

IWI TOPIC

NBS/NBT integration on health care system and society

PROMOTING CIVIL SOCIETY AWARENESS OF NATURE'S POTENTIAL FOR HEALTH AND WELL-BEING. PRELIMINARY RESULTS FROM A CASE STUDY IN PORTUGAL

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ABSTRACT

NATURELAB aims to promote paradigm shifts by integrating Nature-Based Solutions (NBS) and Nature-Based Therapies (NBT) into healthcare practices, including potential prescription by practitioners in the Portuguese National Health Service. As part of its outreach, NATURELAB participated in the Festival de Bem Estar, the largest Portuguese event on complementary therapies, which attracts a receptive and diverse audience. The project hosted a stand, staffed by trained members, where visitors could engage with scientific evidence on NBS and NBT through brochures, leaflets, and interactive discussions. A key element was the implementation of an on-site survey exploring participants' connection with nature, knowledge of NBT, and openness to evidence-based approaches. The survey gathered 252 responses, complemented by qualitative insights. Preliminary observations highlight strong interest, particularly from women and younger participants, as well as curiosity about professional guidance in NBT. The initiative fostered dialogue with civil society, providing an understanding of public perceptions regarding nature's role in health and well-being. The analysis of results will provide information able to support replicating and expanding similar initiatives.

Keywords: Awareness Raising; Dissemination; Survey; Civil Society.

1. The importance of public awareness of nature's role in health and well-being

Among the NATURELAB's objectives, there is the shifting of paradigms and encouraging open, integrated, and inclusive approaches, particularly regarding the relationship between human and nature, as well as to the potential integration of NBTs into prescriptions issued by practitioners within the National Health Service (NHS), in Portugal and in other consortium countries. To this end, communication and dissemination activities across multiple fronts are essential, whether at the institutional or personal level, through press releases, podcasts, articles, videos, and other media formats. In this context, NATURELAB's participation in events aimed at civil society is considered pivotal for the broad dissemination of the project to an audience that is, from the outset, more receptive to the themes we address.

The Welfare Festival (Festival de Bem Estar) is the first and largest national event dedicated to Complementary Therapies that occurs in Portugal. Formerly known as the 'Feira Alternativa', since 2004, this festival has represented a gathering and a moment of union for those seeking to live with greater awareness and balance. As a research project, the core mission of NATURELAB is fully aligned with the Festival's purpose of contributing to 'a better life in awareness and balance'. Therefore, it seemed promising to make the decision to register and apply for a stand at this event, in a collaborative effort joining three of the Portuguese partners of NATURELAB.

2. The participation of NATURELAB at a well-being festival with national impact in PORTUGAL

2.1 The chosen approach

Centred on the promotion of nature-based interventions for the enhancement of health and well-being, the project's presence at the event aimed to raise participants' awareness and curiosity regarding scientifically validated solutions for improving health and well-being, while simultaneously fostering greater environmental balance and the sustainability of urban spaces. NATURELAB works towards this end by promoting Nature-based Solutions (NBS) and Nature-based Therapies (NBT), which harmonise the relationship between nature and the human being, activating a symbiotic connection.

The main objective of NATURELAB's presence at the Wellbeing Festival was to disseminate the project among civil society and highlight the relevance of NBS and NBTs for promoting population health and well-being. NATURELAB decided that two representatives would be present at all times at the stand. All the persons hosting the stand were project team members, including those from the communication and dissemination leadership or partner members with relevant experience in engagement activities with civil society, who were briefed on the project. A range of materials was made available at the event to provide information about the project. This included three versions of leaflets, created on purpose for the event, which summarise the project and present scientific evidence of the role of nature in improving health and well-being. In addition, project flyers and brochures were provided for those seeking more detailed information about the project. A roll-up banner was also displayed to increase the visibility of the project at the venue.

2.2 Implementation of the survey

It was decided to use this opportunity to implement a questionnaire survey, to be preferably completed on-site or during the visit. The purpose of this instrument was twofold: on the one hand, to inquire about participants' knowledge of nature-based therapies, nature and its associated benefits, as well as their degree of connection and interaction with natural environments; and on the other, to foster reflection and raise awareness regarding these topics. The questionnaire was accessible via a link, as well as a QR code, made available at the venue. The survey structure and key topics are presented in Table 1.

3. Results

During the three days - from the 5th to the 7th September 2025 - the Festival was open to the public from 3pm-11pm (Friday); 10am-11pm (Saturday) and 10am-9pm (Sunday). The NATURELAB stand was always hosted by two people.

Figure 1 illustrates some materials and interaction with the participants. The people who approached the NATURELAB stand demonstrated mostly an open-minded attitude, as many of them had already attended the former Feira Alternativa and therefore tended to adopt a more holistic perspective of health and well-being, rendering them particularly receptive to the themes addressed. On Saturday, attendees were observed to come from various regions of the country, with a strong presence from the North of Portugal, including, for example, Aveiro and Gaia, although not all places of origin could be recorded. The location of the stand, near the entrance (and exit), facilitated the engagement, as it allowed for interactions both at the entrance and upon exit from the Festival.

All participants who successfully completed the survey were allowed to take out a raffle and receive a gift, ranging from organic tea bags and plant seeds to a bracelet with the project logo with the sentence "I am NATURELAB," as well as a gift for children.

Table 1. Structure of the Connection with Nature and Well-Being Survey

1. Demo-graphics	2. Connection with nature	3. Interactions with nature	4. Nature-Based Therapies
Age groups	Time spent in nature	Activities in nature	Knowledge of nature-based therapies
Gender	Relaxation induced after spending time in nature	Purpose-seeking when in nature	Knowledge about nature-based therapies validated by science
Education	3 words that come to mind when you think of nature	-----	Interest in trying nature-based therapies to improve health and well-being
Place of residence	Nature Connection Index scale (Richardson <i>et al.</i> , 2019)	-----	Support to GPs being able to prescribe nature-based therapies



Figure 1. The informative materials at the stand, interactions with the public and participants completing the survey

It was possible to collect 252 answers to the questionnaire, which is considered highly satisfactory. Since not everyone who was informed about NATURELAB decided to complete the survey, it is estimated that around 300 people received information about the project. The data was not yet analysed, except for the reply to the question “*Tell us three words that come to mind when you think of nature*”. Figure 2 represents the word cloud with the answers received, being “Health”, “Peace”, “Connection” and “Calm” among the most chosen words to represent nature.

Some empirical information and acknowledgements from conversations with participants revealed that the relationship and interaction with nature proved to be a topic of genuine interest. Several participants even emphasised the need for more nature spaces to enable people to benefit more fully from contact with nature. A considerable number of participants expressed both curiosity and appreciation when informed of the existence of scientific validation underpinning NBT. This seems to indicate a willingness to engage with evidence-based approaches. Most attendees posed questions, further demonstrating active interest and engagement with the project.

4. First conclusions and next steps

Although the public was diverse, responses to the survey were mainly provided by women, indicating a gendered aspect in receptiveness to the project. Furthermore, younger participants were especially responsive, with most engaging positively and enthusiastically about the project. Fourteen respondents were non-Portuguese speakers.

In terms of thematic content, many participants reported familiarity with the concept of nature-based therapies (NBT). Nonetheless, a recurring question concerned the necessity of a guide or therapist, with some participants questioning whether such practices could be undertaken independently. This suggests an area where further clarification and communication regarding the role of professional guidance in NBTs may be warranted. A

key issue is that the respondents to the survey are likely to be more open to NBT, therefore not representative of the Portuguese population.

The forthcoming phase will concentrate on a systematic analysis of the survey data collected during the Festival. This analysis will include both quantitative and qualitative dimensions. Quantitatively, descriptive statistics will be used to characterise respondents' demographics, patterns of interaction with nature, familiarity with nature-based therapies, and attitudes toward their potential integration in healthcare. Qualitative data, including the free-association exercise of "three words that come to mind when thinking of nature," will be further explored to identify prevailing perceptions, symbolic associations, social representations about nature and underlying values allocated to the natural environment. Particular attention will be paid to differences across age groups and educational backgrounds. Building on these findings, NATURELAB will refine its outreach strategies to better engage diverse audiences and support the scientific and policy dialogue on integrating NBT into healthcare systems. Ultimately, this step is crucial for scaling up nature-based interventions and fostering sustainable connections between civil society, nature, and public health.



Figure 2. Word cloud from the question "Tell us three words that come to mind when you think of nature".

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References

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