



Alpine health tourism and sustainable wellbeing perspectives in the high Ossola valley (Italy)

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Received: April 2022 – Accepted: May 2022

Abstract

In the complex and dynamic framework of health tourism, along the Alps the innovative project HEALPS2 has moved forward with promising results. The main goal is combining the knowledge and the technology-oriented approach developed by researchers and experts from the private and public sectors with the knowledge of the territory held by local associations and public organisations, for the best planning of the future sustainable development of marginal rural regions. HEALPS2 has developed a model for a sustainable enhancement of natural resources for health, wellbeing and tourism purposes. The paper explores forms and features of Alpine health tourism while offering an overview on the structure, methodology and outcomes of a specific research action of HEALPS2.

Keywords: Alpine Natural Resources, Health Tourism, Protected Areas, Sustainable Development, Wellbeing Perspectives

1. Introduction

Within many Alpine areas, tourism has been an important and growing economic sector for over 200 years. In terms of tourism demand, an estimated 120 million people visited the Alpine region each year before the pandemic crisis (Romeo et al., 2021), making up approximately 12% of tourists worldwide (Dornier and Mauri, 2018).¹ Tourists are attracted to destinations

along the Alps for various reasons, such as climate, clean air, unique landscapes and wildlife, scenic beauty, local culture, history and heritage, and the opportunity to experience snow and participate in snow-based or nature-related activities and sports. While winter sports are often the main tourist attraction, it emerges that alternative tourism products and practices are able to target different kinds of tourist profiles. Many mountain destinations are currently looking to

¹ The total volume of tourists in the European Alpine regions can't be accurately measured, in particular due to the national differences in the definition of

tourist accommodation and to the national statistical data collection ways.

both specialize and diversify their tourist offer range including healing and wellbeing proposals.

Even if the pandemic event has modified flows and practices, for many Alpine places and inhabitants, tourism can be still considered one of the easiest options to earn money, both directly and indirectly. To many farmers, tourism produces a secondary income and thus it contributes to ensuring mountain farming practices' continuation and the conservation of Alpine landscapes. In the last few years, younger generations have been choosing the Alpine valleys as places to stay or return to due to the opportunities offered by tourism services as the basis of employment and business opportunities (Corrado et al., 2014; Varotto, 2020). A renewed interest with varied connotations that recalls the evolution of the relationship between tradition and modernity in Italian mountains since the 1990s (Bernardi et al., 1994). It can be stated that this socio-economic and territorial pressure potentially creates conflicts between tourism development interest and the protection of Alpine nature and culture. In this framework, sustainable and responsible tourism seeks to resolve conflicts and to provide competitive products able to generate adequate income without negative impacts to Alpine ecology, space and the local communities. The Alpine health tourism value chain represents an opportunity to achieve these goals, driving job creation and sustainable growth also in remote and inner Alpine areas. Those are the reasons why many European funding programmes implemented in the Alpine area are aimed at the tourism sector, and more specifically at sustainable tourism products and experiences, focused on co-created and participatory community initiatives. The EU programmes and their related calls are addressed at stimulating policies and projects, consolidating the public-private partnerships as fundamental networks in the Alpine context, and co-financing the proactive commitment of several local actors, including the local communities.

With specific regard to Alpine health tourism, the paper aims at exploring its features, meanings and forms along the Alps and their protected areas. In particular, it shows findings, results and practical implications of the action-research carried out within the project HEALPS2

– *Healing Alps* of the Interreg Alpine Space programme. The work has been implemented by the Study Centre Upontourism. *Vision, Strategy, Research for innovative and sustainable tourism* of UPO – *Università del Piemonte Orientale* (Italy), and managed by EGAPPO – *Ente di Gestione Aree Protette* dell'Ossola, the Italian partner of HEALPS2. The focus of interest on the Italian side has been the protected areas of the high Ossola valley, a mountain territory in the Piedmont region of north west Italy. The role assigned to EGAPPO in this project was specifically aimed at integrating through new resources and scenarios, a protected areas' perspective on sustainable health tourism. The final action to be finalized was the design and implementation of a pilot project. The research conducted by Upontourism has had a function of support and coaching through the scientific study and definition of project guidelines, instrumental, in the first instance, in the implementation of the pilot project, as well as other consequent projects.

The scheme below (Figure 1) illustrates in detail the research structure carried out by UPO, made by three subsequent steps. The main findings of this path are presented and discussed in the following paragraphs. Central overlapping area outlines illustrate implementation priorities and policy recommendations for health tourism development in the Alpine protected areas (PATH, as acronyms and metaphor), with particular reference to the EGAPPO context and HEALPS2 project, which represent the core field of this research and paper.



Figure 1. Research Design. Source: Cerutti and Menzardi, 2021.

2. Changing practices, changing motivations: the health tourism in the Alps

Locations as tourism destinations are the most important basis for all forms of tourism (Jovicic, 2019). Customers choose a location or destination according to their needs and wishes (Bieger and Beritelli, 2013; Benur and Bramwell, 2015). Positioning in tourism aims to differentiate a region or a service provider for a target market by means of specific product characteristics, which differentiate the destination from its competitors (Pike and Ryan, 2004; Saqib, 2019). Increasingly it means enhancing local material and immaterial heritages within a more sustainable perspective, involving communities and local stakeholders (Nunkoo and Gursoy, 2012; Jeon et al., 2016; Cerutti et al., 2021). Tourists are in fact deeply motivated by emotional factors and activities that can be experienced in a specific location, deeply related to its history, culture, landscape and people.

Despite positive impacts that tourism has on various aspects of human activity and environment (Fayos-Solà et al., 2014), there exist many negative viewpoints about the tourism activities and destinations that manifest massive negative impacts on the local environment, culture and lifestyle (Mihalič, 2000; Pechlaner et al., 2019). This leads to continuing efforts in the direction of more sustainable and responsible tourism.

Tourist motivations nowadays are largely related to safety issues of tourism destinations management during the ongoing pandemic. Hence re-positioning in tourism means to change visions, targets, strategies. Opportunities for sustainable and proximity tourism are emerging in the Covid-19 era (Cerutti and de Falco, 2020).

In tourism, in the Alpine area, a variety of heterogeneous products, practices and services (e.g. hiking, trekking, winter sports etc.) can be identified; these products and services contribute to an increasingly intense competition for experience opportunities. Together with other resources and services they can now drive changes. New and innovative tourism products

and services are needed to differentiate from competitors and from the past.

Positive developments in the field of health tourism, in particular, show high potential for differentiation (Evangelista, 2016; Ulusoy and Tosun, 2020). According to experts, life and leisure behaviour mainly contributed to the increase of health consciousness in the population. The growing potential of health tourism products can be underpinned by demographic development and increasing expenditure on health. Covid-19 has outlined the need for better prevention and control, and for safety procedures for tourism businesses and the trust of travellers and tourists who choose a certain destination. The time of Covid-19 is characterized by the power of close-to-home nature, recreational outdoor amenities giving more vitalities, also to health and wellbeing tourism activities.

Therefore, tourism providers in Alpine regions have a unique possibility to develop novel health-related tourism products or adapt existing offers.

Alpine destinations especially provide the following prerequisites (Schalber et al., 2011):

- due to their long-standing experience, developed Alpine tourism destinations have available a high degree of professionalism in delivering the tourism product;
- Alpine tourism destinations are very accessible for their core markets (Germany, Benelux, Switzerland, Austria and Italy);
- Alpine tourism destinations have consolidated public and tourism infrastructures;
- Alpine tourism destinations are settled in a unique landscape and scenery which is appropriate for health services due to the climate, altitude and pure unpolluted mountain air;
- Alpine tourism destinations include a wide range of offers related to sports and outdoor activities in all seasons (winter sports, hiking, climbing etc.);
- Alpine tourism destinations are known in their core markets to position themselves above the average;
- Alpine tourism destinations offer a well-developed tourism product – a clear winter

and summer product – which can be easily combined with medical wellness services.

The link between protected areas and tourism is as old as the history of the areas themselves. Protected areas need tourism; tourism needs protected areas. Though the relationship is complex and sometimes adversarial, tourism is always a critical component to consider in the establishment and management of protected areas (Eagles et al., 2002). Ensuring that tourism follows a truly sustainable path, and that it contributes to the sustainable management of protected areas, whether public or private, will require enhanced cooperation and concrete partnerships among the tourism industry, governments at all levels, local communities, protected area managers and planners, and the tourists themselves.

When it comes to health tourism related to protected areas (Puhakka et al., 2017; Azara et al., 2018), although recreation has been an integral part of national parks since the beginning, interest in the potential role of parks in human health and wellbeing is relatively new. While research on these issues has a long history, previous studies have focused on the effects on physical health, psychological wellbeing, and cognitive ability (Keniger et al., 2013). National parks and other nature reserves with recreational value can be seen as a fundamental health resource, particularly in terms of countering disease and illness (Maller et al., 2009). There are growing efforts to develop nature-based wellbeing tourism; empirical evidence is pointing out that contact with nature promotes mental and physical health. The opportunity to observe nature and be in a natural environment can give direct physical and emotional health benefits. Natural settings activate people to move, which produces indirect health benefits. Nature also promotes people's mutual interaction and their sense of community. The economic implications of the benefits of natural environments to health and wellbeing have been considered substantial; utilizing green spaces effectively in health promotion could reduce public healthcare budgets and create new sources of income (Nilsson et al., 2007).

Within the rural and Alpine context, nature, landscape and environment, as well as social,

cultural, and economic conditions, should be considered and be protected, promoted and financed in a sustainable way (Hammer and Siegrist, 2008; Pröbstl, 2010; Richins et al., 2016). In tourism research recent studies underline the importance of various forms of health tourism in the Alps and protected areas (Schalber and Peters, 2012).

As a development post-pandemic pathway, tourism-generated foreign exchange for countries endowed with natural assets (protected areas, pristine landscapes, forests, wildlife), contributed to conservation revenues, and provided local development benefits for communities. Protected areas can generate several and articulated benefit potentials (Mainil et al., 2017). It is possible to underline that the sustainability of protected areas and the viability of tourism to provide conservation and socio-economic benefits strictly depends on planning and management strategies of tourism within protected areas, enhancement of models for community participation and entrepreneurship, and benefit-sharing mechanisms between parks and communities (Candrea and Ispas, 2009; Trček and Koderman, 2018; Buccheri and Passerini, 2019; Bhamman et al., 2021).

Connecting health, wellbeing and the natural environment is a key driver for local and regional development (De Vecchis, 2020; CEETO, 2020)². Tourism can affect sensitive Alpine ecosystems and human health. The current situation led to several changes in the protected areas' visitor flows from an increase of demand to a differentiation of needs. A significant reduction in outdoor activities during the lockdown period was followed by a rising demand for nature-based tourism in the summer season of 2020 (Cerutti and de Falco, 2020). The Alpine protected areas had to adapt to these changes, particularly by increasing awareness both in offer and demand tourist systems, and consequently by planning adequate policy recommendations and practical advice to the different stakeholders for tourism management and promotion. Additionally, diversifying the tourism offering and the tourism services provided by the protected areas is important for

² For an in-depth look at the Italian studies on health geography, see Evangelista, 2016.

sustainable tourism growth. Health tourists desire environments that are optimally stimulating, both on a natural and socio-cultural level. When tourists are engaged in leisure activities and wellness tourism, they find an environment and optimal conditions that encourages them to reduce negative behaviours and lifestyles, while increasing feelings of comfort, health and wellbeing. Furthermore, if tourists are in a stimulating environment, they can strengthen their physiological and psychological functions to adapt to such an environment. Some scientists are working on the definition of health tourism destination indexes and types of matrices (Figure 2). It can contribute to the overall strategic planning process by identifying improvements in activities and enhancing competitiveness in health tourism management (Klöpping, 2012; Jónás-Berki et al., 2015; Lee and Li, 2019).

Health tourism has often been mainly classified under the market for the sick and not under tourism that targets the healthy. Today, especially due to the pandemic, a new market for the healthy has emerged; as an example, health(i)ness could help to clarify the terminology, to be seen as a gatekeeper of health and as a cultural paradigm change from cure to prevention (Hofer et al., 2012).

Health tourism is considered by the EU as a subsector of general tourism that comprises medical, wellness and spa tourism. *Medical tourism* involves people travelling expressly to access medical treatment. People travel for wellness tourism to maintain or enhance their personal health and wellbeing. *Spa tourism* focuses on healing, relaxation or beautifying of the body that is preventative and/or curative in nature. The three forms of health tourism (medical, wellness and spa) reside on two parallel continuums: “illness-health-wellness” and “curative-preventative-promotive” (Mainil et al., 2017). Medical tourism is associated with curing illness; wellness tourism promotes personal wellbeing, and spa tourism is positioned in between, aiming to prevent illness and wanting to sustain health. Wellness and spa tourism are also associated with certain types of facilities offered at “wellness centres” and spa destinations, while medical tourism focuses on (non-tourism) medical facilities. General tourism

provides complementary amenities like accommodation with facilities for people who require medical care, are disabled or suffer from health problems (OECD, 2020).

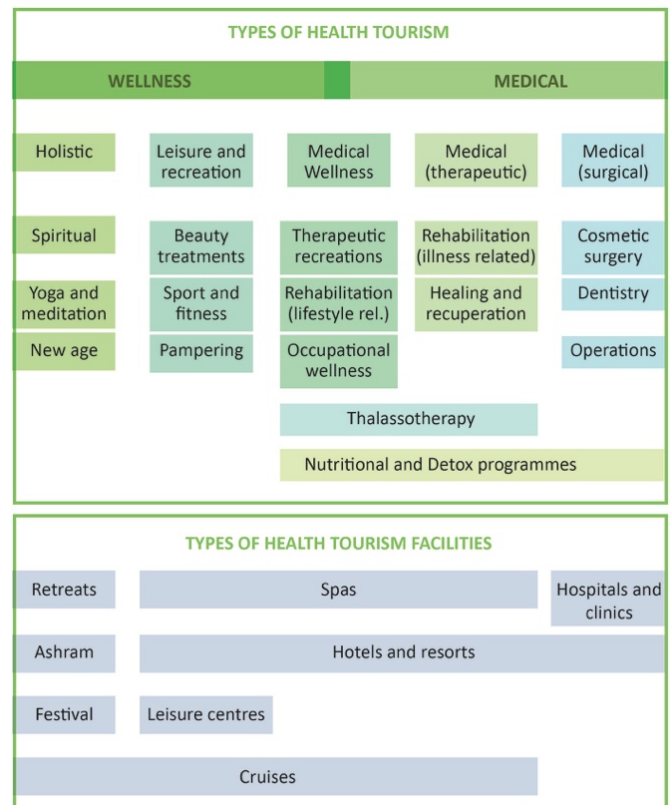


Figure 2. Types of health tourism. Source: Smith and Puczkó, 2009.

3. HEALPS2 project: healing and wellbeing rising from the Alpine context

3.1 Project framework of HEALPS2 and the action-research bases of *Upontourism*

Thirst for nature-based experiences and increased health consciousness are global trends that hold considerable opportunities for developing innovative nature-based health tourism value chains along the Alps.

To fulfil this potential, the Interreg *Alpine Space* programme has been financing and supporting the cooperation and transborder project named *Healing Alps: tourism based on natural health resources as a strategic*

innovation for the development of Alpine regions, known by its acronym HEALPS2³. The overall objective is to develop and improve framework conditions and tools for a better utilisation of Alpine-specific natural health resources for the development of innovative tourism products and service chains in the field of environmental and physical wellbeing. It connects academia, different business sectors such as the health sector, tourism and local service providers, together with innovation and transfer agencies to jointly implement new business models that improve value creation across sectors in Alpine destinations. The unique Alpine natural health resources and strengthens the Alpine territorial innovation capacity, which are the foundations of this transnational and transversal approach.

The specific objectives of HEALPS2 are:

- initiate mutual learning on health tourism development and implementation strategies from different regions by the involvement of actors from the quadruple helix;
- enhancing access to and use of innovation knowledge in Alpine regions regarding evidence-based health tourism development and cross-sectoral value chains;
- facilitate a more innovation-driven tourism policy and business development in Alpine regions.

The main programmed outputs cover four different levels, and specifically⁴:

- Tactical Health Management Toolset: a digital tool to assess and simulate the valorisation of alpine resources for health tourism services. It analyses data to assist in the development of regional strategies through a logical and mathematical model of implementation;
- Alpine Health Tourism Innovation Model:

the schematic model provides an easy-to-follow framework and techniques in order to enhance the capacity of Alpine regions in innovative health tourism development with an integrated transnational approach;

- Training Toolkit: the toolkit on the techniques and tools that have been developed induces engagement, raises awareness and enables the preparation of high-quality projects for the target groups;
- Alpine Health Tourism Action Plan: it contains comprehensive innovation strategies on regional and transnational levels for deriving greater values from Alpine assets inclusive of a white paper with policy recommendations for support schemes targeting three EU policy levels.

The 11 partners of the HEALPS2 project constitute a unique cooperation between NGOs, universities, protected areas, public institutions and private companies. They are (Figure 3)⁵:

- Paracelsus Medizinische Privatuniversität Salzburg (lead partner, Austria);
- ALPARC Network of Alpine Protected Areas (France);
- Consiglio Nazionale delle Ricerche (Italy);
- Znanstveno raziskovalno središče Bistra Ptuj (Slovenia);
- Innovation Salzburg GmbH (Austria);
- Hochschule für Technik und Wirtschaft HTW Chur (Switzerland);
- Association La Route des Villes d'Eaux du Massif central (France);
- Razvojni center Murska Sobota (Slovenia);
- MOXOFF SPA (Italy);
- Gemeindennetzwerk Allianz in den Alpen (Germany);
- Ente di Gestione delle Aree Protette dell'Ossola - EGAPO (Italy).

EGAPO⁶ aims at preserving natural, landscape and historical features of the territory, protecting and improving fauna and floristic species living in the protected area, and promoting the usability of the parks with tutorial, cultural, scientific, recreational and

³ As concerns the HEALPS2 funding, the total eligible costs are 2.169.952 EUR, the ERDF grant is 1.844.460 EUR. As regards its duration, the project has started on 1st October 2019 and it will be concluded on 30th June 2022. More info about the whole project are available at <https://www.alpine-space.org/pr+ojects/healps-2/en/home>.

⁴ For a focus on the project deliverables see the page <https://www.facebook.com/HEALPS2/photos/a.140253977527312/342360253983349>.

⁵ To know the list of HEALPS2 Observers use this link: <https://www.alpine-space.org/projects/healps-2/en/about/observers>.

⁶ <http://www.areeprotetteossola.it/it/>.

touristic goals. It manages the Nature Park Veglia and Devero, the Nature Park of High Antrona Valley and two Nature Sites (*Siti Natura*). It has developed many experiences in the sustainable tourism sector through the Strategic Plan and actions of the European Chart for Sustainable Tourism (CETS)⁷. Other experiences have been developed in the management of hiking tourism (“slow tourism”), giving special attention to disabled accessibility. Involved in all HEALPS2 working packages, EGAPo has been specifically integrating the protected areas’ perspective on sustainable health tourism in the Innovation Model. More precisely, it has been working on the improvement of the accessibility of nature parks for people with special needs.

The Study Centre Upontourism of the University of Piemonte Orientale (UPO, Italy) was commissioned by EGAPo to develop research aimed at the identification of experiences and success factors on the interrelationship between tourism and health in Italy and Europe, and at the definition of guidelines for the creation of innovative models of interrelationship between tourism and health in Ossola. To achieve these goals, Upontourism has chosen an action-research approach, an interactive inquiry process to integrate the data-driven analysis on the Alpine health tourism with concrete actions to be suggested in the collaborative context of local stakeholders and tourism SMEs in the EGAPo area of competence.

As mentioned in the introduction, the research first began with a literature review and theoretical analysis on the topics to be covered based on a desk research. Then it analysed some case studies and best practices implemented in the Alpine region with the main goal of discussing and evaluating backgrounds, features and results of their reference projects as they emerged from a qualitative methodology approach. Taken together, the two steps enabled outline useful guidelines and tools for innovative health and wellbeing tourism proposals with regards to the Alpine protected areas and more

specifically to the pilot project that EGAPo then has developed. The outcomes of the lastly two research development steps (see Figure 1) are described and discussed below, after offering an overview on the main features of the high Ossola valley as geographical context of HEALPS2 project.



Figure 3. HEALPS2 project partners. Source: <https://www.alpine-space.org/projects/healps-2/en/about/partners>.

3.2 An overview on the geographical context

Ossola is a geographical area in the north of Piedmont region (Italy) that extends north of the shores of Lake Maggiore to the nearby borders with Switzerland. It includes the valleys Anzasca, Antrona, Bognanco, Divedro, Antigorio, Formazza and Vigizzo.

Known as *Land of lakes*, both glacial and artificial, it owes its connotation to the element of water and its strong and important value on the territory. In this area, largely crossed by the drainage basin of the River Toce, with its imposing and renowned waterfall, as well as numerous other streams and cliffs, the water resource represents a strong focal point and potential both for the wellbeing and economy of the local communities, and for the offer of proposals in the field of nature tourism, slow tourism and wellness.

Lake Maggiore, the alpine lakes, the high peaks of the Monte Rosa massif, the mountains of the Val Grande National Park, the protected areas of natural parks of Alpe Veglia-Devero

⁷ The CETS was given to the Management Body for the years 2013-2017, and renewed for the years 2018-2022.

and Alta Valle Antrona, the vast expanses of woodland, the gentle hills behind the valley floors, the unspoilt nature of the nature reserves, together with art, history, architecture, food and wine, make this land an ideal tourist destination for quality experiences and all-round wellbeing.

High Ossola valley is part of “Distretto dei Laghi” (*Lake District*) and the so-called *Lands of wellness*, an amphitheatre of widespread destinations, where one can enjoy wellness and relaxation experiences, appreciating the therapeutic properties of the area’s thermal waters. The area is in fact rich in water springs with optimal characteristics particularly suitable for various treatments and therapies, such as the *Vanzonis water* that flows in the municipality of Vanzone con San Carlo, qualified as the richest in mineral salts in the world. That District is also home to two important thermal spas, Terme di Bognanco and Terme di Premia, whose waters are distinguished by their ancient properties that can provide psycho-physical benefits through relaxing paths and specific treatments. In addition to relaxing and aesthetic treatments, it is also possible to carry out health therapies such as balneotherapy, phlebological treatments and vascular courses, both privately and in agreement with the National Health Service.

The high Ossola area also offers a wealth of opportunities in the field of sport, both for the presence of facilities for the practise of the major and most popular sports, and for the extremely rich and diverse natural environments that allow the practice for outdoor activities such as trekking, climbing, canyoning, mountaineering, outdoor yoga, forest bathing, downhill skiing and ski mountaineering.

The identity element of water is reflected across several levels in its cultural, landscape and energy systems. There are many naturalistic, geological and glaciological routes throughout the area that unravel around the narrative of the “places of water”, providing a wealth of resources, stories and spaces dedicated to health and wellbeing, which are only partially exploited to their full potential.

This heritage is complemented by a very important and considerable architectural capital built in close connection with the element of water, from the hydroelectric power stations, to

the historic villas overlooking the most famous shores of the lake and the most panoramic heights, to the sumptuous gardens symbolizing the wealth of the great families of the area, and also the lush greenery that is a distinctive feature here.

The wellbeing that can be derived from experiencing these places is manifold and can be derived from discovering them and inviting people to linger, to stop and be intrigued by their visit, to take part in the numerous events that are organized, to savour the delicacies of the local cuisine, light and distinctive local products. The territory is dotted with assets and places, ethnographic itineraries and industrial archaeology (mills, factories, hydroelectric power stations etc.) which are an explicit invitation to enjoy the area through slow, regenerating and relaxing tourism, in the full meaning of a wellness experience.

The current offer, which focuses on wellbeing and which generates a specific appeal, deserves to be better valued and developed through a more structured and effective process of recognition of the value of local resources. In this sense, it is hoped that a new constructive and sustainable way of thinking will be consolidated - one that focuses on the area’s natural resources, on the health and wellbeing benefits of the places themselves, and of the people as well, as potential triggers for activities, relations and ways of promoting and enhancing the area. This does not require the territory to make additional infrastructural investments, since this vision condenses a “cultural” approach that asks public and private actors to develop factors and visions that are not yet sufficiently appreciated, but which already exist, into a system in order to present wellness tourism experiences capable of conveying the authenticity of the high Ossola territory.

3.3 The methodology and case study analysis

With respect to the geographical, environmental and cultural context of the high Ossola valley, the research work was carried out following a clear qualitative methodological approach that, starting from the identification of experiences and success factors in tourism and

health around Italy and Europe, has outlined guidelines from which innovative models can be implemented.

The initial research of the case studies was carried out with the aim of collecting best practices in the field of design and innovative sustainable tourism offers, exploring opportunities demonstrating the benefits in health and wellbeing achievable by the specific natural resources of the environment and territories. From the study of the projects identified, selected according to specific criteria described below, it proceeded to extrapolate the characteristics and salient aspects, consistent with the context of reference, in order to be replicated and scaled, with appropriate declinations in the project area, to implement the pilot testing project, and as guidelines in other realities.

The selection of case studies was accomplished by following a web of intertwined criteria. First of all, the research was addressed at a more general level to projects that were, at least for the most part, carriers of some of the following characteristics:

- Being emblematic of ways of participatory and inclusive design, creation and strengthening of supra-national collaborative networks;
- belonging to the European alpine area included in Interreg HEALPS2 or similar areas referring to the European alpine context;
- exemplifying the systemic vision of sustainable development and enhancement of territories as ecosystems;
- supporter of valorisation of resources and natural and landscape qualities of the territory;
- focused on health in the sense of outdoor wellness practices, sports, in relation to natural elements;
- including innovative elements of experiential tourism related to practical activities in nature;
- characterized by differentiation and width of experiential proposals in response to the needs/interests of more targets;

- close in time to the project in terms of material relevance/results that can be investigated and replicated.

The subsequent selection criteria, more specifically, have determined the selection until reaching a final shortlist of six projects. The thematic criterion has given priority to those cases that stand out in promoting new approaches to health tourism based on the potential of nature and territories, that promote the development and strengthening of local collaboration networks, and that encourage the co-design of local offers. Another factor of choice was the extension of the field of action to cover several territorial and/or cross-border areas, i.e. projects that were developed as local experiments with the aim of building collaboration, exchange and project networks at several levels and between several contexts, including different ones, within the European Alpine arc. The critical choice of cases also depended on the systemic criterion, according to a vision of tourism promotion as an all-round, systemic enhancement and wellbeing of the territories. The concept of sustainable development is thus reconciled with the implementation of measures aimed at preserving the qualities, resources, and tangible and intangible assets of places with a view to systemic processes that relate and create value between the actors of the territories and other internal and external stakeholders. This supports a plan for health tourism that includes aspects such as the protection of ecosystems, responsible agricultural production and resilient adaptation to change. The criterion of applicability has also been considered, i.e. the compatibility of the guidelines with the Ossola area chosen for the implementation of a pilot project.

The application of the criteria grid led to the selection of the following case studies:

- Nature's Contribution to Adaptation in the Central French Alps (France);
- Forest and health: the national project of CAI-CNR (Italy);
- *WinHealth* Sustainable enhancement of healthy tourism potentials in Alpine winter tourism in SalzburgerLand Alpine Health Region (Italy, Austria);

- *Trail for Health*. Valle Aurina, Campo Tures, Valli della Salute (Italy, Austria);
- Wellbeing Tourism in the South Baltic Region. Guidelines for Good Practices and Promotion (Poland, Denmark, Germany, Lithuania, Sweden);
- *FuTourist*. Promotion of the Alpine cultural heritage through open air sportive, touristic and sustainable initiatives (Italy).

Each case was analysed and made comparable through inclusion in a summary sheet organized into sections (Figure 4).

In addition to data relating to the temporal and geographical location of the projects and the partners involved, the objectives, impacts and results and the phases of subsequent development and implementation were highlighted. These items were completed with descriptive textual content. At the conclusion of the sheets, a second section extrapolates, through the graphic form, strengths, weaknesses and elements of scalability of each project case.

HEALPS ²		Projects/Case Studies Experiences in mountain and rural areas of tourism proposals focusing on health and well-being issues
Case study 2. Forest and health: the national project of CAI-CNR		
 Forest Therapy Key words: forest therapy, physical and mental health, forest therapy sites, mountain economy, phytotherapy		
GEOGRAPHIC AREA	State: Italy	
YEAR(S)	2019 - current	
PROJECT PARTNERS		
CSC - CAI Central Scientific Committee CAI CNR Institute for the bio-economy (IBE)		
OBJECTIVES _		
The project is aimed at making the benefits generated by the frequentation of forest areas creatively available and optimised for the social body and the many frequenters of CAI refuges paths, as well as forest environments in general. It aims to develop a network of qualified forest therapy stations on the basis of strict criteria, thus providing an increasingly comprehensive set of services both for regular forest and mountain users and for patients referred to forest therapy practitioners and health facilities. Further objectives are to raise public and decision-maker awareness of the need to protect forest areas and to create important new opportunities for the mountain economy.		
DESCRIPTION _		
Preliminary investigations were organised in the northern Apennines, where scientific inform was collected, particularly with regard to the spatial and temporal distribution of the concentration of BVOC (Biogenic Volatile Organic Compound), necessary to characterise the vocation of specific forest environments with respect to potential health benefits. From autumn 2019, after a preliminary experience at Pian dei Termini, in the area of Teso forest (PT), starting with the initiative of Tuscan Regional Scientific Committee "Fiorenzo Gelli" of CAI with the project "RiForest", were carried out jointly by CSC-CAI e IBE-CNR experimental sessions of "forest baths" and "forest therapy" latter led by experienced psychotherapists and psychologists according to a specific protocol.		
The planning process for the assessment of sites (CAI Refuges/Trails) for the effects of forest use on human health involves three distinct phases: - pre-assessment based on structural elements such as distance from sources of pollution, accessibility, slope gradient, slope exposure, forest structure and species, presence of watercourses; - detection of dynamic elements, in particular the concentration and type of biogenic volatile organic compounds released by plants into the forest atmosphere. This is followed by direct testing psychological and physiological functionality on groups of volunteer members; - preparation and training of qualified operators and communication to CAI members and mountain users.		
Case study 2. Forest and health: the national project of CAI-CNR		
RESULTS/IMPACTS _		
On the basis of the results of these sessions, it was possible to define - also in comparison with experiences conducted in other countries - the high functionality of the same conduction protocol with respect to representative parameters of psychological health, as well as, at least preliminarily, the importance of forest structure, meteorological comfort and BVOC concentration. All this has already involved a number of CAI refuges and some CAI Sections in Tuscany and Emilia-Romagna, together with small groups of members and other people from outside CAI who, in accordance with the COVID regulations, have lent themselves with great interest to take part in these field tests. Assessments of the potential benefits for physical health have not yet been carried out. These can be carried out in the future with the collaboration of the Central Medical Commission of the CAI (CCM-CAI), the CNR itself, CERFIT and other structures of the National Health Service.		
DEVELOPMENT _		
There are about 120 CAI refuges in forest areas that could potentially be involved in this project, mainly distributed in central and northern Italy, with a few units also in the south and in Sicily. The same number of Sections are involved, almost all of which are also located in areas covered by regional or national parks that may be very interested in having in their territories Forest Therapy Stations qualified according to strict criteria.		
The project which, in its first experimental phase, has taken shape along the northern Apennine axis between Tuscany and Emilia-Romagna, can consolidate this experience in the year 2021 (with the addition of other 10 refuges in this area). At the same time, the idea is to develop an experimental station in each of the three sectors (Western Alps and Pre-Alps, Central Alps and Dolomites) in the course of 2021.		
STRONG POINTS		
Alternative use of woodland and forest areas	Wide range of application	Added value compared to other related experiences
Low operating management		
WEAK POINTS		
Evaluation of ongoing physical and psychological effects	Research areas still small and limited	
ELEMENTS FOR SCALABILITY		
Correspondence of forest criteria with other areas	Low operating costs and agile infrastructure	Responding to growing demands for healthy lifestyles in contact with nature

Figure 4. Example of case study analysis sheets (*Forest and health: the national project of CAI-CNR*). Source: Cerutti and Menzardi, 2021.

4. Finding results and discussion

From the collection and analysis of the case studies selected for this work, a wide spectrum in the variety of tourism proposals related to health and wellbeing is highlighted. The ways in which wellbeing can be understood and offered

in the form of experiences and services take on specific features that are sometimes more linked to the physical state, whereas others are more related to the psychological condition. Within these two polarities there is an articulated and vast field of activities and practices that range and are characterised by different weights on

one and the other aspect of wellbeing in relation to nature and the territory. From this reading, an ordered picture of the possible categories of proposals is composed in simplified but representative terms of the many areas (Figure 5).

The attempt is to catalogue experiences and services of tourism for wellness, aimed at exploring areas of design, not as closed categories but as characters to intertwine with each other and experiment according to an open logic and continuous vision. What emerges is that the areas and themes involved in the intersection between tourism and wellbeing concern sport and practices inherent to various disciplines of the body and mind, relaxation through meditation and the use of the five senses in contact with nature, exercises and participation in artistic, cultural, popular and educational performances. They include playful experiences, exploration, hiking, contact with animals or in specific natural environments. They require individual or accompanied modes of development, limited to specific contexts but also practicable in widespread locations, they contemplate both moving and static practices, the active and passive involvement of people, as well as indoor and outdoor exercise. From these polarities and characteristics with which to decipher each macro-category of activity, analysis sheets have been drawn up for each macro area of activity with a brief detail of each cluster and its positioning according to each aspect/polarity scale.

The activities identified were thus investigated in the following macro-themes:

- eco car-bike sharing with electrically driven city cars and e-bikes: to promote intermodality and integrate different opportunities to visit independently the sites, visitor centres, facilities and reserves of the protected areas through the use of the path network or special routes/trails;
- lessons, botanical walks and workshops dedicated to the cultivation and care of the vegetable garden, specific local crops, foraging and the preparation of dishes based on the seasonal harvest: to raise awareness of local specialities, produce, ancient crops and a culture of wellbeing that starts with caring for the land and emerges in good and healthy eating;
- sports, hiking, recreational activities, orienteering trips, geocaching, treasure hunts: practices in movement to be carried out mostly in the open air related to sports, explorative and playful disciplines or practices;
- leisure and entertainment activities: moments of play with a sporting or cultural, formative or educational slant aimed at involving and attracting the attention of the public by conveying messages and lessons in wellbeing and health related to the environment and living in harmony with nature;
- accompanied activities with animals, visits to shelters and farms, hippotherapy: ways of contacting and interacting with nature, mediated and complemented by encounters with fauna and animals, with the possibility of hiking, safaris, birdwatching, petting and other beneficial and educational interaction practices;
- yoga sessions, meditation in nature, forest baths, concerts of emotional music: proposals linked to muscular/physical and psychological relaxation and relaxation through physical exercises, meditation, listening, observation;
- summer schools, seminars, training courses, educational press tours, live radio and TV programmes from natural sites, trade fair events: environmental education programmes, support for sustainable tourism, networking, exchange of good practices, awareness-raising activities for media operators, journalists, tour operators, influencers, bloggers, instagrammers;
- popular science events, outings with park guides and experts: lectures, seminars, workshops, events related to scientific and naturalistic themes. Moments dedicated to cultural deepening in meteorology, geology, ornithology, entomology, human communities and nature, and interaction with professionals in the sector;
- reading sessions, theatre and dance performances, diffuse exhibitions, art installations, artist residencies, open air cinema/projections: relaxation experiences through sounds, colours, performances, exhibitions, visits, listening, poetry exercises,

readings, participatory storytelling. Immersion in moments and spaces dedicated to the territory, local heritage, the relationship between human communities, nature and fauna.

Figure 6 is an example of an analysis sheet with the positioning of a macro-theme with respect to the polarities identified.

To complete this work, a synthesis of the guidelines that emerged was made in order to draw up a short vademecum, a small practical guide of ideas and operational guidelines for the design, proposal and management of activities, experiences and services in the field of tourism for health and wellness⁸. Included in this short document are considerations and practical, orderly advice on the major aspects to consider regarding the relationship with the target audience, the creation of the business model and the communication plan. The resulting contribution can also lead to educational and training insights, which arise from the experience in nature and that can take place in different contexts, according to two levels of learning: the acquisition of awareness and critical thinking about the physical environment encountered and experienced, in terms of the needs and potential related to the tourism practice as a whole (sphere of doing); the recognition of physical and psychological benefits acquirable by the interaction with natural environment and referred to a deeper personal dimension (sphere of being).

From the intersection of what emerged from these phases of study, the environmental characteristics of the context and the specific needs of the high Ossola valley, EGAPO has outlined and fielded a pilot project of experimentation of tourism practices aimed at health and wellness.

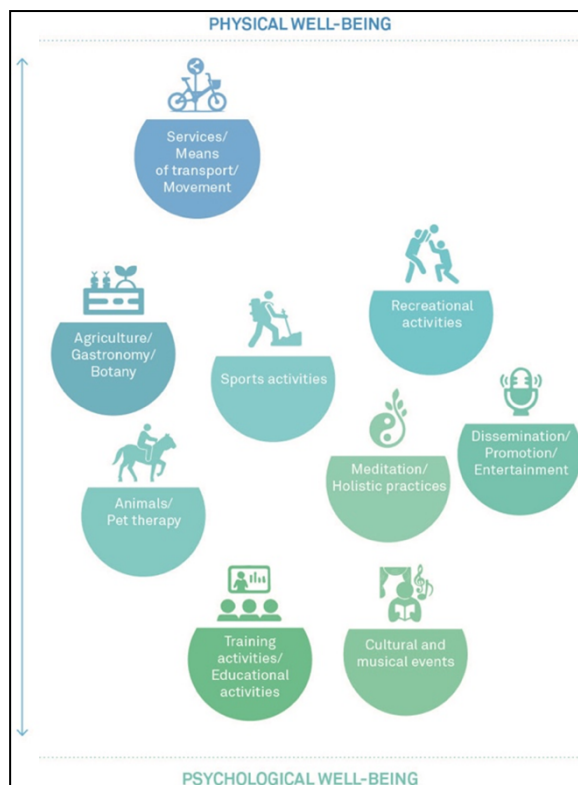


Figure 5. Wellness activities clustered-distributed according to prevalence of impact on physical or psychological wellbeing. Source: Cerutti and Menzardi, 2021.

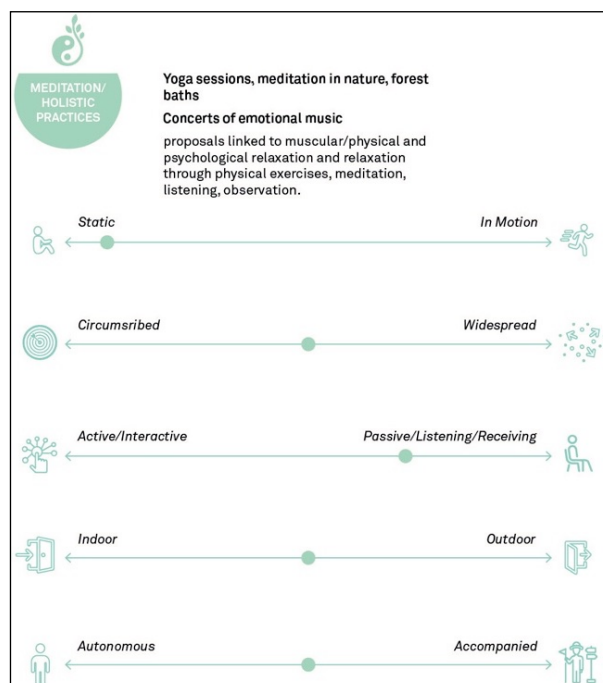


Figure 6. Example sheet of weighing process for wellness activities' cluster related to meditative and holistic practices. Source: Cerutti and Menzardi, 2021.

⁸ The guidelines and main outcomes have been shared with local stakeholders, tourism operators and entrepreneurs in February 2022, during a workshop session.

This is how two weekends of guided hiking activities were started in an exploratory form within the protected areas, accompanied by qualified personnel and certified guides, protagonists of a reinterpretation of the outdoor experience, as a moment of physical practice but also of strong reflection and psychological exercise, for both individuals and groups. The goal is to systemize what has been started, together with the resources already present in the area, and structure a common project path in pursuing the potential offered by these new forms of tourism.

5. Conclusions

Since the last decades, many approaches and challenges have emerged regarding the development of health and wellbeing tourism. The requirements for the Alpine health tourism experiences range from specialized tourism services over specific medical treatments to natural scattered resources functioning as fundament base for wellness and recreation activities. Products and destinations along the Alps can contribute to sustainable tourism development, facing at the same time post-pandemic issues and seizing any related territorial or strategical opportunities.

This is the background of the Interreg HEALPS2 project aimed at providing policy-makers, regional developers, Alpine regions and SMEs access to innovation knowledge and to implementation tools for health and wellbeing tourism enhancement.

As regards the high Ossola valley context, EGAPO and Upontourism have been involved in a specific research action that has proven to be capable of: giving a direct contribution to the production of a model of Alpine health resources; implementation of this model in the pilot region; integration of the needs of supra local and local stakeholders towards sustainable use and preservation of Alpine natural resources. The results achieved reveal new concrete opportunities for health and wellbeing tourism based on natural resources as strategic innovation levers for the development of the whole Alpine Ossola region. A horizon of opportunities is certainly looming, but it does

not conceal criticalities and fragilities. These include the difficulty of maintaining active networks among local stakeholders as they need a constant push and support of individual and collective motivation to work together and co-create health tourism-oriented development pathways. Therefore, moving in these design terms means to face the challenge of making relations, intentions and scenarios cohesive and lasting: a condition that the project presented here has helped to outline in its difficulties of implementation and continuity.

The research fits well into the wider formed model for health tourism development co-designed by HEALPS2's partners. Its findings suggest two further implications' orders. The first order consists of a series of practices and tools that can be scaled and used to support other sustainable tourism initiatives within the protected areas of the Alps. The second order stems from the reframing issues of how health and wellbeing tourism can be better implemented by private and public actors in marginal Alpine areas to boost sustainable future scenarios.

Acknowledgements

Though the paper was devised together by the Authors, Stefania Cerutti wrote introduction and conclusions, paragraphs 2 and 3.1; Paola Menzardi wrote paragraphs 3.2, 3.3 and 4.

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