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## CUSTOMER EVALUATION OF NEW PRODUCT IN TOURISM: FOREST BATHING

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### Abstract

**Relevance and novelty.** The paper examines the benefits of forest environment for human health through forest bathing. Forest bathing has been widely studied in a medical context, as it has been scientifically proven that slow forest bathing boosts the immune system, reduces stress and improves mood, but in the case of tourism this niche has not yet been explored. It should be noted that forest bathing has been extensively studied from a medical perspective, but in the case of tourism this niche has not yet been explored as no scientific articles could be found, so it would be interesting to find out how tourists would perceive this experiential dive into nature. The object of this paper is the practice of forest bathing for tourism consumers. Research problem. It is not clear whether forest bathing would be attractive to tourism consumers. The aim of this paper. To find out the attractiveness of forest bathing as a wellness tourism on the Lithuanian market. Research tasks: 1) to clarify the concept of forest bathing; 2) to analyse the health benefits of forest bathing; 3) to investigate the attractiveness of forest bathing as a health tourism for tourism consumers. Research methodology. In order to achieve the aim and objectives of this study, this work include the analysis and systematisation of scientific literature, which will allow to clarify the perception of forest bathing practices in Lithuania and the world; qualitative research is conducted using a focus group method. The study reveals that the practice of forest bathing would be an attractive niche in wellness tourism. Respondents were positive about the experience, stating that the forest bathing excursion was not only enjoyable and calming, but also informative, and that the knowledge gained made them look at the forest in a different way, stimulating a holistic connection between nature and human health.

**Keywords:** forest bathing, wellness tourism, forest health benefit, experiential trip in nature.

### Forest bathing concept

This part of the paper explains the concept of forest bathing in Japan and Lithuania. First, we will look at the origins of shinrin yoku in Japan and how the practice of forest bathing developed in Lithuania. In 1982, forest bathing wellness programme shinrin-yoku (shinrin means forest and yoku means bathing) was introduced in Japan (Q. Li, 2018). In this healing practice, a person immerses himself or herself in the forest and its surroundings, consciously paying attention to his or her basic senses: sight, smell, touch, hearing and taste receptors (Li, 2018). Dr Qing Li, a Japanese forest medicine expert, talks about the benefits of forest and plants for both mental and physical well-being of humans, and he states that this topic is extremely relevant nowadays, when people's lifestyles are enormously fast (Li, 2018).

The founder of the Forest Bathing Club, J. Plevin, in her book "The healing magic of forest bathing", tells us about the history of this practise. Mr Levin

states that although the practice of forest bathing was officially born in Japan in 1982 when Tomohide Akiyama, then Minister of Agriculture, Forestry and Fisheries, introduced the term shinrin yoku as a public wellness programme to reduce the stress level of working people and to encourage society with a healthy lifestyle, the basic concept of forest bathing originated much earlier than when the term was first mentioned. This could be supported by the examples in Japan nature such as Japanese haiku poetry about nature, the concept of wabi sabi, which states that beauty lies in the imperfection, temporality and connection with nature, as well as ikebana, an art form originated in Japan that is expressed through the composition of flowers in a particular order and focuses on a personal connection with nature, all of the above confirms that a large part of the Japanese culture is based on a deep understanding of the connection with nature. Levin also mentions that Japanese ancestors worshipped the sacred spirits which were manifested in nature through stones, trees, mountains and rivers, and therefore deeply believed that everything in nature was sacred and had healing powers (2019). The author of the term, Tomohide Akiyama, argued that "the Japanese people need to heal through nature" (Li, 2019, p. 12), introducing shinrin yoku as

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a wellness practice to cope with public health issues such as stress, fatigue among workers and technostress, which refers to the harmful, disease-causing behaviours associated with technology (News break, 2022).

Today, forest bathing is understood as a conscious engagement with the forest through the basic senses: sight, hearing, taste, smell and touch (Time, 2018). Luke Eisenberg describes the basic principles of effective forest bathing: leave smartphones or other distracting devices at home; have no expectations; slow down when you are in nature, forget about time; be immersed in the moment; find a comfortable place to sit down (it can be a tree, grass or a bench); consciously submerge yourself in nature with your senses, listen to the sounds around you, and observe the sights and feelings that accompany you (2019).

Lisa Zschuschen, an author of “Forest Bathing: Living and Healing: A Photo Journal”, describes the main experiential activities of forest bathing. She encourages you to look at the flow of the river to awaken your eyesight, to observe water stream as it moves between the rocks, watch the birds, see the dandelion fluff carried by the wind, or just simply scan the trees and everything around you. The author invites you to explore the objects you observe, for example by examining the leaves you find, their structure, and seeds you find. For hearing, it is recommended to listen to the sounds in the surroundings, which may be caused by small animals or birds running around, like for example a woodpecker pecking at a tree. When walking, it is advisable to listen to the rustling of dry leaves and the sound of tree branches, and to listen for the presence of birds and bees. For sensory training, it is recommended to touch a soft blossom of a fern, dry leaves or wood bark, to touch different cones while noticing the differences between them; to stroke the buds of a willow tree and try to feel how soft they are; or to find the smoothest stone and touch it, in order to arouse the haptic sense. The author invites us to open our mouths and feel the purity of the air in the area, or drink tea using the herbs that can be found around us, deeply breathe and inhale the aroma of the pine trees and their needles, and after rain, try to find the fresh odour of the soil (2018). To conclude, the author of “Forest Bathing: Living and Healing: A Photo Journal”, Lisa Zschuschen, suggests that the most important thing to do when engaging in the practice of forest bathing is to keep your imagination alive and experiment forest bathing in different weather (2018).

Since long time ago an ordinary Lithuanian's concerns were very much connected to nature's phenomena, thus there was a holistic view that everything is connected and that every life is important. As Simonas Daukantas wrote in 1822 in his “Works of Ancient Lithuanians and Semites”: “...what could be more loving to a man than to rest under that oak, lime or maple tree under which his grandfather, too, rested when he was tired” (Žaliasis pasaulis). Today, Anykščiai claims to be the birthplace of forest bathing in Lithuania, and it all started when Qing Li, author of *Forest Bathing*, came to the first Anykščiai Forest Festival in 2018 to talk about his research in the field of forest medicine, and introduced his newly published book *Shinrin-yoku: “the Art and Science of Forest Bathing”*, and gave a guided tour of the forest bathing in the Anykščiai forest. A year later, at the second Forest Festival, the Forest Therapy Day was organised and three forest bathing sessions took place (Anykščiai City of Culture). Today, Qing Li's book has been translated into Lithuanian, which certainly contributes to the promotion of this practice in Lithuania. It is worth mentioning that the book was translated into Lithuanian by the first certified forest bathing guide in Lithuania – Liudmila Monkevičė, also known as Mila Monk (Anykščiai District Municipality, 2020), who not only promotes this wellness practice through guided tours, but also contributes to the accessibility of the literature on this topic in Lithuanian.

#### **The health benefit of forest bathing**

The effects of nature on humans have been known since ancient times, but today there is considerable scientific research on the health benefits of forests. According to Qing Li, the world's most famous promoter of forest bathing, when forest bathing was first introduced in Japan, the practice was based on intuition and a general understanding that being in Japan's beautiful and green forests would be beneficial to society, as there was not yet enough medical evidence of the health effects of the practice at that time (2022). Today, the benefits of forest bathing for human health are recognised by scientists around the world, and the practice of forest bathing is an officially recognised preventive/treatment measure in the UK, Germany, the USA; Australia and other countries (Būkime sveiki, 2022). In this article, we will further explore the health benefits of forest bathing based on the latest medical research.

Today, the benefits of fresh air and sunshine for human health are widely taken for granted, but one of several other reasons why being in

the forest is beneficial to human health is the presence of *Mycobacterium vaccae* – a bacterium found in the soil that is not harmful to human health, but instead provides strength, boosts the mood, and also strengthens the immune system (Reber, 2019). Dr Qing Li, a Japanese immunologist and forest medicine expert, has spent many years studying the effects of forests on human health and has shown that being in the forest has a positive effect on the immune system due to the volatile substances released by plants – phytoncides – which have antimicrobial properties and reduce stress level in the human body. According to Qing Li, the immune system, including natural killer (NK) cells, is known to play an important role in the defence against bacteria, viruses and tumours and stress is known to suppress immune function. Forest environment (Shinrin-yoku / forest bathing) reduces stress the study group led by Qing Li investigated the effect of Shinrin-yoku on the human immune system and confirmed that being in nature, where nature is rich in phytoncides, increases the number of NK cells that kill tumour cells. Being in nature is beneficial because of the negative ions found in nature, that provide energy and clearness of mind (Li 2019), as well as because of the natural patterns called fractals, which reduce mental fatigue and stress, while the lack of natural fractals in daily life can cause headaches (Robles, 2021).

Another study conducted by Ye Wen and his colleagues showed that forest bathing effectively activates the parasympathetic nervous system while reducing sympathetic nervous system activity. Both dynamic and static forest bathing show positive effects on physiological and mental health, although static forest bathing shows stronger effects on physiological health, lowering blood pressure and pulse rate, whereas dynamic forest bathing shows greater effects on psychological health, reducing tension, anger, depression, confusion, and shows positive effects on health for individuals of different genders. The findings of the study emphasise the holistic approach to forest bathing and its potential for health benefit, encouraging both healthcare professionals and local policy makers to plan more green spaces in urban areas (Wen, 2023), and therefore, complementing the researchers' findings, that forest bathing has a great potential for the tourism sector.

#### **Customer evaluation of new product in tourism: forest bathing**

A qualitative study was conducted using a focus group method in order to find out the attractiveness of forest bathing as a wellness tourism for tourism

service users. Two focus groups were formed and their responses were compared, in order to find out the respondents' experience of forest bathing. The questionnaire included questions about forest bathing: which sense was the most enjoyable, how the participants rate the experience of forest bathing, and whether the participants of the tour think that the weather influences the forest bathing experience. This qualitative research helps to understand whether forest bathing as health tourism would be attractive to tourism consumers.

The first focus group consisted of tourists who took part in an experiential excursion to the forest bathing site, led by professional forest bathing guide Liudmila Monkevičė. The excursion took place on 22 October. Due to the weather conditions, the questions were submitted to the correspondents by e-mail and 3 respondents answered the questions. They were all asked the same three questions. The second part of the focus group consisted of final year tourism students from one of the Kaunas colleges, the excursion was led by a master degree student in Tourism Studies. The tour took place in Kaunas Botanical Garden on 26 October and lasted about 1 hour. This focus group was chosen purposely, as these respondents are future professionals soon to enter the labour market and it is likely that they will further promote this practice in the future through their senses and experience as a new activity in tourism. The information was collected in about 20 minutes, during which all participants were allowed to discuss and express their views on the questions asked. All questions were recorded on a dictaphone and later transcribed and analysed.

The transcription of the focus group interviews led to the identification of three themes: the five senses, the evaluation of the excursion and the last group – seasonality or impact of weather on forest bathing practice. The first theme, 'The five senses', was divided into five sub-themes: touch, smell, sight, hearing and taste. It was interesting to note that, although the five sub-themes are different, the responses from the respondents were evenly distributed, with the sense of smell receiving the lowest response. According to forest bathing guide Liudmila Monkevičė, the natural odour chemical particles are smaller than the synthetic odour particles that surround us in everyday life, which is why it is harder to smell natural odours in nature (LRT, 2019). A number of respondents reported hearing and sight as their favourite senses: "I liked when I closed my eyes,(...) then you open

your eyes and the colours are brighter, it was quite nice” (5), “...I liked when I closed my eyes, and just because I opened my eyes, I seemed to see a different picture than I did before I closed my eyes...” (7). Respondents associated the sense of hearing with calmness and described the sounds they heard in the environment as pleasant: “I liked hearing because those sounds are also soothing, like the rain, the rustling of the leaves...” (4); “I liked closing my eyes because I could imagine the drops of rain falling on the leaves” (6). Respondents’ answers also support scientists’ claims that being in nature reduces stress and helps concentration (Q. Li 2019).

In the second theme “Evaluation of the excursion”, it is clear that respondents have a positive attitude towards forest bathing, stating that they would repeat the experience “I appreciate it very much, I think it should be promoted more...” (10) and that they would recommend it to others as a way of reducing stress. From the participants’ statements, it was possible to highlight the positive features of the forest bathing excursion: that forest bathing helps to regain energy, to get away from their routine, participants were interested in a new and unusual activity, they experienced new sensations, staying in the forest relieved stress, they valued the opportunity to get closer to nature and to learn new things about the forest. It is worth mentioning that although the excursions were perceived positively, not all participants of the forest bathing enjoyed discussions after every experience in nature, saying that they had hoped to be only with the forest during the excursion, and another respondent had some remarks for the student that guided the excursion.

In the third theme of the forest bathing workshop, “Seasonality”, participants were asked to answer the question whether seasonality would affect forest bathing. Most participants answered that the weather is not important but highlighted the need to prepare for the weather in advance “Not really, unless it is very cold, then it would be uncomfortable” (11). Respondents also stated that the rain deepened their

forest bathing experience, both in terms of touch “... I liked the most (...) to feel the different textures, because I also loved to feel how wet the tree was, which has a lot of bark...” (2), and in terms of hearing “I liked the hearing, because it’s also soothing, like the rain, the rustling of leaves. ...” (4), which could suggest that weather adds an extra dimension and variety to the experience of forest bathing, however, respondents stated that a meaningful forest bathing experience requires adequate preparation for the weather conditions.

To summarise the respondents’ answers, it is possible to highlight the positive feedback about the forest bathing experience from both the tourist group and the future professionals.

### Conclusions

1. Forest bathing is a slow walk in the forest, consciously using the five senses: sight, hearing, taste, smell and touch. The practice, born in Japan out of intuition due to the Japanese culture’s deep connection with nature, is today a world-renowned health practice based on extensive scientific research.

2. *Mycobacterium vaccae* in soil has been scientifically proven to give strength and boost immunity; phytoncides in plants reduce the number of natural killer (NK) cells; negative ions in the forest air give energy and clarity of mind; and fractal observation reduces fatigue and stress. Being in the forest lowers blood pressure, activates the parasympathetic nervous system and slows down the sympathetic nervous system, which is beneficial not only for physical but also for psychological health.

3. The study reveals that the practice of forest bathing would be an attractive niche in wellness tourism. Respondents were positive about the experience, stating that the forest bathing excursion was not only enjoyable and calming, but also informative, and that the knowledge gained made them look at the forest in a different way, stimulating a holistic connection between nature and human health.

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## ОЦІНКА СПОЖИВАЧАМИ НОВОГО ПРОДУКТУ В ТУРИЗМІ: ЛІСОВІ КУПАННЯ

### Анотація

**Актуальність і новизна.** У статті розглянуто переваги лісового середовища для здоров’я людини за допомогою лісових купань. Лісові купання широко вивчаються в медичному контексті, оскільки науково доведено, що повільні лісові купання зміцнюють імунну систему, зменшують стрес і покращують настрій, але у випадку з туризмом ця ніша ще не досліджена. Слід зазначити, що лісові купання широко вивчалися з медичної точки зору, але у випадку з туризмом ця ніша ще не досліджена, оскільки не вдалося знайти наукових статей, тому було б цікаво дізнатися, як туристи сприймуть це експериментальне занурення в природу. Об’єктом даної роботи є практика лісових купань для споживачів туристичних послуг. Проблема дослідження. Незрозуміло, чи будуть лісові купання привабливими для споживачів туризму. **Мета статті** – з’ясувати привабливість лісових купань як оздоровчого туризму на литовському ринку. Завдання дослідження: 1) уточнити поняття лісових купань; 2) проаналізувати користь для здоров’я від лісових купань; 3) дослідити привабливість лісових купань як оздоровчого туризму для споживачів туризму. **Методологія дослідження.** Для досягнення мети та завдань даного дослі-

дження дана робота включає аналіз та систематизацію наукової літератури, що дозволить прояснити сприйняття практик лісових купань у Литві та світі; Якісні дослідження проводяться методом фокус-груп. Дослідження показує, що практика лісових купань була б привабливою нішею в оздоровчому туризмі. Респонденти позитивно оцінили отриманий досвід, зазначивши, що екскурсія для купання в лісі була не тільки приємною та заспокійливою, а також пізнавальною, а отримані знання змусили їх поглянути на ліс по-іншому, стимулюючи цілісний зв'язок між природою та здоров'ям людини.

**Ключові слова:** лісові купання, оздоровчий туризм, користь для здоров'я лісу, експериментальна подорож на природу.

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