraged by the territories and local businesses.

The results of this study might be used as a methodological toolkit for the creation of well-being experiences, which could be replicated to different types of protected areas. In future research, it would be interesting to measure the effect of mindfulness practices in creating experiences through longer sessions, such as a retreat to stimulate creativity. Also, blue spaces have been reflected as key places for developing these experiences, and there is a lack of scientific research on this topic.

5. Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and visitors' involvement

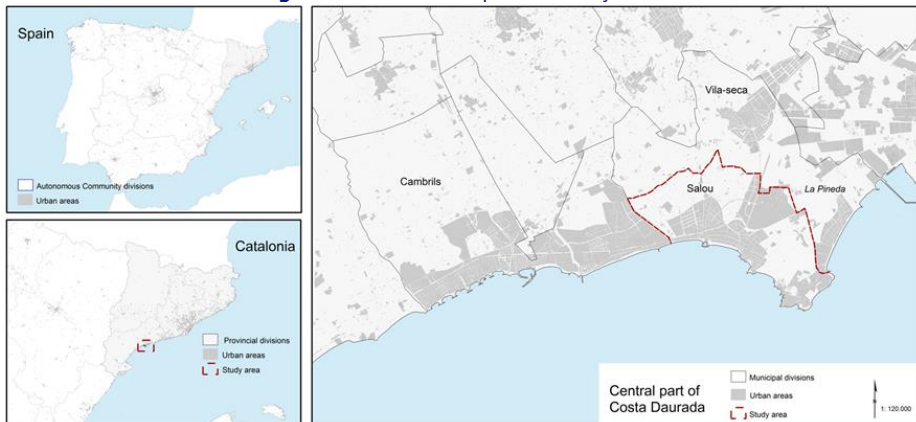
The sea, the coast, the beach and, in general, the blue spaces, are key locations for tourist activities and experiences, and there is increasing scientific evidence that shows an improvement in well-being directly associated with living, visiting, being near, and/or doing activities in blue spaces. However, the maximum potential benefit of these areas is not always obtained, either because they are not accessible, lack facilities or, simply, because they are not known enough. In an attempt to provide scientific knowledge and transfer to the territory in this topic, the main aim of this article is to provide a mixed methodology to identify, characterize and mapping blue spaces in coastal tourist destinations, and analyse which benefits they bring and how to enhance them for tourists and residents. To this end, a qualitative and quantitative methodology is applied in Salou (Spain) – as a pilot experience –based on surveys and participative workshops with the involvement and co-operation of both public and private local agents. Opportunities, new proposals, and challenges are considered in search of a balance between the benefits of the water and nature, the well-being of locals and visitors, and the sustainability of the destination.

Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T. & López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Santos, M.C., Santos, J. A. c., Gonçalves, A. R. & Solano-Sánchez, M.A. (Eds.). *TMS Algarve 2022: sustainability challenges in tourism, hospitality and management – Tourism & Management Studies International Conference*, Olhão, November 16-18, 2022. DOI: 10.34623/eryw-0423.

5.1. Study Area

In order to provide a methodology applicable to coastal tourist destinations where the sea is the predominant blue space, a tourist municipality located on the Costa Daurada, in the south of Catalonia (Spain), is chosen as a pilot experience (Figure 31).

Figure 31. Location map of the study area.



Source: Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16-18, 2022.

The municipality of Salou, as a sun and beach destination, is currently facing a profound shift in the competitive paradigm that the effects of the recent pandemic have only reinforced (Ministry of Industry, Commerce and Tourism of Spain, 2021).

Salou is a town in the north-west of the Iberian Peninsula that is joined to the Mediterranean by means of a singular geographical incident which identifies it and which has conditioned its history up to the present day, i.e. Salou Cape or *el Cabo de Salou*. Due to its shape and location, it is a typical starting point in historical naval episodes, a refuge for numerous pirates between the 15th and 18th centuries, a shelter for numerous military defense buildings during the first wars in the 20th century, a port for many fishermen and over the last decades, a destination for millions of tourists who find the town is the ideal location for spending their holidays.

It is worth mentioning that the beginning of tourism in the town was linked to the Discovery of the therapeutic properties associated with the sea and swimming, which attracted numerous groups of people who wanted to enjoy this healthy environment. In 2019, the town received more than two million visitors a year, mainly from international origins, which meant more than 8 million overnight stays concentrated mainly in the summer season (data from 2019 provided by Salou Tourist Board).

Salou is the capital of the *Costa Daurada* and it is one of the main Spanish “sun and beach” destinations. This traditional model was complemented more than 25 years ago with the entertainment offer supported essentially by the presence of Port Aventura World, Spain’s leading theme park and one of the most popular in the whole of Europe. Through the park, the town experienced its latest large-scale transformation, consolidating entertainment as a complement to a traditional model that was looking to differentiate its offer.

However, the traditional model continues to identify the destination and its main attractions. On the one hand, the beaches continue to be the main asset that Salou has to offer its visitors, with a standard of excellence proven by numerous certificates that recognize them annually, such as the quality of the water or the presence of multiple complementary services. Leisure is also including in these attractions, as there is a wide range of sea-faring activities for everyone. The climate with average temperatures over 15° provides the necessary comfort for being able to enjoy the outside areas.

The described context makes the town the ideal environment for accommodating tourist activity throughout the year and makes it difficult to understand the current seasonal-based activity that is evident mainly to the profile of the main visitors, i.e. families.

Salou was the first Catalan destination to be certified as a Family Tourism Destination, nearly 20 years ago. This aspect was a turning point for the town since it found a clear position for aligning and identifying a large part of its public and private offer. The destination has also been certified in areas such as football (2013), sailing (2016), cycle tourism (2018), golf (2020), and triathlon (2021). Deciding to promote sport as the town’s main approach to breaking down seasonal activity is widely shared and supported by the private sector, which provides first-class infrastructure that makes Salou a unique environment for doing sport on all levels. Salou has also joined Red DTI (Smart Tourist Destinations) which implies a constant commitment to supporting and improving innovation, accessibility and sustainability.

With hostelry beds renewed in recent years and three first-class campsites, accommodation is one of the main attractions for families who find affordable prices and very pleasant environments adapted to their needs. The accommodation sector has 57,136 beds between hotels, hostels, apartments and campsites, more than doubling the local population of around 28,000 inhabitants, and this shows the importance the tourist industry activity has in the town.

The mobility restrictions within the COVID-19 pandemic highlighted the need to reflect upon the destination's promotion and strategic actions. The behaviour of residents and tourists is characterized by a new demand for the preservation of the landscape and the maintenance of ecological quality and historical and cultural heritage. The answers to these new demands will be translated and will require a strategy that puts sustainability at the center of tourism policies, greater environmental protection and revaluation of the territory and a more important assessment in experiential terms of the local component that will be a key factor in the differentiation with respect to competing destinations (Catalan Tourism Agency, 2017).

Within the COVID-19 pandemic, DMOs led to reinforcing an approach started in recent years, highlighting the natural and sustainable side of Salou based on recognised assets such as the beaches, added to new attractions such as gastronomy, the landscape and historical narrative, identified as the town's main resources today for development and differentiation.

When combining the willingness to enhance the value of nature and adding the challenge of ending seasonal activities, well-being has been identified as a strategic opportunity in the long-term (Exceltur, 2019), which will make it possible to offer a differentiated added value that is very much in line with the essence of the destination and the foreseeable post-pandemic tourist motivations.

5.2. Methods

The methodology chosen in this study is a mixed type, combining qualitative and quantitative techniques, with locals and tourists' involvement. A participatory approach to tourism implies a greater involvement of the community to create high value-added components at the destination (Hatipoglu et al., 2016).

First of all, for obtaining information it was essential to form a working group with representatives from the town's public and private area who have been monitoring the project together and articulating and agreeing the different sessions and techniques planned. In this sense, this round table is made up of representatives from the local government in Salou, entrepreneurs and organisations in the field of health, environment, tourism and nautical and aquatic activity (sport and recreation), with which two workshops are held.

In the initial session, the key concepts to blue spaces and coastal well-being were explained, and then the blue spaces, blue infrastructure and activities associated with the Salou case study were identified. This first session led to the first elements to be included in the mapping, which will be extended by gathering and analysing blue space planning documents, and the field work, mainly.

The second workshop with the working group was part of the final working day on the project, a face-to-face seminar held in the Salou Nautical Club on 31 March 2022. In the morning, the session consisted in disseminating the results obtained with the project framework and experts discussing blue tourism, blue spaces and the well-being of the local community in coastal destinations. The second session with the working group was part of the final working day on the project. The session-cum-workshop was aimed at validating, completing and discussing the results of the surveys and mapping. In this session, new proposals and opportunities were revealed for the tourist sector and the local community with respect to improving the blue infrastructure and new experiences in blue spaces.

Secondly, the quantitative research is based mainly on carrying out face-to-face surveys aimed at the tourists and residents in Salou, and it is aimed at analysing the benefits of living near the coast and/or using the blue spaces. The main areas included in the survey will be closely related to the potential benefits of blue spaces such as recreation and tourism, physical and mental health, social interaction, educational benefits, quality of life, etc. (see [Appendix A.2](#)).

The survey carried out contained 28 questions organised into a first block referring to general information about the survey respondent and maintaining their anonymity (user profile, residence, state of health and well-being), and a second block on the user's relationship with and assessment of the blue space (interaction, activities, satisfaction with services and infrastructure). A total of 247 surveys were carried out by 3 interviewers, in person, with users who were passing by the defined intervention points on the various beaches in the town of Salou, throughout the month of December 2021. The surveys were collected using the Survey Monkey program. The survey lasted about 10 minutes and participants had to give their consent regarding the processing and use of personal data prior to starting the survey.

5.3. Results: exploring blue spaces for locals' well-being.

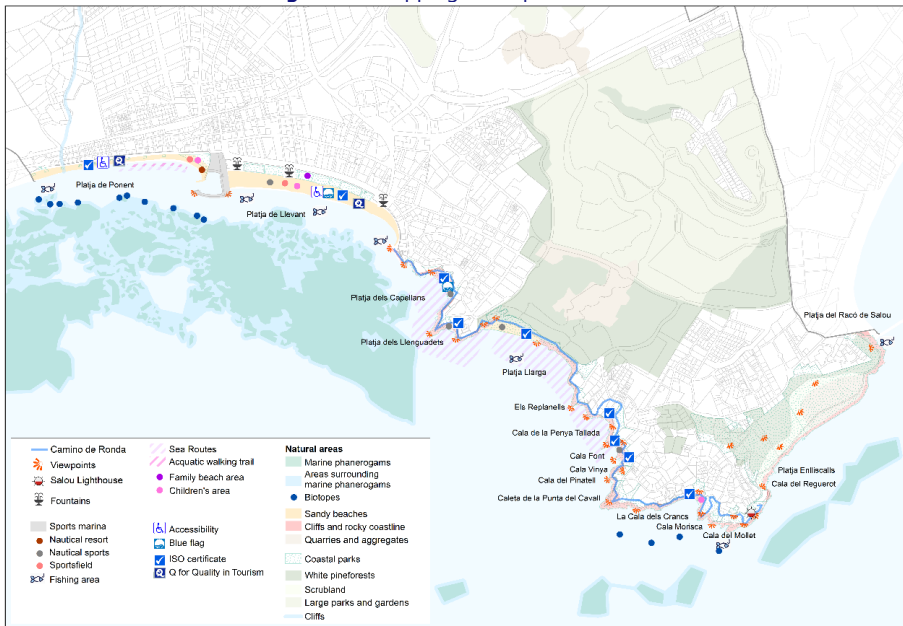
This section comprises the results obtained in the applied methodology, particularly with respect to the set of sessions with the working group and field work, which made it possible to map the characteristics of the blue spaces in Salou, and to design and apply surveys to the blue space users.

5.3.1. Mapping Blue Spaces

According to literature review, the basis of our study is that blue spaces go beyond those "natural" spaces with water, such as the sea, lakes, or rivers, but rather imply everything that has or is related to the natural, artificial, or urban blue space. The infrastructures, equipment, services, activities, and certificates are key elements to characterise and map the blue spaces destinations.

The main blue space Salou has is the Mediterranean Sea, that characterises its coastline that is delimited by the morphology of the coast and the Cape of Salou, which are the main elements making up the natural and anthropic landscape. This provides a backdrop for numerous tourist activities and resources related to the water and provides numerous activities for the well-being of tourists and residents (Figure 32).

Figure 32. Mapping Blue Spaces in Salou.



Source: Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16-18, 2022.

The Cape of Salou, on the town's northern coast, is an area of great cultural and historical interest, and it has been declared a site of geological interest. The morphology of this coast lends itself to the existence of 25 beaches and bays, some sandy, other with cliffs and rocky coastlines, and the natural area is characterized by Mediterranean forest with white pine, maquis and scrubland.

As for its marine area, it has a large extension of seagrasses, particularly Posidonia meadow, an aquatic plant endemic to the Mediterranean and which plays a very important role sedimentary dynamics (with their roots, these plants help to keep the sediment still), and they are

important areas in terms of oxygen production, breeding and shelter for many animal species. Also, there are 14 marine biotopes, structures of artificial homes installed in strategic places to enrich the marine flora and fauna, whereby these areas and types of fishing are regulated and specific.

Fountains are also a key element in characterising blue spaces; an urban maritime walkway on the Llevant Beach has three fountains that allow you to see, hear and play with the water in different shapes and colours, a spectacle of water, light and music.

The main activity and blue infrastructure that allows us to get to know the coast in this town in the Camí de Ronda, a 6.5 km path along the coast as far as the Lighthouse of Salou, located on the Cape of Salou, and along which you can see the more than 20 viewpoints. The path has 2 sections: from Pils to Replanells (2 km) the path is fully adapted with walkways and ramps, and on the other hand, from Replanells to the Lighthouse (4.5 km) it is a natural path, not fully conditioned. Historically, the Camí de Ronda was used to control the coast or anglers. Recovering this path has brought back the possibility of walking along the coast through points where it was impossible to do so for many years.

Salou has a marina managed by the Salou Yatch Club which, apart from moorings, offers other services such as a Fitness and Sport Club, , Social Festivities and Restaurant. The Yatch Club introduces users to light sailing activities, windsurfing, SUP, and the Nautical Park offers 26 different activities including kayak, windsurf or diving, which are available all year around.

During the season of the beach usage plan (April to October), sport areas are installed in two beaches, and there is a Family Beach Area (Llevant beach) with guided family/sport activities (July and August). In April, a big event is held the Triathlon Challenge, and the Salou Tourist Board has launched the “Salou Beach all year round (January to March)” program, with free activities on mindfulness, Reiki, treasure hunting, Clean-up days, and proposals for more than 15 activities to do on the beach independently.

The Salou Hiking club organises activities along the Camí de Ronda, the Aqua Beach Trail and water walking (April to October). In this respect, Salou has defined the areas for doing water walking and the sea routes that offers two marine paths, each 1 km long, for swimming, diving or o snorkelling.

5.3.2. Surveys analysis

In order to analyse the benefits of living near the coast and/or using blue spaces, the results of 247 surveys carried out at various strategic points along the Salou coast were analysed. The basic information of the respondents regarding gender, place of residence and age was classified initially to create the profile of the user who uses the blue spaces (Table 5).

Table 5. Information on gender, age group and main residence of the surveyed users.

Gender	% responses	No. responses
Male	56%	137
Female	44%	107
Total	100%	244
Age group		
18-29	31%	76
60+	30%	72
40-49	17%	41
30-39	12%	28
50-59	11%	26
Total	100%	243
Main residence		
Salou	48%	116
Tarragona	14%	33
Reus	11%	27
Cambrils	8%	19
Vila-seca	4%	9
Barcelona	4%	9
Others	12%	29
Total	100%	242

Source: Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16-18, 2022.

It was observed that 56% of the respondents were male and 44% female. As for age, 31% of the respondents belong to the group between 18-29 years old and 30% to the group over 60 years old, with the remaining 39% covering the ages between 30 and 59 years old. A total of 48% of the respondents live mainly in the town of Salou, while 52% of the non-residents who regularly use the blue spaces in Salou live in nearby towns like Tarragona, Reus and Cambrils, among others.

The results showed that 69% of the non-residents in Salou are visitors and that 20% of the tourists who stay the night in Salou in the low season, 15 % do so in the homes of family or friends and only 5% stay the night in tourist accommodation. Out of all the male and female respondents living in Salou, either as their main home, second home or to stay the night, 60% can see the sea from their accommodation, and the remaining 40 take about 10 minutes to walk to the sea from their accommodation. Therefore, among the people with accommodation in the coastal town of Salou, we can observe a strong connection or desire to be close to the sea.

Activities in the blue spaces

The blue spaces in Salou visited the most by tourists and residents are the Levante beach, the Poniente beach and the Larga beach. Others visited to a lesser extent include Capellans beach, Llenguadets beach and Crancs bay.

The activities carried out in the blue spaces in Salou are categories according to the type of activity (Table 6). This categorisation is self-developed, the result of continuous literature review, observation, analysis of good practice, and years of research. There are three general categories, one of socialisation, which includes informal and friendly activities for using and enjoying the public space of the beach and the sea. Then there is a classification of activities according to their impact: those that are quieter and more relaxing, where self-improvement and impact are not the objective. Finally, there are the high-impact activities, on the one hand sports and on the other hand activities that take place in water, some of which are motorised and have a direct impact on the environment.

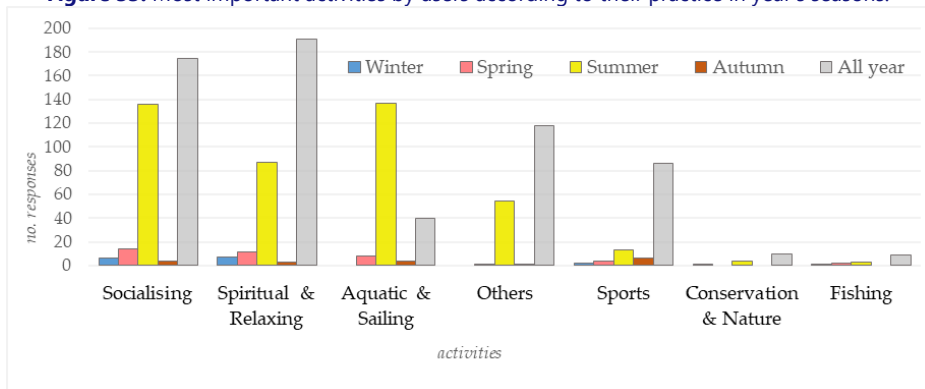
Table 6. Categorization of activities in the blue spaces.

Category	Description	Subcategory	Activities
Socialising	Activities carried out with friends, family...	-	Walking with the family, meeting friends, playing with children, informal games and sports (e.g. frisbee, beach ball, beach racket and ball, etc.), picnicking, eating or drinking with friends and/or family, going by boat (organised tour).
Low impact "passive"	Activities that are considered passive because they require little physical effort and have little or no environmental impact.	Spiritual + relaxing	Walking alone, reading, meditation, listening to and contemplating the sea, walking barefoot along the shore.
		Conservation + nature	Collecting rubbish, bird watching.
		Leisure fishing	Underwater fishing, traditional fishing, fishing from the beach.
		Others	Sunbathing, appreciating the landscape, walking with dog(s), arts.
High impact "active"	Activities that are considered active due to the high level of physical effort required to perform them or the high environmental impact that these activities may have.	Water and sailing (non-motorized)	Swimming, water sports (e.g. paddle surfing, windsurfing, foil surfing, canoeing, kayaking), diving and snorkelling, water walking (walking in the sea with water over the waist and diaphragm) and non-motorised sailing (e.g. sailing boat),
		Motorised water activities	Jet skis, yacht, etc.
		Sports near water	Cycling, jogging, horse riding, Nordic walking (nordic walking along the shore with sticks)

Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16-18, 2022.

The socialising, spiritual and relaxing activities, water/aquatic and sailing activities and sport activities are those carried out mainly on Salou's most popular beaches. When relating the activities that take place on the beaches in Salou according to the year's seasons (Figure 33), we can observe that Seasonal activities, there is little activity in the autumn, winter and spring, unlike the summer when most of these activities are carried out. The activities related more to connecting with nature and health and well-being, categorised as spiritual and relaxing, are the ones carried out the most throughout the year.

Figure 33. Most important activities by users according to their practice in year's seasons.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T., López, M. (2022). Betting on blue spaces with a view to well-being tourism in coastal destinations: A mixed methodology with locals and tourists' involvement. In Sustainability Challenges In Tourism, Hospitality and Management (TMS) Conference, Faro (Portugal), November 16-18, 2022.

Out of the total number of respondents who walk barefoot (along the shore), 58% do it all year round and 42% do it in the summer. A total of 71 % of the respondents who contemplate and listen to the sea, do it all year round, while only 27% in the summer and the remaining 2% during the other seasons of the year. Out of the respondents who meditate on the beaches in Salou, 65% do this all year round, and the remaining 35% only do it during the summer.

Diving is an all-year activity, although out of the respondents who do this activity, 74% do it only in the summer and 26.32% do it all year round.

Therefore, we can observe evident season-based water and sailing sports, which mainly take place in the summer on the beaches in Salou. However, spiritual and relaxing activities, for example, and socializing, sport activities and others low-impact ones, are carried out all year round, providing options and variety to Salou's annual tourism offer.

Connecting with nature, state of health and well-being.

As for connecting with nature, health, and well-being, on a scale of 0 to 10, the average connection with nature in the daily lives of the respondents in this study, is 6.88 points and the average score in assessing the state of health and well-being is 7.12 points.

In order to measure how Salou's blue spaces influence the state of health and well-being of the respondents in the case study, three different states of well-being were identified: social, mental and physical. Social well-being refers to strengthening social relationships, enjoying other people's company and sharing the space. Mental well-being summarizes our satisfaction with life, mood enhancement and mental stress relief. Physical well-being refers to keeping physically fit and feeling happy about one's own physique.

The results show that visiting the Salou beaches has a positive influence on the three states of health and well-being analysed. The average scores are 3.81 out of 5 in social well-being, 3.97 out of 5 in mental well-being and 4.02 out of 5 in physical well-being, with the latter being the one influenced the most by visiting Salou's blue spaces.

5.4. Discussion and Conclusion

As a result of the participative process, the inventory, analysis and field work carried out to develop the project, conclusive proposals and potential approaches were conveyed to the round table, which were mainly as follows:

- Rational planning of the activities developed on the coast to balance protecting the environment and landscape with the economic, social and cultural development.
- It is necessary and a strategic approach to continue preserving and recovering the coastal and marine areas for the benefit of present and future generations in order to stop the loss of biodiversity and preserve the protected species.
- Supporting the Blue Spaces concept implies sustainability and innovation.
- The beach offers a myriad of ecosystem-based activities that allow for a great diversity of uses throughout the year on levels of leisure, health, environment discovery and knowledge, artistic, etc.

- The sensory properties of water (touch, sounds, colours, hot or cold water, are resources that have a great experiential potential that must be included in new tourist experiences.
- The blue experiences can offer entertainment, education, disconnection, well-being.
- Adding the “Blue gym” concept to the image and experience strategies, closely linking sport, health, entertainment and well-being.
- The marine ecosystem and the resources it hides, many unknown, is an attraction to be enhanced.
- Organising and programming guided trips along the Camí de Ronda or Camino de Ronda (watching coastal birds, dramatized and nocturnal trips, etc.)
- It was detected that the blue spaces and coastal parks are a good combination for designing activities.
- To promote entrepreneurship and creative design in the form of new products, souvenirs and amenities linked to the brand idea of Salou and Blue Spaces.
- To schedule activities (sporting, mind-body, cultural, artistic, educational) throughout the year. It was proposed to make a special mention of enhancing and offering facilities to be able to carry out sport activities throughout the year on the Llevant and Ponent beaches. The rise in the popularity of surfing was highlighted also on Playa Llarga, and this deserves special attention as it offers many avenues of possibilities to be explored.

It was also conveyed to the working table representatives that to continue advancing and making the most of the benefits of the blue spaces it was essential to organise working spaces. First, it was proposed to create a forum of local agents linked to the well-being, nature and tourism sectors (Goodkarma, Salou Triatló Costa Daurada, Centre Excursionista, Grup de

Dones de Salou). A second proposal was to establish alliances between companies, town halls, local entrepreneurs, the sailing resort and Yacht Club, to create combined experiences in well-being and blue tourism.

In conclusion, Salou is a mature sun, beach and leisure tourist destination in the Mediterranean, but with an increasing commitment in recent years to family and sport tourism. Today significant efforts and resources are being devoted to evolving the model, internalizing the concept of sustainability as an essential value where recovering and preserving the coast is a strategic axis vis-à-vis its tourism policy, communication and image, the impact of the markets, supporting new segments and diversifying the offer of activities strictly linked to leisure and well-being.

It has been talking about and betting on the need for renewal and on the commitment to the sustainability of coastal destinations for two decades now (Vera & Rodríguez-Sánchez, 2010) and Salou is a clear example. The different tourism plans and programs such as the Strategic Tourism Plan for Salou (2018-2022), the certification as a Smart Tourism Destination or the recent Tourism Action Plan implemented with COVID undoubtedly define the development strategies and bets of action of the destination in these coming years that focus on key aspects such as sustainability, respect for the environment, accessibility, beaches open all year round, innovation, landscape, gastronomy, sports and leisure mobility (which is to understand mobility itself as part of the experience, going for a walk, enjoying the spaces, etc.).

6. Exploring coastal walks for well-being: A comparative analysis of trails in Southern Catalonia

Most Europeans live near blue spaces, and there is scientific evidence that proves that living or spending time near the coast contributes to a better state of health. Today, well-being activities around water are becoming a key element for the management and conservation of the natural resources that, despite the urbanization and massification of the coast, are still found there. This is the case of the southern coast of Catalonia, where a lot of effort is being made to recover coastal walks known as "Camins de Ronda". The aim of the article is a comparison of well-being outcomes of walkers according to their profiles, motivations, perceptions in two coastal trails – with differences in landscape and trail characteristics. The methodology is based on field work, participant observation, and structured interviews carried out in July and August of 2022. The results show that both trails can become a resource to maximize the benefits in the health of locals and tourists and encourage collaborative work for the conservation of coastal-marine ecosystems.

Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T., Saladié, S., López, M (in review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia. *Journal of Adventure Education and Outdoor Learning*.

6.1. Study Area

The Ronda trails and the coastal routes in Catalonia follow the GR92 Mediterranean route that, in turn, is part of the E-10 European trail (Baltic-Mediterranean Sea), connecting in the north to France and in the south to the Valencian Community.

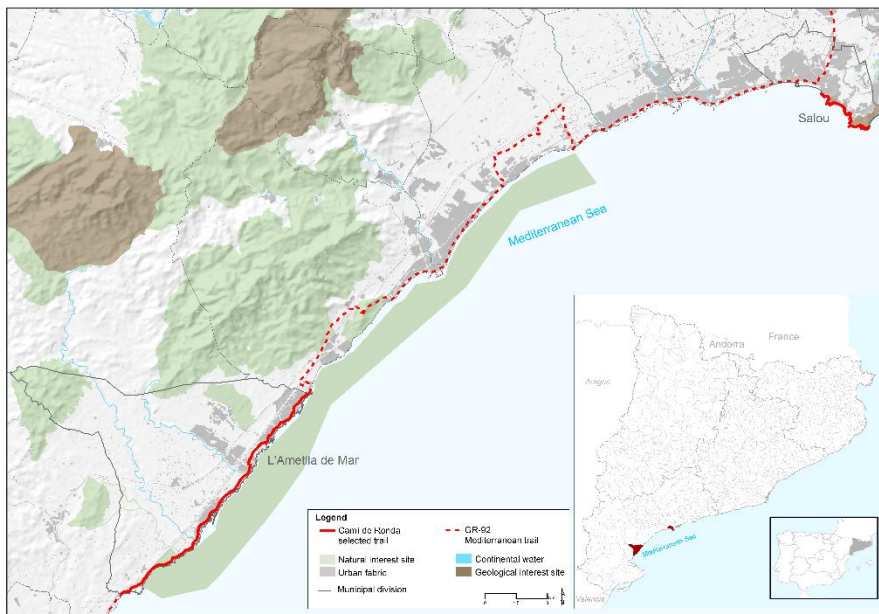
Historically, fishermen used a series of routes that ran along the coast to move from one bay to another by land. These trails became very important with the rise in maritime smuggling in the late 19th and early 20th centuries. Some used them to escape and transport the goods, while others used them to pursue and control the sea from land (Fàbregas, 2010).

When agricultural activity was abandoned, the lighthouses became automated and the transport infrastructure modernised, use of the Camí de Ronda trails fell into drastic decline. At the same time, the urban development arising from coastal tourism during the latter half of the 20th century led to the discontinuity of these paths.

The progressive awareness of the tourist sector of the need to offer a better-quality product, and the population's increased general interest in doing outdoor activities linked with nature and the landscape, has led to the process of recovering the Ronda trails.

In this study, we conduct a comparative analysis of two sections of the Camí de Ronda in Catalonia, one running along part of the coast in the town of Salou, and the other one, along the entire coastal area in the town of L'Ametlla de Mar. Although they are in the same province of Tarragona and less than 50 km from each other, there are differences between them in terms of tourist destinations, route characteristics and landscape values (Figure 34; Table 7).

Figure 34. Location of the study area and trails.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T., Saladié, S., López, M (in review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia.

Table 7. Main data of towns.

Data	Salou	L'Ametlla de Mar
Population (2021)	28512	7,131
Surface area (km2)	15.13	66.86
Density (hab./km2)	1.884.5	106.7
<i>Housing typology</i>		
Main residence	10,793	2,979
Second home	17,454	3,729
<i>Regulated tourism offer</i>		
Tourism accommodation places	38919	3264
Homes for regulated tourism use	6571	1804

Source: Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T., Saladié, S., López, M (in review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia.

On the one hand, Salou belongs to the Costa Daurada tourism brand, the main sun and beach modality and family tourism segment that is very important in leisure tourism, mainly because of the presence of the Port Aventura theme park. The existence of second homes and a high number of tourism accommodation places defines the density and seasonal nature of tourism. However, other modalities are also present, such as sport tourism and gastronomy, resulting from a revival of the traditional sun and beach mass-tourism model.

On the other hand, l'Ametlla de Mar belongs to the Terres de l'Ebre, Biosphere Reserve, and the context is very different. It is a fishing village with a combination of family sun and beach tourism with natural values and less human impact, and an accommodation offer based essentially on campsites and rural homes.

With respect to the routes under analysis, the Salou trail is 5km long, and stretches from the urban seafront in Salou passed some bays, cliff areas and balconies on the Mediterranean Sea, to the Salou lighthouse. This route is located within Salou's residential and tourist area and combines more accessible sections with wooden or asphalt walkways and another part that maintains the trail's natural and historical essence.

The trail in l'Ametlla de Mar is very long, covering 14.5km, passing bays and historic landscapes and bordering the coast through virtually untouched areas with a view of the Delta de l'Ebre Natural Park. This is a low-frequented natural trail in a sparsely urbanised area, with a low concentration of population.

Landscape values of trails

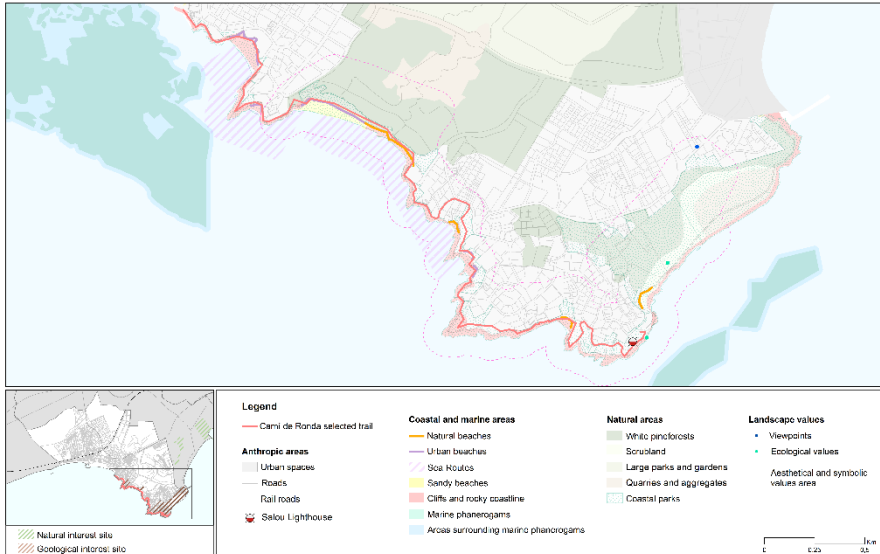
The values of the landscapes that the Camí de Ronda passes as it goes through Cap Salou and l'Ametlla de Mar are listed in the Landscape Catalogues (*Observatori del paisatge, 2010a, 2010b*). When cataloguing the landscapes in Catalonia, the Landscape Observatory places particular emphasis on the diversity of values that each landscape can represent: historic, social, natural, aesthetic, symbolic-identity, spiritual, and productive (Nogué, et al., 2016).

First of all, it is worth highlighting that the Camí de Ronda itself is considered to have both social and historic landscape value because, on the one hand, it is a route used by both the local and non-local population as a an area for walking and leisure and, on the other hand, it is a network of historic trails corresponding to either tangible or intangible evidence of human activity, specifically routes used by the civil coast guards to control the activity of smugglers who took advantage of the rugged coastline to conduct their business.

As the Ronda trail goes passed Cap Salou ([Figure 35](#)), it runs through a landscape that has natural, aesthetic, and symbolic-identity values. The landscape's natural values, which refer to the factors or elements that define the quality of the natural environment, are represented mainly by the structure of the complex Cap Salou relief, with outcrops of different geological materials where the fossil beach strata, raised a couple of metres about the current sea level, stand out. The coastal section of Cap Salou is included in the Inventory of Areas of Geological Interest in Catalonia because of the singular structure of the relief. Another natural value is related to the presence of the *Limonium gibertii* natural habitat, an endemic

species to the coast in the province of Tarragona. Also, the set of biotic land-sea relationships represent a natural value of this landscape, just like the natural character of the beaches located in Cap Salou.

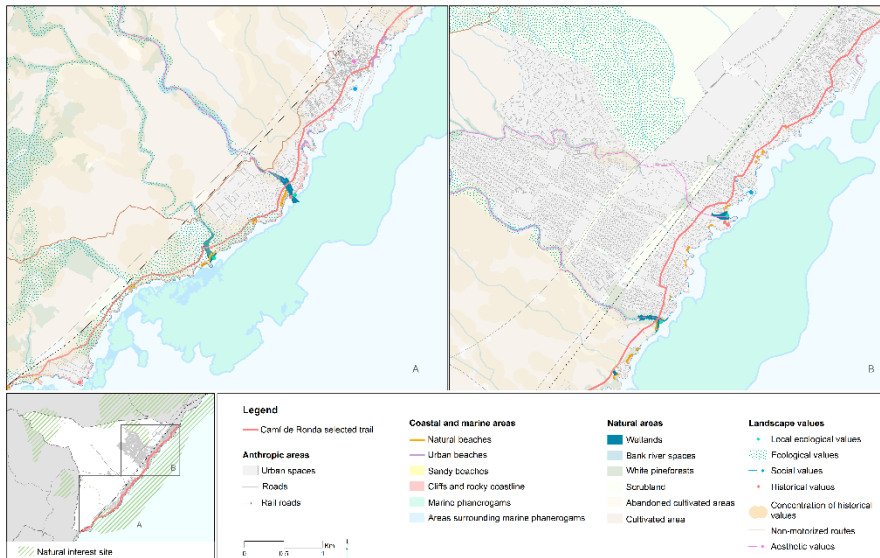
Figure 35. Coastal Walk of Salou.



Source: Font-Barnet, A., Nel-lo, M., Rovira-Soto, M.T., Saladié, S., López, M (in review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia.

The aesthetic values are related to a landscape's capacity to convey a certain feeling of beauty, according to the meaning and cultural appreciation it has acquired throughout history. In Salou, these aesthetic values are recognised in the land-sea interfaces in Cap Salou, where there are harmonious combinations containing various elements such as beaches, fossil beaches, rocks, water and white pine woodland. The symbolic-identity values present in Cap Salou are related to legends, such as the Rescue of the One Hundred Maidens (*Rescat de les Cent Donzelles*), or episodes in history, such as the departure of Jaume I to conquer Mallorca.

As the Camí de Ronda route passes through the town of l'Ametlla de Mar (Figure 36), it goes through a landscape with various aesthetic, natural, historic and social use values.

Figure 36. Coastal walk of L'Ametlla de Mar.

Source: Font-Barnet, A., Nel-lo, M. Rovira-Soto, M.T., Saladié, S., López, M (in review). Exploring coastal walks for well-being: a comparative analysis of trails in Southern Catalonia.

The aesthetic values are represented by the alternating bays and cliffs, the presence of fragments of white pine woodlands, the olive and carob groves with dry rock architecture, the fishing centre in l'Ametlla de Mar, and the environment of the monumental element, the Sant Jordi d'Alfama castle. The natural values are represented by the biotic relationships that occur in the land-sea interface, the set of cliffs and natural bays, the wetlands in the various outlets, the presence of the area of natural interest in Cap de Santes Creus, and the natural wildlife reserve in Torrent del Pi.

The historic values are recognised in the set of olive and carob groves with dry rock architecture, the presence of the mentioned castle, which is the result of a series of destructions and reconstructions of the primitive castle built in the 13th century in the Alfama desert. Other points of historic value are the Punta de l'Àliga defence and watchtower, and l'Estany port which, for years, was the only mooring for fishermen in the area.

The social values are linked to the three marinas in Calafat, Sant Jordi d'Alfama and l'Ametlla de Mar, where various water activities operate and recreational fishing and diving, or the bays enjoyed by locals and tourists.

6.2. Methods

The methodology used to conduct this work includes several in situ methods, structured walking interviews, frequentation counts, field diaries and walking as a participant-observation method.

During the months of July and August 2022, at the height of the tourist season for the area of Costa Daurada and les Terres de l'Ebre (southern Catalan coast), a user count (level of frequency) was carried out, and structured interviews were conducted through interviews with adult tourists (>18 years) at different points of the two coastal walks under study. The two main project researchers, and a hired master's student in tourism, took part in this process.

Frequentation counts

In order to determine the frequency level of the path and characterise the users of the Ronda paths, a count of path users was carried out for two hours, 9 days in July and 4 days in August in different sections. Seven days were in l'Ametlla de Mar (7, 15, 17, 21 and 30 July and 24 and 27 August) at five different points along the path (Cap de Creus, Estany, Cala Vidre, Platja Torrent del Pi and Pixavaques), and seven days were in Salou (11, 23, 25 and 31 July and 23 and 28 August) in three points along the path (els Pilons, Llenguadets vantage point and Far). Out of the total days of the count, six were during the week and six were at the weekend. The hours were eleven days in the morning and two in the afternoon in order to detect possible differences. This allowed us to make total user counts, calculations of people per minute, and a description of the user type based on the observation.

Structured interviews

The structured interviews were carried out eight days in July and 4 days in August. Six days in l'Ametlla de Mar (7, 15, 17 and 30 July and 25 and 27 August) in the six points along the route, and six days in Salou (11, 23, 25 and 31 July and 23 and 28 August) at the three points along the route. Out of the total number of days reserved for interviewing, three were during the

week and three at the weekend. The hours when they were held were in the morning between 9.00am and 12.00pm, except on 27 and 28 August, when they were held in the afternoon between 5.30pm and 7.30pm.

We sampled 52 users >18 years of age in coastal walks with open-ended interviews, 30 in Salou and 22 in Ametlla de Mar. We focused on randomly selected visitors who were walking along the path and the interviewer accompanied the interviewee as they walked along in order to facilitate and empathise with them, and so as not to disturb their activity. The majority of participants was sampled during sunny weather conditions, with temperatures between 25 °C and 30 °C.

The time dedicated to the interviews was between 11 and 28 minutes, with an average of 19 minutes. The language of the interview adapted to the profile of the interviewee, and was mainly Spanish, Catalan, French and English. The interviewer used the Survey Monkey software to collect the interview responses, which allowed entering and collecting the interviewee's responses and comments online.

The interview included predetermined questions in an established order, combining questions that were usually closed, dichotomous questions (yes/no) or multiple choice, and open questions. The interview is structured around 32 questions aimed at responding to the following objectives: 1. User profile, 2- characterise the route completed, 3- motivation, perception and assessment and 4- detect the well-being benefits it provides (see [Appendix A.2](#)).

6.3. Results: Users profile, motivation and well-being outcomes

Thanks to the direct observation and the fieldwork conducted, we have been able to detect that the users of the Ronda trails in Salou and l'Ametlla are men, i.e. 54.7% and 52.7 % respectively. The degree of frequentation in the Salou CR is high, 1 person every 1.35 minutes, and the average number of users based on the analysed sections is 161 people, particularly at the beginning of the trail, which is well communicated with the centre of the city, accommodation, and the most popular beaches.

The start of the path is better equipped than the end of the trail, and this makes it easier for people to use. On the other hand, l'Ametlla CR is sparsely frequented, 1 person every 6 minutes, with an average of 24 users. It is also worth highlighting that, unlike the Salou CR, dogs accompanied the users on 4 of the 8 days of observation and frequency analysis.

6.3.1. Sample characteristics and profiles of walkers

The user profile on each CR is notably different. On the Salou CR, 57% of the users interviewed were women, with respect to 36% in l'Ametlla de Mar. A common feature of both CRs is that 89% of the users were not local residents, with 80% being Spanish nationals and 20% foreigners. In the case of Salou, the national market is mainly from other autonomous communities in Spain, like Zaragoza (19%) and Navarra (12%), while in the case of l'Ametlla de Mar, 50% of the national users come from Catalonia. The main foreign market in both cases is French.

The users stay mainly in hotels, apartments or campsites, 31% in Salou and 45% among users in l'Ametlla de Mar. It is worth noticing that the weight of the second homes among users in Salou is 27%.

In terms of age groups, in the case of Salou, the main group is the 50-59 year olds with 37%, followed by the group of over 60s with 20%. The users of the l'Ametlla CR are much younger, with the prominent age group being between 40-49 years old, with 27%, followed by the 30-39 and 50-59 year olds.

The following results were obtained regarding the characterisation of the route. Also, the sections covered by each interviewee were analysed, by asking where their routes started and finished, which provided information on the walking distance and time. In the case of Salou, users walk an average of 3.84 km over 51 minutes. There are some well-defined sections, with the beaches and the Lighthouse being the main starting and finishing points. The users of the Ametlla CR, walk an average of 7.88 km, over 2 hours and 10 minutes. It was possible to identify that each user makes up their own route, meaning there are as many routes as there are users.

In the case of Salou, the route starting point is mainly Playa de Llevant (27%), the Lighthouse (20%) and the Capellans beach (17%). The main route finishing points, according to the users, are mainly the Lighthouse (26,7%), Llenguadets or Playa de Llevant with 13%, respectively. Regarding the Ametlla CR, the main points for joining the trail are the village of l'Ametlla de Mar and the Náutico de l'Ametlla, with 18% respectively, followed by l'Estany beach and the l'Ametlla campsite with 14%. The end point is l'Estany, L'Estany Tort and the village of l'Ametlla. On both trails, 88% of the users go back along the same path.

In the case of Salou, 100% of the users walk along the path, with respect to 80% in l'Ametlla de Mar. One common feature in both cases worth mentioning is that 73% of the users had already walked along the trail before. In both cases, 40% of the users walk along the trail every week. The national users also indicated they do the walk on a recurring basis when visiting the area.

When asked how they found out about the trail, in both cases the main response was that they have always known about it, 24.5% in the case of Salou and 17% in the case of l'Ametlla de Mar. However, the responses that drew out attention were that 18.87% of the Salou CR users said that they had found it or that 8% in the case of L'Ametlla de Mar knew about it because of information provided by their accommodation.

6.3.2. Motivation and well-being outcomes from users' perception

The interviewees indicated that the main reasons for walking the Ronda trail focus on the landscape, strolling in a contemplative mood, observing, nature and feeling and interacting with the blue area, i.e. the sea. In the case of the Salou users, most indicated that the main reason is to go for a walk and exercise along the trail. In l'Ametlla de Mar, although the main motivation is to exercise, the interviewed users referred explicitly to the landscape, nature and the sea in their description of the path.

The three main words defining the Salou CR, according to the interviewees, are beautiful, 21.4%, relaxing, 10.7% and peaceful, 9.5%. The three main concepts defining the CR in l'Ametlla are peacefulness (16%), nature (15%) and sea (11%). Among the words used, the physical description of the path and the aesthetical values of its landscape stand out, such as the coast, pines, stone, wilderness, crystal clear waters, rocks, sea and water”, and it is perceived as “inviting, genuine, easy, simple, natural”. On the other hand, at no time were any words used related to the historic or symbolic value of the landscape through which the Ronda trail actually passes, or to the legends, the castles, the bunkers or the watchtowers.

The main activities that the interviewees usually perform along both routes are walking alone and walking with family. It is noted that people usually walk alone more in winter and less in the summer, when they walk with the family to enjoy the sea and as an activity for the summer holidays from school. On the l'Ametlla de Mar CR, it is worth mentioning the significance of activities with greater physical intensity that are performed along the path, such as running or Nordic walking. Other activities that the interviewees usually do along the path, and which are particularly evident on the Salou CR, include reading in the small bays in Cap Salou and having a drink with friends, as it is an interurban route.

At the start of the interview, the CR users were asked how they felt, on a scale of 0 to 10, in terms of health and well-being and how connected they felt with nature. The average responses reveal that in Salou people feel well, have good health and well-being (7.87) and feel connected to nature (7.13). The figures rise slightly among users on the L'Ametlla de Mar route who consider that they have very good health and well-being (8.5), and are connected closely to nature (7.45).

To conclude the interview and address the “well-being outcomes from users' perception” from a multidimensional perspective, it is important to point out that the results indicate that both routes mainly influence the interviewees' mental well-being, followed closely by contributing to their social and physical well-being.

Interviewees rated mental health benefits, such as better mood and stress recovery, quantitatively, awarding a score of 4.7/5, with those who walk the paths alone giving the highest scores. All the users claim to feel more relaxed and free of stress when walking the Camí de Ronda. In fact, 31% of the words used to describe the route in l'Ametlla de Mar were “relaxing”, “peacefulness” “Serenity”, Peaceful, Switching off, Peace, Harmony, Positive energy, Silence, Freedom, Calm. Furthermore, in Salou, 26% of the words used were “relaxing”, “peacefulness”, “Serenity”, Peaceful, Switching off, Peace and Calm.

Most of the interviewees indicated that the route is a resource for keeping fit, particularly in the case of l'Ametlla where the route is longer, harder and takes longer. In both cases, the path provides an opportunity to reinforce social bonds, enjoying being together, sharing the area, the path, the landscape, the sea. In this respect, in terms of the social benefit, it is important to consider that in the case of l'Ametlla de Mar, 81% of the interviewees do the walk with relatives or friends and 2% with their dog, whereas in Salou, 90% walk the route accompanied.

Lastly, regarding the assessment of the path, the aspect valued most highly by the users of the Salou CR is the fact that it is easy to walk along. The other items such as landscape, path width, signage, information, urban furnishings, accessibility, safety and maintenance were valued below 2.6 out of 5, with signage and information being the worse valued aspects. Three users define the path using words such as “noise” “overcrowding”, as it is an interurban trail and during the season has a higher concentration of tourists.

In the case of l'Ametlla, the CR assessments are higher. The landscape is the highest valued item, with a near maximum score of 4.77 out of 5. The aspects needing attention to improve the user's experience are the urban furnishings and the information, which received the lowest scores.

6.4. Discussion and Conclusion

The field work, the observation and the interviews conducted with the users on the motivation, use and the well-being provided by coastal walks, has allowed us to detect aspects of great interest that are important to reflect upon and are the basis of future strategies and actions that tourist destination managers must work on.

The case studies are destinations with distinctive tourism seasonality during the summer months, but it has been proven that the winter and autumn are attractive seasons for users who prefer to walk these paths alone due to the mental and physical benefits they provide. This study has revealed the benefits that both coastal walks provide and, without a doubt, this is a strategic proposal that managers can rely on, and which would give added value to the experience of visitors and tourists facilitating and/or designing significant well-being experiences.

The results indicate that the CR are an area of socialisation where it is possible to enjoy and share an activity near the sea, with the multiple benefits this provides in all dimensions of well-being. Another interesting data is that most users already knew the path, which suggests on the one hand that the CR can retain their users and that these users do different paths along the Catalan coast throughout the year, along stages of the CR.

The following aspects are indicated in detail and for each CR. In the case of l'Ametlla, it would be necessary to further explore the opportunities that the Ronda path offers as an area for walking and enjoyment with dogs. In recent years, it has become known as a pet-friendly destination, "a pet friendly destination, sensitive to nature and a lover of animals. Accommodation, restaurants, places so you can spend your vacations accompanied by your best friend".

The results of the frequency and surveys point to the presence of dogs, but in a very testimonial way, which indicates that this segment has great potential that would provide differentiation and competitiveness. It is a growth segment at a European level.

In the case of Salou, the use of the path is distinctively unequal in terms of frequency, with a high volume of users concentrated at the beginning and a more senior tourist profile. It would be necessary to enhance the intermediate sections of the path, highlighting more natural, cultural and scenic values, and to continue supporting the development of high impact sporting activities like surfing, diving, and relating them as a complementary product of the CR.

For both analysed paths, a priority action is the need to incorporate and disseminate the historical, symbolic and identity values on an interpretive level. With the aim of promoting the valuation and understanding of the environment, and improving the experience (Avila, 2021), it is necessary to take action on the signposting, information and urban furnishings along the paths, a common weak point in both cases under study.

The southern coast of Catalonia offers very varied and numerous tourist areas, made up of a mosaic of different landscapes, a tangible and intangible heritage of incalculable value, and Mediterranean gastronomy based on quality, local produce, among other attractions, which can be experienced and explored by following the CR routes.

Natural environments and outdoor activities help to reduce stress, promote physical activity, establish social relationships and potentially improve people's health and well-being. Today these benefits are more important and put the CR in the spotlight, as it can become a differentiating resource providing numerous benefits to citizens, visitors and tourists, as well as reducing tourism seasonality and promoting co-operative efforts to preserve the territory's nature and economic benefits.

The CR can also respond to alternative tourist services and provide the population with sport facilities and contact with the sea and nature, which have numerous benefits for health and well-being, and help to reduce stress, establish social relationships, and promote physical activity.

In recent years, both the government and society have become aware of protecting and preserving the natural and scenic coastal environment as a future value for tourism, but also, and very importantly, as a source of health, and the CR can be perfect allies. However, at the moment, the CR is not used anywhere near its full potential as a tourist resource and, despite the efforts made on a local level, no consolidated, articulated proposal has been put forward by the coastal municipalities through which the route passes.

In this respect, it is important to reinforce promotion and dissemination even more if possible, to win over new users, and to do so, it is important to offer attractive and interesting proposals for the family and young people segments throughout the year, in an articulated matter with the neighbouring municipalities. The Ronda paths can respond to many motivation reasons such as switching off, being in contact with nature and sport.

The Ronda paths must offer their users access to a wide and attractive range of cultural, educational and sport activities that reinforce their educational role of discovering the life and curiosities of the Mediterranean flora and fauna: bird watching, guided historical routes, snorkelling, diving, paddle surf, kayaking, etc. For this, it is essential to effectively manage, maintain and monitor the CRs and their users, and to work on defining and developing actions and measures to adapt and equip the paths to territorial demands and new trends.

With this project, researchers intend defining a proposal to rediscover Mediterranean landscapes through coastal well-being walks in Southern Catalonia as a differentiated resource of quality and well-being tourism that benefits both the resident and visiting population.

PART III. FRAMEWORK PROPOSAL

7. Advancing a framework to enhance the well-being benefits provided by protected areas

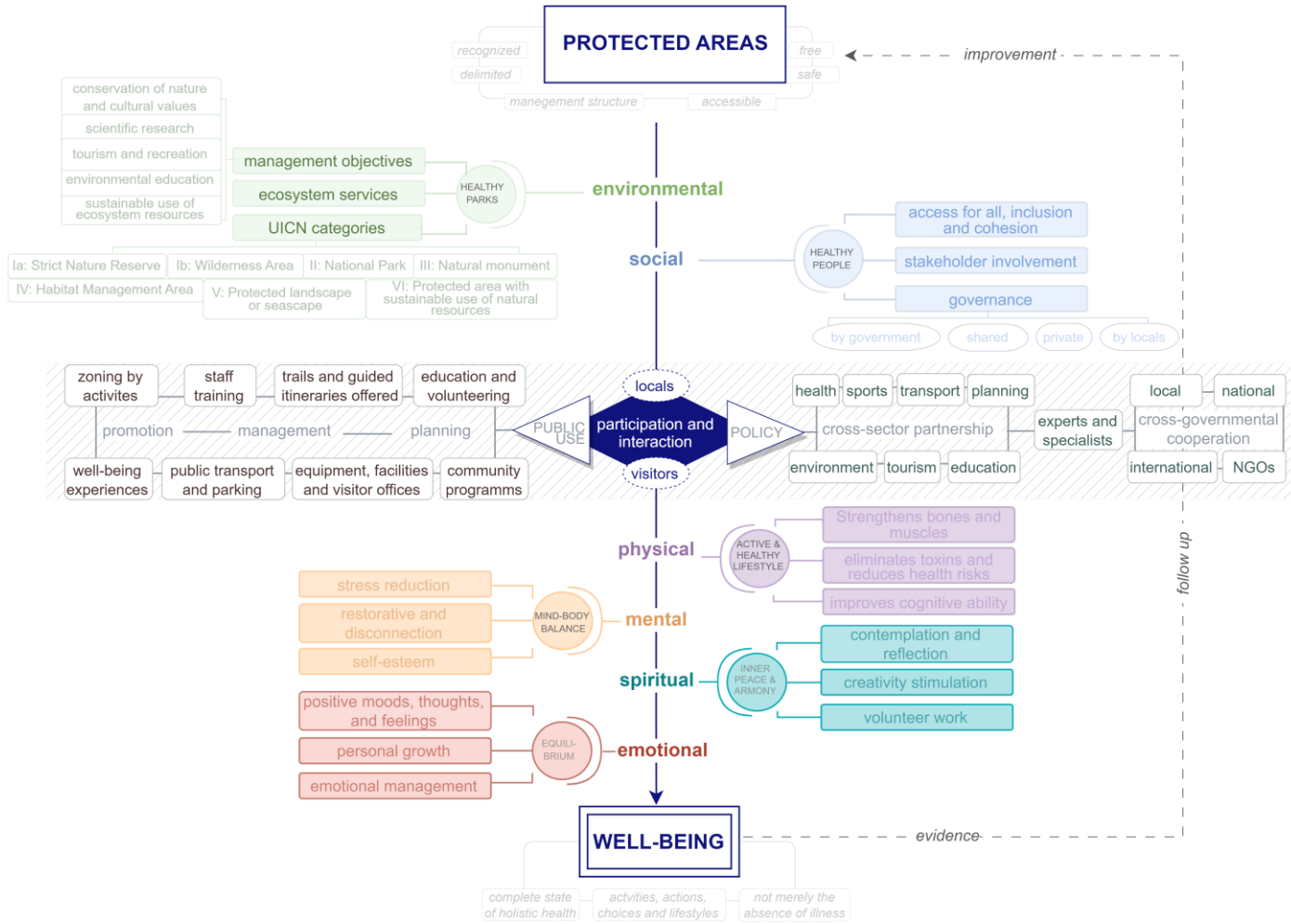
This chapter aims to advance a framework embracing the contribution of protected areas to the health and well-being of society, as well as giving tools to enhance, promote and incorporate the opportunities and benefits in terms of management and public use of protected areas. A framework is used to represent the conceptual status of the things being studied and their relationship to each other (Punch, 2000). It is a system of concepts, assumptions, expectations, beliefs and theories that supports and informs our research (Maxwell, 1996; Partelow, 2023).

From this position, the framework presented in the following pages has emerged as a conceptual and system model after the fieldwork, observations, and experiences throughout the investigation. It has emerged as a result of a sum of projects, publications, research stays, works and studies related to the main topic of research, thereby providing theoretical cohesion and connection to the evidence and conclusions presented in this doctoral thesis. With this framework, the research aims to provide a basis by which managers of protected or recognised natural areas and the councils or other administrators (government) where the natural area is located can take into account to demonstrate and value the well-being benefits that nature provides to the society at large.

7.1. Structure and key concepts

The framework's structure involves identifying a set of concepts and the general relationships among them in the form of box-and-arrow diagrams, as can be seen in [Figure 37](#). In this sense, the main relationship creating this cohesive framework is the following statement: "**Protected areas** lead to (multidimensional) **well-being** through participation, involvement, interaction and engagement (of users)", closely related to, dependent on and regulated by the management of **public use** that responds to a political strategy. This is the nexus that allows or restrains users (i.e. visitors and residents) of protected areas to achieve or fail to achieve well-being.

Figure 37. Framework proposal.



Source: Authors' own production.

Below (Table 8), the key concepts used in the framework in the context of protected areas, which have already been mentioned in the explanation of the structure, are defined.

Table 8. Key concepts of the framework.

Key concept	Definition
Protected area	Any area of land or sea managed for the maintenance of biodiversity and other natural processes <i>in situ</i> , through constraints on incompatible land usage (Possingham et al., 2006). Geographically, such areas are clearly defined, recognized, dedicated, and managed through legal instruments or other effective means in order to achieve long-term conservation of nature and its ecosystem services, along with its associated cultural values (Dudley, 2008).
Well-being	The World Health Organisation (WHO) has defined health as a complete state of physical, mental, and social well-being, and not merely the absence of infirmity or illness (WHO, 1946). According to the Centers for Disease Control and Prevention (2020), well-being integrates mental health and physical health, resulting in more holistic approaches to disease prevention and health promotion. Well-being can be understood as “an umbrella term for the different valuations people make regarding their lives, the events happening to them, and the circumstances in which they live” (Diener 2006). Yeung and Johnston (2019) define well-being as the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health. Well-being provides a combination of pleasure, hedonism, altruism, and significant experiences. Well-being is not a passive or static state but as an “active exercise”, with intentions, options, and actions related to holistic health and meshing with deeply held values it extends beyond physical health and incorporates different dimensions of the entire person. Both body and mind should work in harmony, and the state is not merely marked by the “absence of illness” or the absence of pain, discomfort, or incapacity (Ryan & Deci, 2001).
Environmental well-being	Parks preserve ecosystems and biodiversity, provide clean air and water, and maintain ecosystem functioning (Maller et al., 2005). The environmental dimension emphasizes the value of local ecosystems and human involvement in the natural environment (Maller et al., 2002; Albuquerque et al., 2018).
Social well-being	Parks and protected areas contribute to community health and well-being in favour of inclusion, accessibility, human involvement, for cohesion and creating bonds. Landscape as a bonding structure for social well-being (Abraham et al., 2010). social connections, so that individuals feel safer and less isolated (Leung et al., 2018).
Physical well-being	It is about actions, lifestyle and exercise to strengthen and care for your body. Activity or exercise in direct exposure to nature positively affects physical well-being and health (Loureiro & Veloso, 2017). Physical well-being can result from an active and healthy lifestyle (e.g., sports and fitness activities). Among the benefits include reduced risks for obesity and cardiovascular and pulmonary diseases.

Mental well-being	Protected areas contribute to mental well-being by reducing depression, stress, anxiety, and sleep problems and boosting self-esteem and the mind–body balance.
Spiritual well-being	Parks preserve the natural environment for contemplation, reflection, and inspiration; invoke a sense of place; and facilitate feeling a connection (Maller et al. 2002, 2005). In the spiritual dimension, volunteer work can also be a mutually rewarding experience for tourists and destinations. As stated by the National Parks of Finland (2020), volunteer work for the good of nature is also a great way to combine being close to nature with social relationships.
Emotional well-being	Spending time close to nature offers peace and tranquillity, while engaging all of the senses. Doing so can help to ease negative feelings and boost positive ones (WWF-UK, 2020; Brecon Beacons, 2020).
Healthy parks, healthy people (HPHP)	HPPH is a global movement that recognises the fundamental connection between human health and environmental health. HPPH promotes the value of protected areas as fundamental resources for well-being by reducing health inequalities, contributing to individual and community health, and supporting the wider aspects of economic health and growth and territorial development (Parks Victoria, 2017; EUROPARC Federation, 2018).
Public use	A set of activities, services and facilities that, regardless of who manages them, must be provided by the administration of the protected area with the aim of bringing visitors to its natural and cultural values, in an orderly and safe manner that guarantees the conservation and dissemination of these values through information, education and environmental interpretation (EUROPARC-Spain, 2002).
IUCN management categories	The International Union of Conservation of Nature (IUCN, 2008) sees the protected area management categories as an important global standard for the planning, establishment and management of protected areas; this section outlines the main uses recognised. Allocation of category is a matter of choice, depending on long-term management objectives, often with a number of alternative options that could be applied in any one site. There are six management categories plus one subdivision: Ia Strict nature reserve, Ib Wilderness area, II National park, III Natural monument or feature, IV Habitat/species management area, V Protected landscape or seascape, VI Protected area with sustainable use of natural resources.
Governance	The governance of protected areas involves interactions among structures, processes and traditions that determine how power is exercised, how decisions are taken on issues of public concern, and how citizens or other stakeholders have their say. Governance arrangements are expressed through legal and policy frameworks, strategies, and management plans; they include the organizational arrangements for following up on policies and plans and monitoring performance. Governance covers the rules of decision making, including who gets access to information and participates in the decision-making process, as well as the decisions themselves (IUCN, 2004).

Source: Authors' own production.

The reference to multidimensional well-being – although this last adjective does not appear in the diagram – refers to all these dimensions that do appear: **environmental, social, physical, mental, spiritual and emotional well-being** provided by protected areas. Each of the dimensions are briefly defined in the diagram, some of them with key subattributes in this research, such as the **IUCN category**, or the **governance** system.

Following the order from top to bottom, environmental and social are the two main dimensions related to the "*healthy parks, healthy people*" theoretical principle, which can be summarised as “from the focus of how we manage parks, it gives us the opportunity to improve the health of both our nature and communities (Parks Victoria, 2017). It is from this point that the research of this doctoral thesis starts.

7.2. A set of guidelines and practices

The framework starts with the agreement that protected areas (PAs) need to be delimited, recognised, safe and accessible places (and free) with rich ecosystems under an integrated management structure (EUROPARC Federation, 2018). These characteristics make PAs suitable places to develop such well-being, which can be achieved by engaging and interacting with them.

Firstly, in the environmental dimension, although achieving the long-term conservation of nature and its ecosystem services and associated cultural values (Dudley, UICN) is the primary objective of protected areas, it is important to know the management objectives that correspond to the qualities and characteristics that define the protected areas, as defined by the protection category. Since 1978, the IUCN has been classifying all types of protected areas into general categories to guarantee the conservation of each of them on an international level. The updating of the system is done with the intention of removing doubts and creating less confusion, in order to facilitate a common language for protected areas among all countries of the world (Table 9).

Table 9. Management categories set by the IUCN.

Category	Definition
Ia. Strict nature reserve.	Strictly protected for biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values.
Ib. Wilderness Area	Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.
II. National Park	Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.
III. Natural monument or feature	Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove. Visitation and recreation is often encouraged and research and monitoring limited to the understanding and maintenance of a particular natural feature.
IV. Habitat/species management area	Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category. Visitation and recreation is a potentially applicable objective.
V. Protected landscape or seascape	Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values. Visitation and recreation is encouraged. Category V does not prioritize research, though it can offer opportunities to study interactions between people and nature.
VI. Protected areas with sustainable use of natural resources	Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims. Visitation and recreation is a potentially applicable objective.

Source: Author's own production from Dudley (2018).

This system of categories is "recognized by international organizations such as the United Nations and – since its establishment – is being progressively incorporated into national legislation" (Dudley, 2008). However, the categories must be understood together with a series of considerations and exceptions, such as "the 75% rule". It is proposed by the IUCN that the main management objective should be applied to at least 75% of the space that must be protected because in many cases and countries "prohibited" uses are allowed to be developed in a limited way and restricted in some categories. For example, a lodge or refuge may be permitted in a national park or areas may be established where fishing is allowed within a marine reserve.

In any case, before considering managing an area to promote and improve the well-being it offers, it is important to know its protection category, especially to consider the compatibility between the visitors and the environment, as well as the management plan, zoning, policies, and governance system of the PA (Cox et al., 2016).

It is on this last concept that we will dwell. The typology of governance has been considered within the social dimension of well-being, which also seeks inclusion, cohesion, accessibility for all and stakeholder involvement. IUCN defines four governance types:

1. **Governance by government:** Federal or national ministry/agency in charge; sub-national ministry/agency in charge; government-delegated management (e.g. to an NGO).
2. **Shared governance:** Collaborative management with various degrees of influence; joint management with a pluralist management board; joint government-community management (e.g. Cahuita National Park – Figure 38).; transboundary management with various levels across international borders.
3. **Private governance:** By individual owner; by nonprofit organisation (NGO, university, cooperative); by for-profit organisation (individual or corporate).
4. **Governance by Indigenous peoples and local communities:** Indigenous peoples' conserved areas and territories; community conserved areas – declared and run by local communities.

Figure 38. Short case study: Cahuita and its National Park, an example of shared governance between the community and government

In 1970 the Cahuita National Monument, located in Costa Rica in Central America, was created to protect the coral reef. Then, in 1978 it was declared a National Park (II IUCN Category) with all the limitations that this implies.

The Afro-Costa Rican community of Cahuita is located within the National Park (in Punta Cahuita). The people there had been taking care of the environment and the area's habitat, but the inhabitants were expropriated by the government after the statement. In 1994 the people said they wanted to participate directly in the governance of the park. The historical and cultural link of the community with these lands required that they be maintained and that these differences be treated in a special way. That is why Cahuita is a "unique park in Costa Rica due to its close relationship with the community, an example of shared management between the community and the government, for sustainable development at the community level. The participation of community park rangers and lifeguards stands out, through a management of shared governance" (National System of Conservation Areas [SINAC], 2022).

According to 2022 data, the park has 7 park rangers from SINAC and 12 community park rangers (neighbours and inhabitants of Cahuita), both parts with functions of tourist control of visitors and tour operators, surveillance and security, environmental education, and habitat conservation. An exemplary model with 30 years of success, this arrangement promotes stakeholder direct involvement, economic sustainability and the protection of biodiversity for the benefit of the community, directly generating jobs as well as improvements in community services (public space, a school, a cultural museum, etc.). According to the Local Council Coordinator of Cahuita National Park, Raquel Russell Gonzalez (2021), "shared management is that not only the government has the power to decide and manage, but also we as a community and residents are there to help, care, and protect, so that the communities can move forward".

Although Cahuita has accessible trails and the community is known for introducing the values of nature and culture to children and the elderly, and women have organised themselves into social enterprises, the country of Costa Rica has a long way to go in this topic. There is a tourism association regarding the well-being, but it focuses mainly on wellness experiences, and there is no planning and management document for protected areas for the Healthy Parks, Healthy People programme.



Source: Author's own production.

Ensuring the social well-being of protected areas must therefore include a form of governance that allows the various stakeholders and local communities to participate in some way. As seen in the previous example, in shared governance – sometimes also referred to as co-management – various actors sit on a management body with decision-making authority and responsibility.

However, there are other ways to participate. Under state governance, there may or may not be a legal obligation to inform or consult stakeholders prior to setting up protected areas and making or enforcing management decisions. Participatory approaches are increasingly common and generally desirable.

The involvement of the various stakeholders – understood as the actors related to a specific area with a natural, ecological, or geological value – is very necessary to guarantee the application of rules but also people's rights in this area. The overall aims are to guarantee the right of citizens to these uses, while making them compatible with the preservation of natural and cultural values.

Ownership and management of protected areas is spread across the public, voluntary and private sectors and through partnerships involving government, voluntary organisations, landowners and community interests. In terms of improving value, managers, owners and partnerships will co-ordinate activities and co-produce outputs that directly contribute to local health and social care priorities.

In some cases, the government retains control of a protected area and decides on the management objectives, but delegates rangers control, planning, and day-to-day management tasks can involve communities, a non-profit organization or a private operator, as illustrated in the following brief case studies (Figure 39 and 40).

Figure 39. Short case study: The Community Guardians for the conservation of the Manatee Sanctuary State Reserve

This marine protected area is located in the southern part of the Mexican state of Quintana Roo and was declared an Ecological Reserve in 1996 and was then upgraded to Chetumal Bay Manatee Sanctuary State Reserve (RESMBCH) in 2008. It covers an area of 277,733 ha. and is home to the most important population of manatees in the Yucatan Peninsula. The inhabitants of the communities geographically located within the Manatee Sanctuary and in its area of influence play an important role in the conservation and use of natural resources.

The participation of the communities is of paramount importance to the achievement of the Reserve's objectives, with the people being known as the "Community Guardians", the result of a community monitoring programme in which the residents themselves are the ones who monitor their natural resources with the advice, training and accompaniment of the Reserve. They are made up of honest, responsible and committed people, men and women who are dedicated to protecting nature and fully respecting environmental legislation. They act as a group, in a collegial manner, freely and democratically electing those who represent them, expressing their interest in the protection, conservation, preservation and sustainable use of natural resources and assisting the environmental authority in its monitoring tasks (PPAQROO, 2017).



Source: Author's own production.

This framework recognises the positive links between the policies and strategies of national and local government, government agencies and NGOs that support government objectives for the management of protected areas and the enhancement of the well-being benefits they provide. In recent years there has been a significant increase in cross-government collaboration and development between different levels of government and professionals in the sport, outdoor and nature sectors.

In terms of cross-sectoral partnership, it is important to create structures, policies and strategies between relevant health, sport, environment, education, planning, transport and tourism departments and organisations to deliver health outcomes. When well organised, all sectors can work together in the same direction to achieve common goals.

Figure 40. Short case study: Santa Elena Cloud Forest Reserve, a community project with a well-organized proposal for accessible and well-being trails

The Santa Elena Cloud Forest Reserve (SECRF) is located in the Monteverde area of Costa Rica, on a state-owned farm with an area of 310 hectares. It is considered a community project, directed by the Administrative Board of the Santa Elena Professional Technical College, under the figure of a use permit granted by the Arenal Tempisque Conservation Area for the development of training, research and ecotourism activities. This use permit is the legal instrument that covers the management of a Protected Wilderness Area recognized and administered by the SINAC of Costa Rica.

The Reserve was founded on March 1, 1992, thanks to the determination of the community, together with the active participation of parents and students of the school, as well as national and international volunteers. The benefits obtained from the tickets, sale of tours, self-guided walks and other services are used for the protection and administration of the Reserve itself and to provide support to educational centres in the area and surrounding communities, as a tool for the common good. Santa Elena is one of the first communities in Costa Rica to own and manage an ecotourism project (MAPC BIO 2017). In the words of the Reserve's director, "It is an organization focused on ecological tourism, environmental education, research and conservation of the Cloud Forest, for the community, educational and natural resources benefit of the Region" (Yaxine María Arias Nuñez, Director of Santa Elena Cloud Forest Reserve, 2021).

To explore and enjoy the surroundings of the Reserve, visitors are offered a network of five trails enabled for their personal experience. Among them, a short walk on a path adapted to accessibility and law 7600 stands out, for children, the elderly, and people with disabilities (Sendero Mundo Joven), and the Sendero Del Bajo, a more immersive experience in the forest, which allows the user to participate with the Japanese Shinrin-yoku self-guided walk project.



Source: Author's own production.

Public or social use of protected natural areas is a growing phenomenon, with a wide range of visitor profiles, interests and motivations, but it can also represent a source of conflict, due to the impact it can have on the environment, the impact on the interests of the owners or inhabitants of the area and its surroundings, or the possible incompatibilities between the different types of leisure activities (Newsome, 2021, Natural Parks of Catalonia, 2020c). Proper management of public use plays a crucial role in optimising the enjoyment of these services and conserving the ecosystems that provide them (Muñoz-Santo & Benayas, 2012).

From the tourist perspective, Sheldon and Park (2009) proposed a model of a sustainable well-being destination – which is very useful to understand and replicate when the destination is a protected area – composed of a sum of well-being factors and resources (infrastructure, hospitality, atmosphere), core well-being attractions (natural and cultural, therapeutic and wellness), strategic planning and policy, and well-being destination development and management (human resources, training, education, networks).

As can be seen in the framework, there are three actions that revolve around the public use of the protected area: planning, management and promotion, which are applied to a series of attributes that make it easier for the protected areas that can be visited to provide a sense of well-being.

First of all, infrastructure and human resources are necessary: equipment, facilities, visitor offices, parking, and ensuring access by public transport as far as possible. Staff (as well as all stakeholders and actors involved) must be trained in this topic so that knowledge can be applied in all their competencies, trail management, educational plans and materials, and volunteer and community programmes. It is important that the protected area is zoned at a suitable level of activities, according to the impact and intensity of these activities, and that they respond to the dimensions of well-being. Guided trails and itineraries should be offered, as well as facilitating the emergence of well-being experiences (Figure 41).

Figure 41. Short case study: Els Ports Natural Park bet on the experiences of well-being in nature

Els Ports Natural Park (EPNP) is a mountain massif that extends beyond southern Catalonia into Aragon and Valencia. With more than 35,000 ha, the Catalan part of the Els Ports massif was declared a Natural Park in 2001, as was the Partial Nature Reserve of Les Fagedes dels Ports, which sits in the heart of these mountains. The Terres de l'Ebre region, where EPNP is located, was declared a Biosphere Reserve by UNESCO in 2013 thanks to its rich landscape, its typical Mediterranean ecosystems and its model of biodiversity conservation (Els Ports Natural Park, 2021; Ebre Biosphere, 2021).

The villages of this protected area and its boundaries are culturally and gastronomically rich, adding to its natural features and exceptional biogeographical interest (Terres de l'Ebre Travel, 2021). Additionally, it is an unbeatable destination for activities and sport surrounded by nature, particularly hiking, cycling and caving. Enthusiasts of botany, devotees of zoology and experts in ethnology, geology and hydrography can find a thousand reasons to make dozens of possible itineraries (Tortosa Tourism, n.d.).

The park's natural spaces are of great environmental quality and are ideal for getting in touch with nature and for making Forest Baths, an experience of deep connection with nature that provides physiological, psychological and emotional benefits (Ports Experience 2021). EPNP's nature serves as a space to work on psychosocial well-being and is ideal for developing emotional skills, facilitating emotional education for children and adults, and helping address problems and illnesses through introspection in nature (Nakupenda, 2021). The nature, rurality and diversity of this place also gives rise to authentic experiences, handmade products and opportunities for environmental education, such as organic and natural Mediterranean cosmetics, textile craft workshops and traditional fish farms. To date, there have already been eight editions of *Els Ports, Natura & Art*, a space for artistic reflection on the relationship we maintain with nature. It takes an intimate approach to the landscape with a revaluation through contemporary artistic intervention – ecological, ephemeral and respectful – through poetry, sculpture, performance and music (Lo Pati, 2020).



Source: Author's own production. Text from Font-Barnet, A., Nel-lo, M. (2021). Well-being experiences in nature: An emerging form of tourism. In N. Pappas & A. Farmaki (Eds.), *Tourism Dynamics: New perspectives and changing directions* (pp. 22-40). Goodfellow Publishers.

Managers of protected areas have an important challenge that entails identifying the potential for well-being offered by natural protected areas and co-creating appealing experiences and offerings that benefit the health of visitors and local communities. Undoubtedly, all this must be done under umbrellas of conservation and sustainability, and in pursuit of accessibility.

For all these reasons, these spaces, protected areas, natural, green or blue spaces, not only have the potential to offer new experiences closely related to well-being and the search for integral health but also face challenges in this sense, just as environmental sustainability itself does. The research carried out on this topic shows that the maximum potential benefit is not always obtained from these spaces, either because they are not accessible or they lack facilities.

Lack of accessibility to resources is an indirect but subtle form of discrimination. Therefore, introducing the concept of accessible tourism in destinations – and protected areas – is a factor of social integration; it is a right for all citizens to access, use and enjoy environments, goods, products and services; it contributes to equal opportunities for all people (Figure 42).

Darcy and Buhalis (2011) define accessible tourism as: "a form of tourism that involves collaborative processes among stakeholders that enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services and environments". That is, tourism, in all its manifestations, must be accessible to all (DHR 2018), including people with disabilities, the elderly, pregnant women, families with young children, and people with chronic illnesses or other temporary impairments.

Although accessibility plays an important role in sustainable tourism, it is often overlooked or neglected by tourism stakeholders. Among the main needs identified and required by tourists and are the lack of information about accessibility at the destination, the lack of adequately trained staff and the lack of knowledge about accessible providers (PREDIF, 2022).

Figure 42. Short case study: Ria Formosa Natural Park: accessible, free, and well-maintained trails

Ria Formosa Natural Park (RFNP), the most important wetland in the south of Portugal, is a system of large lagoons that extends along sixty kilometres of the Sotavento coast of the Algarve and occupies some 18,000 hectares. There is an RFNP Co-Management Committee, in which the Algarve Intermunicipal Community (AMAL) participates with representatives from each of the five municipalities with an area within the PNRF (Loulé, Faro, Olhão, Tavira and Vila Real de Santo Antonio).

Fishing, shell-fishing and the exploitation of the salt pans are ancient activities there, but added to them in the mid-twentieth century were aquaculture and tourism. Today, Ria Formosa continues to preserve its economic importance, as it constitutes a fundamental resource for the native populations who carry out economic activities closely linked to these places (Turismo do Algarve, 2021).

One of the things that makes this place more significant is its accessible trails which are free, safe and well maintained, where locals and visitors walk every day. Three linear paths that connect to each other stand out: Ludo (free access from near Faro Airport), San Lorenzo (specialized for bird watching) and the Loulé footbridge (wooden path with direct access to the beach). The first two of these are managed by Faro Town Hall and the last one by the Loulé Town Hall.

In a survey carried out amongst 98 users of these trails in the months of October–December 2022, most of the respondents answered that the reason for walking this trail was to contemplate the landscape, relax, disconnect and practice sports. *Nature, calm* and *healthy* were the three words most used to describe the trails.



Source: Author's own production.

Developing accessibility implies the incorporation of measures that make it possible to access, use and enjoy infrastructures, products, environments and services in a standardised, autonomous and safe way. In other words, accessibility must be understood in a holistic way. It will not be useful to have accessible accommodation in an environment that is difficult to reach, or when nearby services or tourist attractions are impracticable for visitors. Not only should a person with a disability have adequate transport and a hotel, but they will also want to eat, visit museums, stroll through parks and trails or participate in leisure activities in nature.

The above considerations have various implications for managers, as well as highlighting challenges and recommendations for improvement. In particular, careful planning and management of protected areas can allow the sector to contribute to the health and well-being of local communities and visitors.

Natural areas are a trend in demand for tourism, while tourism management and conservation policies need to understand that the goal of protecting ecosystems is essential for sustainable tourism.

Finally – and undoubtedly – scientific evidence and knowledge of global case studies on how to achieve well-being through participation, engagement and interaction with protected areas, as well as monitoring of the policing strategy applied around the protected area, are key to continuous improvement of models and success.

PART IV. DISCUSSION AND CONCLUSIONS

8. Discussion

This chapter consists of a discussion on the findings, results and/or advances that have emerged from this research. Based on this research development, the six research questions outlined in Chapter 1 will be answered. In response to the research objectives, the contribution of the thesis is then made visible; that is, the advances or novelties that the thesis brings to the field of international academic research in which the work is framed is explained.

8.1. Answering Research Questions

As with any research, it is necessary to know a starting point in the field of study. For this reason, **the first research question (RQ1)** was, ‘What scientific advances and practical programs stand out in terms of the contribution of nature and protected areas to the well-being of society?’

Scientific production on this topic significantly increased during the 2000s. Researchers have shown that natural environments can have direct, positive effects on well-being, with stimulating effects on human health and general well-being (Bowler et al., 2010; Cvikl, 2016; Ryan et al., 2010; Ryse & Meers, 2012). Well-being is also provided by therapeutic landscapes (Bell et al., 2017; Gesler, 1996; Williams, 2007); and the coast and blue spaces (Bell et al., 2015; Garrett et al., 2019; Hooyberg et al., 2020; Kelly, 2021; Marselle et al., 2013; Wheeler et al., 2012; White et al., 2013).

Experts from many fields and disciplines recognise and highlight the many benefits of natural protected areas (Buckley 2020; Dudley & Campbell, 2015; Ho et al., 2003; Lemieux et al., 2012; Maller et al., 2009; Rashid et al., 2017; Romagosa et al., 2015, Smith & Puczó, 2016; Sparkes & Woods, 2009; Thompson, 2018). Studies on the potential benefits and challenges of tourism in protected tied to with positive outcomes for well-being also stand out (Azara et al., 2018; Curtin, 2009, Eagles et al., 2002; Gabriel, 2019; Leung et al., 2018; Li, 2018; Little, 2012, Puhakka et al., 2017).

The Healthy Parks Healthy People (HPPH) programs, which originated in Australia in 1999, stand out in terms of the contribution of protected to the well-being of society. Since then, this movement has promoted the value of protected areas as key resources for well-being worldwide by reducing health inequalities, contributing to individual and community health and supporting the broader aspects of economic health and territorial growth and development (Europarc, 2018; Parks Victoria, 2017). The First International Healthy Parks, Healthy People Congress was held in Australia in 2010. In 2011, the U.S. National Park Service published the *Healthy Parks, Healthy People U.S. Strategic Plan*, a document that lays the foundations for the programme throughout the national park system. The EUROPARC Federation published the *EUROPARC Toolkit Health & Well-being Benefits from Parks & Protected Areas* in 2018, the aim of which was to provide advice on how parks and protected areas can support and generate positive health outcomes for visitors (EUROPARC Federation, 2018). Countries such as Finland and Scotland have developed their own strategy and guide for the well-being of society and their protected areas following the guidelines and recommendations of EUROPARC and international organisations. And within IUCN, there is now a specialist group—‘IUCN-WPA Health and Well-being’—which actively works to advocate for greater recognition of the interdependence between healthy parks and healthy people and the natural world (IUCN-WPA, 2014). While the programmes and advances that have been made—and especially those that have been promoted—have not always been implemented in specific countries, with Australia, the United States, Canada and some European countries—especially northern Europe and Spain—standing out, but there is still a long way to go in Latin America.

The second research question (RQ2) asks ‘what well-being benefits are provided by protected areas’ and was seen throughout the research as many and multidimensional. Protected areas with spaces and services for multiple activities (e.g., hiking, walking, cycling and swimming) in incredible environments and landscapes provide optimal effects in

environmental, physical, mental, spiritual and social dimensions. Visiting a protected natural area that is safe, accessible and free for recreation is now seen worldwide as preventive treatment for public health problems (Buckley, 2020; Lemieux et al., 2012; Maller et al., 2009; Rashid et al., 2017; Romagosa et al., 2015; Smith & Puczó, 2016; Sparkes & Woods, 2009).

Parks are perfect places that emphasise the value of ecosystems and human involvement in the natural environment (Albuquerque et al., 2018; Maller et al., 2002). The multidimensionality of well-being concept in relation to the benefits provided by protected areas can be defined with the following dimensions: physical for active and healthy lifestyle; mental for stress reduction, boost self-esteem and mind–body balance; social for human involvement, inclusion and cohesion; emotional for personal growth; spiritual for contemplation, reflection and inspiration; and environmental for ecosystem protection (Font–Barnet & Nel-lo, 2021; Gladwell et al., 2013; Global Wellness Institute, 2018; Maller et al., 2002). A multitude of experiences in nature contribute to tourists' well-being and have the potential to influence their lives beyond the actual activity and trip (Knobloch et al., 2017); and bring nature closer to the most vulnerable groups, such as the green and blue exercise, doctor-led activities, volunteer work, mindfulness, forest bathing and art therapy, among others.

With regard to **the third research question (RQ3)**—‘How can the well-being benefits of protected areas or blue spaces be identified?’—co-creation and action-research approaches enable stakeholders to actively participate in the research as data generators and co-researchers. Even though there is no doubt that nature brings about benefits, as is corroborated by scientific studies, it is important to both create a process of reflection and raise awareness among the agents involved in the planning and management of protected areas, blue spaces and coastal paths. Co-creation is understood to be an active, creative and social process based on collaboration between producers and users. With a diversity of methods and tools explained in the methodology of this research, which ranges from setting up working groups

in the study area with all stakeholders to providing training workshops and developing focus and discussion groups using visual and collaborative techniques. Transparency, communication and gaining confidence is the most important to a successful user engagement and commitment.

Without going into the detailed medical aspects (e.g., evidence of stress reduction), the applied methods allow the identification and structuring of potential opportunities for tangible and intangible resources that benefit multiple dimensions of well-being provided by green and blue spaces. Depending on the research objective, the area of study, the availability of participants and the sample, a combination of both qualitative and quantitative methods (e.g., visitor surveys) should be considered, and the flexibility of the research design is key to being able to constantly adapt to the needs of the research and the participants.

For **the fourth research question (RQ4)**—‘How can well-being and nature-based tourism experiences be co-designed?’—we developed a research methodology that integrates visual methods in data collection and analysis with the participation and involvement of public and private actors in order to co-design experiences of well-being; this will be explained in Chapter 4. This methodology—which involves concepts such as participation, collaboration, cooperation and creativity—was applied in two natural parks and one coastal destination, with the active participation of protected area managers, municipalities, destination management, the tourism industry, residents and entrepreneurs.

The workshop of co-design process of experiences focused on sessions lasting 3.5 hours held that addressed to 8–10 participants, which included such techniques as mental maps, meditation sessions and a form that included the different steps of the experience. However, this workshop was part of an eight-month project with important previous phases for successful co-design sessions (i.e., an open seminar on the project, training workshops, focus groups to identify the well-being benefits of the area, field trips, a website analysis and a literature review).

The main benefits identified from the methods used are: the transfer of knowledge from the academy to the territory and the creation of awareness of the potential and close relationship between nature and well-being; dynamics of the workshop, which allowed the creation of collaborations and synergies; and the emergence of innovative, original experiences created by the participants. We confirmed that the visual and design methods resulted in detailed well-being experiences that met the clear purpose of this research, which was to create innovative experiences with potential viable application. The resulting experiences can be incorporated into the proposals parks and destinations offer to visitors; above all, managers will drive efforts to incorporate, reinforce, communicate and share the health benefits of protected areas and blue spaces.

The fifth research question (RQ5) was ‘What proposals can be made to maximise the potential well-being benefits of blue spaces and coastal walks?’ It is necessary to better promote and integrate blue spaces and the potential thereof into development strategies and tourism planning and improve citizens’ understanding of the health risks and benefits of interacting with the sea and raise awareness of marine ecosystems, habitats and species and rationally plan activities developed on the coast in order to reconcile environmental and landscape protection with economic, social and cultural development. A strategic approach to the continued conservation and restoration of coastal and marine areas for the benefit of present and future generations will halt the loss of biodiversity and preserve protected species. The beach offers a wide range of ecosystem-based activities that allow for a variety of uses throughout the year at the levels of leisure, entertainment, education, recreation, health, environmental discovery and knowledge, arts, etc.; by encouraging entrepreneurship and creative design in the form of new products, souvenirs and amenities linked to the destination brand idea and the concept of blue spaces; and planning sporting, mind–body, cultural, artistic and educational activities by the sea throughout the year, managers can continue to develop and maximise the

benefits of blue spaces, it is essential to organise working spaces, such as the creation of a forum of local actors linked to the well-being, nature and tourism sectors and the establishment of alliances between companies, town halls, local authorities and entrepreneurs to create combined well-being and blue tourism experiences.

Coastal trails and walks are social spaces where visitors can enjoy and share activities close to the sea, which offer multiple benefits that include all dimensions of well-being, such as the need for a consolidated, articulated proposal put forward by the municipalities through which the coastal path passes. The need to incorporate and disseminate the historical, symbolic and identity values at an interpretive level should be a priority action; the need to take action on signposting, information and urban furnishings along the paths was found to be a common weakness in both cases studied. Wherever possible, circuits should be created with different destinations and attractions, signposted with information about the route (distance, estimated walking time, interpretation) and, ideally, standardised if the circuits are in a common area (close to a protected area, town, etc.). Trails create opportunities for active participation by walkers and local communities. Partnerships can be formed with local groups and associations that offer visitors ancillary services (horse riding, local guides, participatory monitoring, handicrafts, local products). There was also a need to continue supporting the development of outdoor sports activities such as surfing and diving as a complementary product to walking

The objective of **the sixth research question (RQ6)**—‘Can this research provide a basis to enhance the well-being benefits that protected areas provides to society?’—was to advance a framework by which the managers of protected areas and the communities and/or other authorities/administrations (i.e., the government) where a natural area is located could consider demonstrating and adding value of the well-being benefits that nature provides to the society.

The framework available in Chapter 7 emerged as a conceptual and system model after we completed the fieldwork, made observations and documented experiences throughout the whole research process as a result of a sum of the projects, publications, research stays, works and studies related to the main topic of research, thereby providing theoretical cohesion and connection to the evidence and conclusions presented in this doctoral thesis.

The primary relationship creating this cohesive framework is the following statement—‘Protected areas lead to (multidimensional) well-being through participation, involvement, interaction and engagement’—which is closely related to, dependent on and regulated by the management of public-use that responds to a political strategy. This nexus allows or restrains users, visitors and residents of protected areas to achieve or fail to achieve well-being.

8.2. Main Contributions

The overall objective of this thesis was to demonstrate the important contribution of protected areas to the well-being of society from conservation, community management, public use and tourism. The analysis of practices and the combination of participatory and mixed methods from different case studies allowed for a diversity of findings that respond to the research objective. The main contributions of this research are thus related to the specific objectives.

First, tourism offering well-being practices in nature has exponentially increased in recent years, and the scientific interest in this subject has also grown at a similar rate from both a theoretical and a methodological perspective. However, no bibliometric analysis of the scientific production had been conducted within the topics of ‘tourism’, ‘well-being’ and ‘nature’ before stating this thesis. **A bibliometric analysis of the literature was carried out to provide insights into the contribution of nature to the well-being of society** (i.e., Objective 1). It was useful to provide an approximation of the evolution and general features

related to this multidisciplinary topic and identify geographical distribution of the application of research (i.e., case studies, cross-country network collaboration) and new trends, concepts and further research.

Second, in line with Objective 2, identifying the well-being benefits of protected areas through a participatory research process—**this research has evolved from the well-being benefits of nature in a multidimensional way**, without going into the medical aspects, but sharing the benefits, facets and dimensions of well-being related to protected areas, landscapes, blue spaces, coastal walks, experiences and tourism. The six dimensions of well-being studied were selected on the basis of research advances and approaches in this area from different perspectives and disciplines, which add value and originality to this research. The results show that the environmental benefits (e.g., conservation and protection of the ecosystem and environmental education) and the physical benefits (e.g., through the creation of trails for exercise) were the most commonly dimensions addressed in the different case studies in both protected and unprotected areas. In contrast, emotional, mental and spiritual well-being is rarely addressed.

Third, the **application of the co-creation and action research approach was the basis of each case study to ensure the involvement and engagement of communities** and the transfer of knowledge, suggestions and actions to enhance the benefits of nature and raise awareness of conservation for the well-being of people and nature. Today, the study areas discuss the well-being of protected areas and blue spaces and implement community programmes, experiences and marketing campaigns on the subject, so local residents and visitors can enjoy and connect with nature. In this sense, and as a methodological example, this research provides a methodological proposal for co-designing experiences of well-being with stakeholders (i.e., Objective 3).

Fourth, **this research provides evidence on the well-being of users of protected areas, blue spaces and coastal walks** in a multidimensional manner after applying different methods in several study areas, as defined in Objectives 2 and 4, the latter of which led us to explore the motivations and well-being outcomes of blue-space users and coastal walkers in order to maximise the potential benefits of these areas. Careful planning and management of public-use nature areas (i.e., protected or unprotected blue and green spaces) contributes to the health and well-being of those working in tourism, locals and travellers seeking contact with nature and memorable experiences to escape their urban realities, daily stressors and over-connectedness to technology.

Fifth, **this research facilitated the study of different cases of protected areas of tourist interest** from Latin American and European regions: Cahuita National Park in Costa Rica, Bahía de Chetumal Natural Reserve in Mexico, the Ebro Delta Natural Park and Els Ports Natural Park in Spain and the Ría Formosa Natural Park in Portugal. This led us to study parks with different protection categories, management plans and socio-economic realities, where the sense of community is shown in different ways; and to develop a framework for enhancing the benefits of protected areas for human well-being, based on various experiences and practical studies and in response to Objective 5. Knowledge, instruments and strategies were provided to promote, incorporate and/or increase the benefits for health and human well-being tied to contact with nature in the cases studies, where the concept and associated benefits of well-being are rarely integrated into the planning and management of the public use of protected areas. The challenge for protected-area managers is to identify and understand the well-being potential of protected areas to both rethink all elements of the public use of space (i.e., infrastructure, provision and purpose of trails, education and volunteer programmes and staff training) and create attractive experiences and provisions that benefit the health of visitors and local residents.

9. Conclusion

The concluding remarks of the research are presented in this final chapter, and limitations and future lines of research are discussed.

9.1. Concluding Remarks

As was noted, **natural environments can have direct, positive impacts on well-being and stimulating effects for human health and general well-being** (Bowler et al., 2010; Cvikl, 2016; Ryan et al., 2010). The need for nature, urban green spaces, blue spaces, parks and protected areas is not only for the health of nature and conservation of the planet, but also for the well-being of people (Dudley et al., 2015; EUROPARC Federation, 2018). In this way, **nature contributes to the sustainable development of regions and societies** (Mellon & Bramwell, 2016; Nelson & Rafal, 1997).

The need for a connection to nature; the growing numbers of visitors to protected areas; and the purchase of tourist experiences for well-being, spirituality and personal growth is a growing trend, and nature-based recreation has strong potential in this area. Natural parks offer ecosystem services to those who visit and enjoy them through the different modalities and services of public use and tourism that are established by each, and tourism management and nature conservation policies must understand that **the objective of protecting ecosystems is vital for sustainable tourism**. Research on tourism, well-being and nature is a leading topic, along with planning and promoting natural areas as tourist destinations (Bushell, 2009; Hartwell et al., 2018; Uysal et al., 2016).

Well-being tourism encompasses a diverse set of activities and interests, including preventive health, beauty, fitness, personal growth and nature (GWI, 2018; Smith & Puczó 2016). **Well-being goes beyond the tourist's satisfaction, however: directly improving their quality of life, social capital and social inclusion benefits tourists and residents**. There are numerous diverse opportunities and benefits associated with well-being tourism, which directly affect tourism and territorial development. Well-being serves as an engine of economic growth through job creation, the

promotion of local products and gifts and women's empowerment; well-being is health (i.e., the recovery of traditional mechanisms and the reduction of the epidemic of poor mental health); well-being improves quality of life and social capital; and well-being protects natural and cultural goods (i.e., sustainable tourism).

Natural areas are among the clearest beneficiaries of these new tourism trends, because they combine relaxation with environments offering direct, positive impacts on human health and well-being. Specifically, **protected natural areas that are perfect for developing well-being** are situated in rich ecosystems, are delimited, safe and accessible, include a management structure with staff and provide places for recreation. In addition to being strategic places to protect natural resources, biodiversity, and other cultural values, protected natural well-being contribute to the general well-being of local communities and visitors, thus reinforcing the principles of ecotourism. Parks are important places that improve physical health, boost self-esteem, promote confidence and strengthen, specially for populations that rarely use parks, such as minorities, low-income households and people with disabilities. It is therefore necessary to prepare protect areas to accommodate the growing interest in nature and guide tourism towards positive outcomes that promote the well-being of the environment, visitors and local communities.

While significant progress has been made, there are aspects on which there is still a long way to go. The challenge is to **make parks a good place to live and visit** by promoting the well-being of local residents and the satisfaction of tourists. When people experience and benefit from nature, they are more likely to appreciate and care for these areas (NPS, 2020).

A wide range of activities for both mind and body can be developed in protected areas, whether for solo or group travellers in wonderful landscapes and surroundings that offer connections between the environment and the self. Of the possible experiences, many are usually performed in gyms and enclosed spaces, such as yoga and tai chi; and by

‘going green’, which involves direct contact with nature and has a positive impact on psychological and physical well-being and health (Loureiro & Veloso, 2017); the numerous benefits thereof for the body and mind are reinforced (Gladwell et al., 2013).

The challenge for tourism in protected areas, including all its typologies—gastronomical, nature-based, ecological, wellness and medical—is to improve the health and well-being of social and ecological systems; this requires **proactive and inclusive planning processes that protect the environment while improving lifestyles and livelihoods**. Participatory management of tourism must be ensured in protected areas (De la Cruz et al., 2014), cities and destinations. A place with well-connected, attractive green and/or blue spaces that provide opportunities for active mobility and sport, stress reduction, recreation and social contact is likely to be more resilient to extreme environmental events (e.g. heat waves). Such a city is also likely to have healthier citizens, reducing demand on health services and contributing to a stronger economy (World Health Organization, 2016).

Tourism businesses and destinations need to rethink their strategies and create products that offer unique, different and **accessible experiences** to their customers. A large number of tourism service providers do not know how to address and improve accessibility and respond to the needs of both tourists and local people with disabilities. Knowing the factors that determine a tourist’s experience is now one of the fundamental elements for **planning and managing tourist destinations in an inclusive way**.

Protected area managers face the challenge of identifying the well-being potential of protected areas to co-create and co-design attractive experiences and offerings that benefit the health of visitors and local populations, while adapting to changing needs, including in times of global crises. Protected-area managers face the challenge of identifying the well-being potential of protected areas to create attractive experiences and offerings that benefit the health of visitors and local populations, while adapting to changing needs in the event of a global crisis. It is important to

involve the agents who directly or indirectly participate in the management and use of protected areas or destinations and to **establish agreements and collaborations** with public and private associations and alliances with entities and professionals in the field of health from different perspectives—**health, sport, children’s education, accessibility, senior citizens**—as well as constant evaluation of the state of the facilities, equipment and services of parks in the area of socio-economic influence. In the context of tourism, co-design can transform tourism practices and enable stewardship alliances for sustainable development (Liburd et al., 2020).

Nature, the sea and the coast need to be brought closer to residents and tourists. Hockings et al. (2020) pointed out that the relationships and synergies that can be generated and formed among biodiversity, tourism and well-being are strategic, as well as a significant challenge for public and private agents and local populations. **The collaboration and active participation of the local agents and managers** of the protected areas in this research project provided an opportunity to review, detect and evaluate the multiple benefits offered by protected areas and from which they profit; this occurs through co-creation with public and private tourist agents and collaboration with other sectors and with residents.

A new model of governance and public–private collaboration, especially in protected areas as key places for develop human well-being, should be noted. Managers of protected areas have an important challenge that entails identifying the potential for well-being offered by natural protected areas and co-creating appealing experiences and offerings that benefit the health of visitors and local populations while adapting to changing needs, even during global crises. In order to further enhance community well-being, better coordination between stakeholders is needed to encourage interaction between local communities and tourists (Naidoo & Sharpley, 2015).

Alliances with social, educational and health entities should be promoted to complement a program of activities that encourage inclusive well-being in protected natural areas. Considering their potential, most protected areas are currently underused, not only for the natural and ecological value of their ecosystem, but also in terms of being safe, open, well-managed and accessibility and inclusive for everyone.

Tourism renovation requires a strategic vision that both stimulates and promotes the political, business and social consensus; to give special importance to local agents in the way these destinations are perceived and the manner in which needs are identified; and to prioritise the equitable distribution of responsibilities and benefits in order to promote **sustainable, healthy and accessible** recreational and tourist activities along the coast and in the sea.

This research brought the relationships between environmental sustainability, tourist development and human well-being into sharp relief; **the search for a balance** between these aspects provides an opportunity to rethink the tourist model of destinations. It is necessary and strategic to incorporate **well-being in the tourism plans and the public use of natural protected areas** as a strategic line that innovates and redefines the tourism development plans and policies of protected areas.

Tourist destinations backed by the collaboration of all stakeholders could adapt their offerings to satisfy the emotional, social and spiritual needs of today's tourists. It is therefore important **to measure experiences in parks in order to identify the factors that make up the experience and influence the achievement of a satisfactory experience in terms of well-being.** To identify and make an inventory of the activities, experiences and tourism and leisure proposals offered by the park managers themselves and by entrepreneurs—such as free visits, guided visits, educational activities, volunteer activities, activities for special groups, ecotourism experiences and authorised sports activities—it is essential to plan and manage the space and for companies and tourist destinations to redirect their strategies.

The foregoing reflections on tourism management in nature areas present **various implications and guidelines for managers of protected areas and destinations**, as well as indicate challenges and recommendations for improvement.

With all these remarks, **the hypothesis** ‘there is a positive relationship between nature and well-being and the participation, involvement, interaction and engagement of users (i.e., visitors and residents) with protected natural areas is key to achieving it’ **is affirmed** and was corroborated by research.

9.2. Limitations

The research topic, which focussed on the study of the relationships and links between well-being, nature and tourism, was announced to the doctoral school of the Rovira i Virgili University in October 2019. Now that some time has passed, it seems incredible that the plan to study the well-being of nature was made a few months before the outbreak of COVID-19. And, in fact, this thesis, formally and officially with a pre-doctoral research grant was started at home in April 2020 a few days after March 15, 2020, when the pandemic was officially declared in my country. This research began in a confined and closed space, and we did not know what would happen to our well-being and worried about this situation. This was the first unintentional and external limitation, especially with regard to initiating the development of case studies in Catalonia and abroad; and also because of the suspension of courses, congresses, seminars and research meetings due to the pandemic.

A clear identification and user engagement of stakeholders as participants in the research process is crucial from the beginning. However, the first workshops and meetings with the stakeholders had to be virtual due to the restrictions generated by COVID. This situation, although the use of visual tools for virtual interaction, makes it difficult and delays the links between the research team and the participants.

Priority was given to carrying out more local projects as soon as we could, as evidenced by the scientific publications related to Catalan protected areas and blue spaces. The international research stays were postponed and the first one in Costa Rica could not commence until the end of 2021. Australia and Parks Victoria, which was the most eagerly awaited stay, was unavailable and was ultimately not planned due to the pandemic. Nevertheless, I was able to do three international stays and spent eight months abroad learning, contributing and transferring knowledge, even though there was no time to publish some of the scientific results, such as the framework including the case studies carried out abroad.

The second limitation was being able to prove and publish at a scientific level the human well-being provided by nature from a social, participatory and mostly qualitative study. It was a challenge to develop methodologies and approach this topic without going into the medical aspects of well-being. Finally, while all the articles are published in peer-reviewed journals or by publishers with a high reputation and high journal indexes, no method was questioned.

The third limitation was that developing multiple case studies in different countries made it difficult to apply common methodologies. Flexibility also extended from changing decisions in the field to redirecting questions and methods in advance (Blaxter, 1996). The flexibility in this research design was necessary to ensure engagement with managers and the participation of local actors during the development of the research. Even though only a few methods and workshops were replicated, the expected results were achieved. Moreover, the pandemic made it difficult to apply these methods, some of which needed to be made virtual, some of which were postponed, and some of which had to be rethought. The mix of methodologies in different case studies took time, and it was a challenge, especially when adapting the research to the realities of foreign countries, which had not been previously attempted by researchers; the first step was always to identify and contact all key actors and participants in the workshops or interviews and surveys. The topic of well-being, in a holistic

and multidimensional way, is still a new topic for rural areas and Latin America cases studies, and training on this was necessary prior to the focus groups and co-design sessions of experiences.

The final limitation—despite my interest and curiosity—was the lack of sufficient scientific and practical knowledge about this field of study before we started; it was yet to be discovered. As a geographer, I had knowledge of protected areas and coastal management, and, thanks to the Master in Tourism Destination Management, I knew about the impact and sustainability of destinations and the importance of their governance, and I saw well-being in the use and interaction of public space by communities and tourists. Once this research was completed, I was able to find a way to link these three concepts.

9.3. Further Research

This research should continue with the development of a system of quantitative indicators that would translate all qualitative data contained in the framework presented. Through extensive time and fieldwork, these indicators would allow us use of methods to clearly identify the strengths and weaknesses of different protected areas in terms of providing well-being. I would also use it to compare blue areas with green areas.

In relation to co-designing experiences in protected areas, future projects could address the development of co-designed experiences, the implementation and follow-up of which should be encouraged by the territories and local businesses. It would also be interesting to measure the effect of mindfulness in experience design through longer sessions, such as a retreat to stimulate creativity.

For future research on blue spaces and coastal walks, it is recommended that researchers focus more on landscape perception and evaluate other qualitative aspects, such as asking about the improvement or deterioration of the landscape by comparing photographs. The use of participatory drawing and mapping tools would also reflect the challenges and recommendations in the management of coastal destinations.

10. References

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APPENDIX

A1. Cases studies: photographs

Figure 43. Photographs taken in Ebro Delta Natural Park.



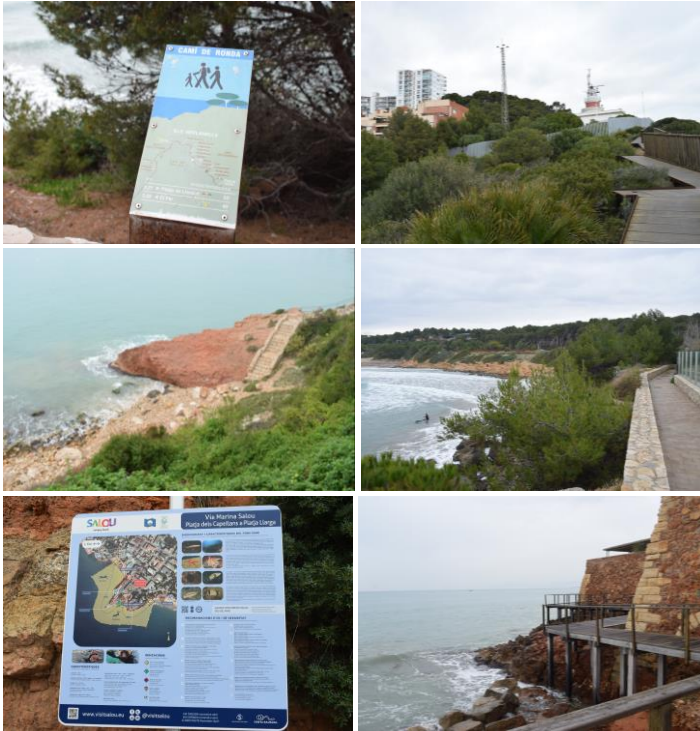
Source: Author's own production.

Figure 44. Photographs taken in Els Ports Delta Natural Park.



Source: Author's own production.

Figure 45. Photographs taken in Blue Spaces and Cami de Ronda Coastal Trail in Salou.



Source: Author's own production.

Figure 46. Photographs taken in Cami de Ronda Coastal Trail in L'Ametlla de Mar.



Source: Author's own production.

Figure 47. Photographs taken in Cahuita National Park.



Source: Author's own production.

Figure 48. Photographs taken in Elena Cloud Forest Reserve



Source: Author's own production.

Figure 49. Photographs taken in Ria Formosa Natural Park.



Source: Author's own production.

Figure 50. Photographs taken in Bay of Chetumal and Bacalar Lagoon.



Source: Author's own production.

A2. Surveys and walking interviews data

Figure 51. Survey model addressed to users of Blue Spaces of Salou.

Informed consent

The questionnaire is carried out within the project "Blue spaces and coastal wellbeing: una font de salut, benestar i equilibri pel territori", coordinated by research Marta Nel·lo Andreu i Alba Font Barnet of la Universitat Rovira i Virgili, with collaboration of Ajuntament de Salou and Diputació de Tarragona. The aim is to analyse the benefits of living near the coast and making use of blue spaces, to facilitate their identification and to propose a blue infrastructure for the municipality through the perceptions of residents, visitors and tourists.

Participation is free, voluntary and anonymous. The information will be treated confidentially and will be used for the exclusive purposes of this research, as well as for the scientific dissemination of the results. If any of the questions make you uncomfortable, you have the right not to answer.

Thank you in advance for your participation.

I AGREE

- * Participant ID:
- * Surveyor ID:
- * Language that responder:
- * Time (in minutes) it took to complete the survey:

Questions:

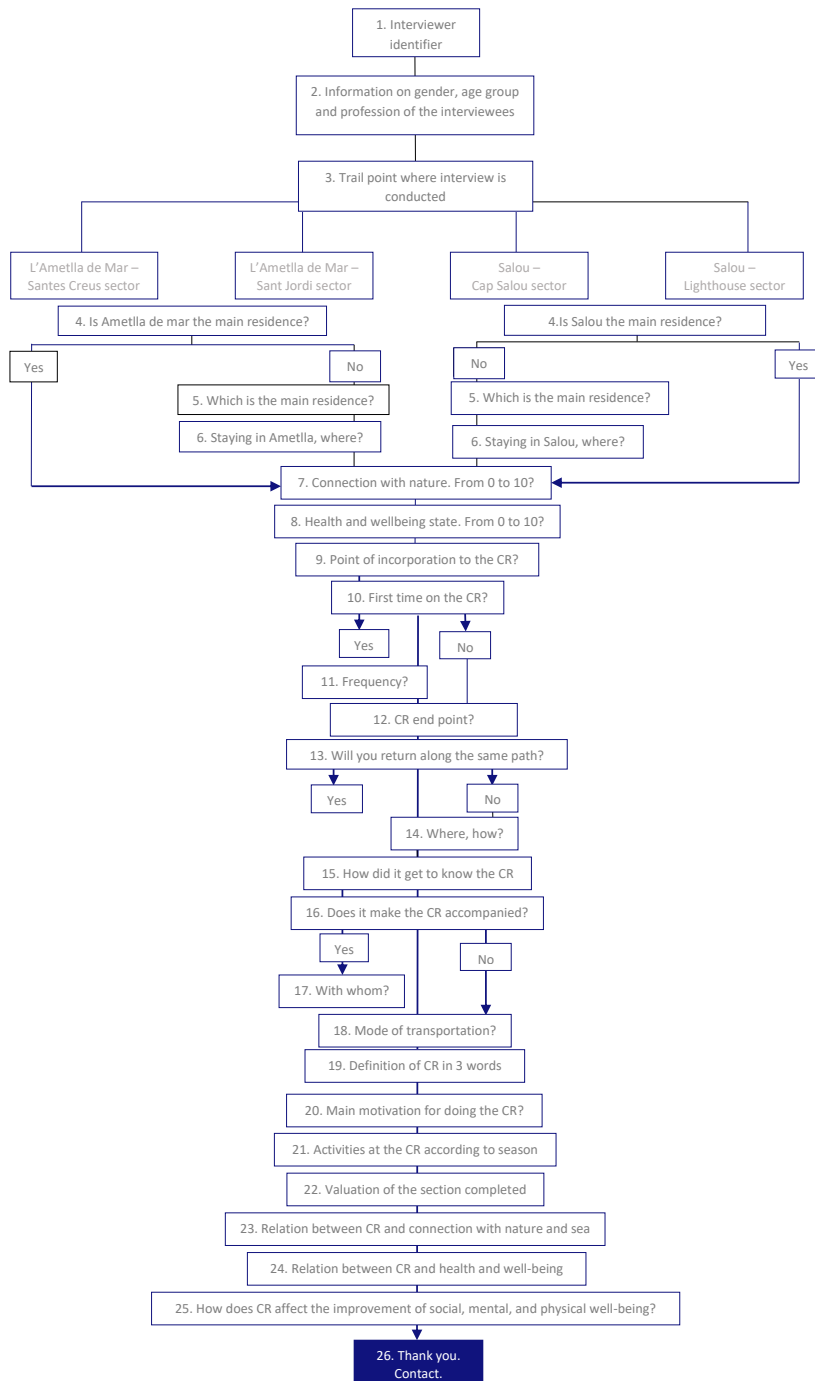
- Age
- Professional field or sector
- Main residence
- If you are a tourist, please provide accommodation details
- From your house or the place where you are staying, can you see the sea?
- From your house or the place where you are staying, how long does it take you to get to the sea if you are walking? (indicate whether you are referring to the time by car or on foot)
- On a scale of 0 to 10, how connected do you feel with nature? In your daily life, with the activities you do, the modus vivendi... (0= not at all connected; 10= completely connected)
- On a scale of 0 to 10, how would you rate your general state of health and well-being?

[Information on: Blue spaces are those open-air spaces, whether natural or artificial, that are predominantly water-based and are accessible to humans either in proximity (being in, on or near the water) or at a distance (being able to see, hear and feel the water)]

- Which of these blue spaces in SALOU do you visit/frequently visit (select from the list)?
- Which of the following activities do you practice in the blue spaces of Salou (select from the list)? In which season(s) of the year do you practice these activities? Select only the activities that you DO practise and indicate the season of the year.
- Which of the following activities do you practice in the blue spaces of Salou (select from the list)? In which season(s) of the year do you practice these activities? Select only the activities that you DO practise and indicate the season of the year.
- Normally, when you go to these areas, who do you go with? Select the options you consider. 18. What is your favourite beach in Salou?
- Why did you choose this beach?
- How would you rate the quality of the water on the beaches of SALOU? (think about the colour, the smell, the rubbish in the water, etc.)
- How would you rate the quality of the infrastructure of Salou's beaches?
- On a scale of 0 to 5, how does your visit to the beaches of Salou influence your state of health and well-being in the following aspects?
- Do you know the Camí de Ronda in Salou?
- How often have you visited the Camino de Ronda de Salou in the last month?
- Which of the following activities do you do on the Camino de Ronda de Salou? In which season(s) of the year do you do them? Select only those that you do.
- When you do activities on the Camino de Ronda, does it make you feel closer to nature and connected to the sea?
- When you do activities on the Camino de Ronda, does it make you feel relaxed and stress-free?
- Thank you very much for your participation, if you want to receive information about the project, please write your email address-

Source: 'Blue Spaces and Coastal Well-being' project.

Figure 52. Sample interview with walkers of Camí de Ronda Coastal Trail.



Source: 'Cami de Ronda' project.

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