



Karolina Sihvonen

## Mindful moments in nature

Experiences on creativity-based wellbeing trail in fostering mental wellbeing and creativity

Metropolia University of Applied Sciences

Master of Social Services

Creativity and Arts in Social and Health Fields

Master's Thesis

November 24, 2025

## Abstract

Author: Karolina Sihvonen  
Title: Mindful moments in nature. Experiences on creativity-based wellbeing trail in fostering mental wellbeing and creativity  
Number of Pages: 74 pages + 3 appendices  
Date: 24 November 2025

Degree: Master of Social Services  
Degree Programme: Creativity and Arts in Social and Health Fields  
Specialisation option: Social Worker  
Instructor(s): Dr Sanna Kivijärvi

---

This master's thesis explores the phenomena of nature-wellbeing-creativity-connection and how spending time in nature and especially doing practices in nature environment might support mental wellbeing and enhance creative thinking. Additionally, the aim was to offer the visitors on the wellbeing trail a possibility to enhance their creativity with the help of set of questions that are related to mental health, grounding, creativity and being present in the moment. The research question is: In what ways creativity-based practices in nature environment could support mental wellbeing and enhance creativity?

The conceptual lens of this research consists of Attention Restoration theory, The Four C Model and notions of stress and imagination. This empirical qualitative research utilized interpretive-constructivist paradigm with phenomenology as its main school of thought. The data was collected via online questionnaire, and it had in total of 32 respondents. The collected data was analyzed by using thematic analysis. The data was handled by using in-vivo coding.

The key findings of this study encapsulated how creativity-based practices implemented in nature environments have a great potential in helping the individuals to stay more present in the moment, paying attention to the small details in nature and boosting their imaginary skills. It can be concluded that people have a need to divert their attention away from the stressful factors of everyday life. Future research could concentrate on harnessing the potential of creativity-based practices in nature environments on a larger scale and consider the possibilities of establishing them as a part of the green prescription locally. Additionally, further studies could be done to explore the meanings mini-c creators give to nature as a source of inspiration and what methods they use to cultivate creativity in nature environments.

Keywords: Creativity in nature, nature environment, mental wellbeing, wellbeing trail, attention restoration theory, four c-model, everyday creativity

## Tiivistelmä

Tekijä:	Karolina Sihvonen
Otsikko:	Tietoisia hetkiä luonnossa. Kokemuksia luovuuslähtöiseltä hyvinvointipolulta mielen hyvinvoinnin ja luovuuden tukijana.
Sivumäärä:	74 sivua + 3 liitettä
Aika:	24. marraskuuta 2025
Tutkinto:	Sosionomi (YAMK)
Tutkinto-ohjelma:	Luovuus ja taiteet sosiaali- ja terveysaloilla
Ohjaaja:	MuT Sanna Kivijärvi

---

Tämä opinnäytetyö tutkii luonnon, hyvinvoinnin ja luovuuden välistä yhteyttä. Tarkastelen, kuinka luonnossa vietetty aika ja erityisesti luovuuslähtöiset harjoitteet luontoympäristössä voivat tukea mielenterveyttä ja edistää luovaa ajattelua. Lisäksi tavoitteena oli tarjota hyvinvointipolun kävijöille mahdollisuus kehittää luovuuttaan mielenterveyteen, maadoittumiseen, luovuuteen ja läsnäoloon liittyvien kysymysten avulla. Tutkimuskysymys on: millä tavoin luovuuslähtöiset harjoitukset luontoympäristössä voivat tukea mielenterveyttä ja edistää luovuutta?

Tässä tutkimuksessa käsitteellisenä viitekehyksenä hyödynnetään tarkkaavaisuuden palautumisteoriaa, neljän C:n mallia, sekä stressin ja mielikuvituksen käsitteitä. Tässä empiirisessä, laadullisessa tutkimuksessa hyödynnettiin konstruktivistista paradigmaa, ja fenomenologia toimi suuntauksena. Aineisto kerättiin sähköisen kyselyn avulla ja siihen vastasi yhteensä 32 henkilöä. Kerätty aineisto analysoitiin teema-analyysin avulla. Aineistoa käsiteltiin in vivo -koodauksella.

Tutkimuksen keskeiset tulokset kiteyttivät, kuinka luovuuslähtöisillä harjoituksilla luontoympäristöissä on suuri potentiaali auttaa yksilöitä pysymään läsnä hetkessä, kiinnittämään huomiota luonnon pieniin yksityiskohtiin ja kehittämään mielikuvitustaan. On pääteltävissä, että ihmisillä on tarve ohjata huomionsa pois arjen stressaavista tekijöistä. Tulevaisuuden tutkimus voisi keskittyä luovuuslähtöisten harjoitteiden hyödyntämiseen luontoympäristöissä laajemmassa mittakaavassa ja pohtia mahdollisuuksia käyttää niitä osana luontolähetteitä Suomessa. Sen lisäksi olisi hyvä tutkia, mitä merkityksiä mini-c-tason tekijät antavat luonnolle inspiraation lähteenään ja mitä menetelmiä he käyttävät luovuuden edistämiseen luontoympäristöissä.

Avainsanat: Luovuus luonnossa, luontoympäristö, mielen hyvinvointi, hyvinvointipolku, tarkkaavaisuuden palautumisteoria, neljän C:n malli, arjen luovuus

## Contents

1	Introduction	1
2	Literature review	5
2.1	Physiological and psychological benefits of nature environments	5
2.2	Nature-creativity relationship and the perceived effects on wellbeing	14
2.3	Nature wellbeing trails in Finland and worldwide	21
2.4	Conceptual framework	26
3	Implementation of the study	33
3.1	Research task and question	33
3.2	Methodological starting points	33
3.3	Data collection	35
	<i>Creative practices on the trail</i>	36
3.4	Data analysis	41
3.5	Research ethics	43
4	Findings	46
4.1	The grounding and calming effect of nature	47
4.2	Finding joy in sensory experiences and appreciation of the aesthetics	50
4.3	Nature as a catalyst for new ideas and creative inspiration	53
5	Conclusions and discussion	55
	References	65
	Appendices	75
	Appendix 1. Participant information sheet	75
	Appendix 2. The advertisements for the wellbeing trail	77
	Appendix 3. The online questionnaire for the wellbeing trail	79

# 1 Introduction

When thinking about Finland from the perspective of a foreigner, one of the first associations may be its consistent top rankings in the global happiness reports (see Fernandez 2024; Yle News 2025). While various factors – such as free public healthcare and a comprehensive education system – contribute to the overall wellbeing of Finnish citizens, the mental health and wellbeing of the Finnish population has become a growing concern in recent years especially with the ongoing budget cuts happening in Finland (Ainasoja 2024).

An essential part of the true Finnish experience comes from Finns' relationship with nature. Finland is covered by forest even up to 75 percent (Suomen metsävarat n.d.) and Finns generally enjoy spending time in nature. However, nature is not something to be taken for granted, even in Finland. During the recent years, the Finnish government has made some questionable decisions about funding the battle against the climate crisis and loss for biodiversity (Jussila 2023). From my point of view, it would be crucial that people would strengthen their relationships with nature, because it might help to build more understanding and compassion towards sustaining and protecting it, too. Within all the knowledge that people have about the ongoing climate crisis, this should be a given. The definition of qualified empathy as well as the notion of dispositional empathy with nature suits well, adding more depth and layer to this thought: the more knowledge we have about sustaining the nature and the more we acknowledge its importance from different aspects, the more people tend to care about it and want to protect it as well. (see Pichlerová et al. 2023, 660; Tam 2013, 93.) Tam (2013) argued that the essence of sustainability lies in empathy and it should be taught from the early years already (Tam 2013, 93).

Gladly, during COVID-19-epidemy, there was a clear trend happening – Finnish national parks and recreational areas were having an increasing number of visitors. (Kansallispuistojen käyntimäärässä kova kasvu – Kansallispuistojen palveluilla selkeä kysyntä 2020). It was reported that there were in total of 7,4

million visits during 2024 in the state protected areas maintained by Metsähallitus, which includes the recreational areas, national parks and other preserved areas (Käyntimäärät maastossa 2024). There are clear results of different studies that show varied health benefits of spending time in nature – being more present, reducing the stress hormones, enhanced creativity and so forth (Brax 2020; Salumäki 2019). A study made by Sitra in 2021 stated that 87 percent of Finns think that nature is an important or somewhat important part of their everyday lives (Kantar TNS 2021). Additionally, Finnish Institute for Health and Welfare (THL) published a report in 2024 where evaluation was done on how the nearby nature in Finland benefits the health and its financial aspects in battling against diseases such as depression and type 2 diabetes. It was found that the importance of nearby nature is paramount: the nearby nature brings remarkable economic significance as the decrease of green spaces would affect the overall societal costs. Further, the nearby nature offers a great possibility for the individuals to unwind and build up bodies' own defense systems. (THL 2024.) How can the Finnish society encourage people to find solace in nature even more, and by that, strengthen the relationship they have with nature from the viewpoint of mental wellbeing and creative thinking?

The focus of my master's thesis is on how engaging with nature and creative activities in nature can strengthen everyday creativity and support mental wellbeing. This research topic stems from personal background as I have found my own personal safe haven in nature very strongly during recent years. I have found a place which helps me to set things into right proportions, with my mind wandering around freely while watching the greenery, the bodies of water, the flora and the fauna. Spending time in nature has allowed me to have more capacity to think more creatively. Additionally, it has helped me to be more present, honor my body and how it functions, and it has boosted my inner desire to be creative. During recent years I have looked at nature from a different point of view. Previously it has been self-evident for me that Finland has a lot of forest and green areas to spend time in. Now I understand that even though we have those areas, humans must remember to protect it with all their willpower in order to sustain them and offer memorable green experiences to the next generations.

I am aiming to create a set of practices which will be a part of recreational area in Helsinki metropolitan area. The purpose of the specific practices is to support the mental wellbeing of visitors and offer them a possibility to enhance their creativity with the help of a set of questions that are related to mental health, grounding, creativity and being present in the moment. My task is to find out and explore how spending time in nature and especially doing practices in nature trails might support mental wellbeing and enhance creative thinking. Since the practices would be around a recreational area, my aim is to utilize the nature aspect fully by intertwining the questions to have a dialogue with the surrounding nature. My target group is the adult visitors of the recreational area in Helsinki metropolitan area. I have decided to use the term “wellbeing trail” to describe the trail in which I have created the practices, but in literature one might see similar terms such as “nature wellbeing trail”, “forest trail”, “forest bath trail”, or “forest therapy trail”, to name a few. As I see it, the term “wellbeing trail” described my creation the best since I cannot state that my trail is purely therapeutic nor it concentrates on forest bathing per se, while there are elements of forest bathing.

From a cultural wellbeing point of view, this study examines how nature and doing wellbeing and creativity-based tasks in nature environments could have a beneficial impact on the individual’s health. I hope that my study offers more answers on how green spaces can offer a place for more than grounding, and especially finding your creativity through nature. This study is a part of the field of cultural wellbeing, as it explores the meanings of creativity impacting on the individual’s mental wellbeing. It also makes nature visible as a platform to explore, be playful and enjoy creative practices. Hildén (2023) argued how inherently connected the individual is not only to the nature, but to experiencing artistic experiences, created by arts and culture. Hildén (2023) explained how nature and artistic experiences offers the possibility to enjoy aesthetic experiences, experiences of agency and connectedness to something that is larger than life itself. (Hildén 2023.) Hildén (2023) suggested that there needs to be more art making and experiencing it holistically alongside scientific knowledge in order for the individuals to grow into “responsible humanity”. (Hildén 2023.) Hildén’s

thoughts resonate strongly with my inner thoughts about creativity, art, wellbeing and nature. As I see it, creativity is embedded in every individual. To strengthen it and to make it a more visible part of one's everyday life, there needs to be places and enough time to practice it. Why not support the perceived wellbeing with the help of creativity in the green spaces?

This master's thesis begins with literature review and the conceptual framework in chapter 2. Chapter 3 is about the research task and question, followed by elaboration about the methodological standpoint, data collection, descriptions of the made practices and the data analysis. Moving to chapter 4, where findings can be found and lastly, chapter 5 is about drawing conclusions and discussion about this study. I will also examine the trustworthiness of the study as well as make further suggestions about future research and future prospects of utilizing nature environments in supporting mental wellbeing and creativity.

## 2 Literature review

In this chapter I present the findings from the key studies which are seeking to understand the relationship between nature, activity or wellbeing trails in forest environments, mental wellbeing and creativity. I have used both scientific articles and books as my sources and for the search I have mainly used databases such as Taylor & Francis, Wiley, ScienceDirect and Google Scholar. All the research used in this chapter is peer-reviewed. Some of the used keywords were ‘forest arts-activity’, ‘mental health’, ‘arts-activity in nature’, ‘therapeutic values of forest’, ‘nature creativity enhancement’, ‘outdoor mindfulness-based interventions’, ‘restorative forest trails’, ‘mental health forest’, ‘arts activity forest’, ‘mindfulness activity in nature’, ‘creativity forest’, ‘mental health nature’ and ‘forest bathing’, to name a few.

The terms “nature environment”, “forest environment” and “nature” are similar with one another. To ensure inclusion of varied references in this literature review, I have sought and written about all mentioned terms to signify the plethora of terms to describe nature. In my study the practices are conducted in a forest environment, but I have chosen to use the term “nature environment” to be more consistent with previously made studies.

### 2.1 Physiological and psychological benefits of nature environments

Nature and the perceived health benefits of spending time in nature have been studied broadly both in Finland and abroad (see Bielinis et al. 2018; Korpela et al. 2017; Pasanen et al. 2018; Tsunetsugu 2013). During the COVID-19 pandemic there was a clear increase of visitors in natural parks and recreational areas in Finland (See Kansallispuistojen käyntimäärässä kova kasvu – Kansallispuistojen palveluilla selkeä kysyntä 2020; Käyntimäärät maastossa 2024), and the same trend was visible abroad as well. In Pichlerová’s et al.’s (2023) research conducted in Slovakia, the goal was to elucidate the effects of nature during the pandemic and especially how nature might affect on one’s

emotional well-being. They also studied how spending time in nature might have an impact on one's perception and value of the forests and the forest ecosystem services. Pichlerová et al. (2023, 648) argued that during the pandemic it was especially valuable to find restorative places and environments for mental decompression. Their first hypothesis for this research was that the pandemic had an impact on the narrative about forests and their benefits – forests are not only mere sources of natural materials, but rather places to spend time and have restorative experiences. Moreover, the second hypothesis for this research was about experiencing feelings of gratitude towards forest and how that may affect behavior while spending time in green areas, which leads to a more compassionate and sensitive approach for the environment. (Pichlerová et al. (2023, 648.)

Pichlerová et al. (2023) conducted the research during summer 2020 and for data collection they used a questionnaire (Pichlerová et al. 2023, 648–649). The results indicated that forest visits had a significant influence on subjective well-being, especially on the feeling of anger and how recently it was felt, and the results ultimately supported the hypothesis of forests being restorative environments that evoke feelings of gratitude. The feeling of gratitude might help visitors to engage more in a sustainable form of living, for example through recycling. (Pichlerová et al. 2023, 660.) It seems that the restorative and positive mental wellbeing effects of nature and forest areas have been vastly studied as well (see Bielinis et al. 2018; Park et al. 2009) in Asia and Europe, and it is interesting to find similarities with my own thoughts about valuing the nature experience.

Similar research was conducted in Japan, although the focus was on urban forest landscapes. Nevertheless, it proves a valid point that green spaces in general might be beneficial for one's health (Tsunetsugu 2013, 93). The study explored how the urban forest scenery affected 48 male urban residents and what were the psychological and physiological effects. The authors argued that there needs to be more quantitative data to underpin the value of nature when making decisions about urban development. (Tsunetsugu et al. 2013, 90.) The aims for

this research were to find out, if even a short visit to a forest area has a positive impact and does it make any difference, whether the time spent in nature is in a forested or a more urban nature area. The research was conducted in four areas around western and central Japan and the participants were divided to urban sites and forested sites. (Tsunetsugu et al. 2013, 91.) The analysis supported the hypothesis of positive psychological effects, especially from a viewpoint of relaxation, which was proven in Pichlerová's et al.'s (2023) study as well. While this research again supported the statement of forestry bringing valuable effects on one's psychological health, Tsunetsugu et al. (2013, 93) reminded that to gain more long-term effects, the study must be repeated several times.

Shinrin-yoku has been a widely spread activity which sees the value in human health and forest. Shinrin-yoku originates from the Japanese words *shinrin* (forest) and *yoku* (a bath). This term was coined in 1982 by the Japanese Ministry of Agriculture and since then, there has been a plethora of studies that investigate the physiological and psychological effects of shinrin-yoku (Park et al. 2009, 18-19.) It is defined not as exercise nor as a hiking trip, but more as creating a connection with nature by using all your senses. (Li 2018, 12.) It is worth mentioning that one of the crucial elements in practicing shinrin-yoku is the observation of your surroundings by using your five senses (Li 2018, 279). Since one of the senses is the sense of sight, visual perspective is utilized when practicing shinrin-yoku. Similarities can be found when exploring the notion of aesthetics which can be linked to environmental aesthetics. It is a form of an aesthetic appraisal related to appreciating the nature environments. (Parsons & Carlson 2024.) Particularly the dimension of nature aesthetics explained by Parsons & Carlson (2024) can be seen as a complimentary point of view when reviewing and building understanding about the concept of shinrin-yoku.

In Bum Jin Park et al.'s (2009) study, the scholars had a field experiment in 24 forests in Japan during 2005 and 2006, where the adult participants had a walk in a forest or an urban area. The scholars did both physiological and psychological measurements on the participants and the evidence demonstrated how the participants had a decrease in their blood pressure, pulse rate and

cortisol concentration when time was spent in the forest. From a psychological point of view, the result proved that a forest environment can indeed diminish fatigue, anger, depression, tension and on the other hand, heighten psychological vitality. Park et al. (2009) states that from the aspect of Attention Restoration theory known as ART by Kaplan & Kaplan (1991), the results of this study underpin the value of forest being a good healing agent for human beings. (Park et al. 2009, 23–24.) Similar findings were made in Berto's (2014) research as well.

As mentioned earlier, shinrin-yoku is a known relaxation practice in Japan and it has versatile benefits on holistic wellbeing (Morita et al. 2006, 55). Since I found the concept of shinrin-yoku rather fascinating and the concept is rather fitting for my thesis, I found some more interesting research where shinrin-yoku's benefits were studied and similar findings were made. A study conducted by Emi Morita et al. (2006) explored what are the psychological effects of shinrin-yoku on a larger number of participants and acknowledged what are the elements that are related to the effects.

The sample size of this research was large as the participant number was 541 and the findings were indeed somewhat similar as it was stated in Park et al.'s study (2009) – feelings that can be perceived as negative feelings such as anger and depression decreased when the participants spent time in forest, as well as the positive emotions enhanced such as friendliness, liveliness and overall wellbeing. (Morita et al. 2006, 57, 60.) Morita et al. (2006) stated that this study brought up a question what elements specifically about the forest environment are effective for the wellbeing and that should be studied further. Notably, the duration of the forest visit nor the forest type did not correlate with the immensity of the benefits (Morita et al. 2006, 61–62). This brings up a question: what would be the elements in nature or forest areas that enhance mental wellbeing and is there a notable preference in green areas where one could achieve these said benefits?

The perceived mental wellbeing benefits of forest bathing have been studied also within the Polish young adults. The study conducted by Ernest Bielinis et al. (2018) examined how forest bathing influences on psychological wellbeing, as well as to find out would a short-term forest bathing during wintertime in Poland affect on emotional, restorative and vitalizing aspects of wellbeing. Bielinis et al. 2018, 277.) Bielinis et al. (2018) argued that hypothetically it would not make any difference if the forest bathing would be conducted during wintertime when the trees won't have any leaves on them, based on the previous research. The authors pointed out that there is a need for further examination and research about the effects of forest bathing from an European perspective, since a considerable amount of the research originates from Asia. (Bielinis et al. 2018, 277.) That statement supported my own thought as well when researching studies concerning this topic and I find it extremely valuable that there would be more data from Europe, too.

Bielinis et al.'s (2018) study was conducted in 2017, taking place in Olsztyn, Poland and including 62 participants. Two different locations were selected for this study: an urban location and a forest location. The measurements were made by using PANAS-tool (The Positive and Negative Affect Schedule), which measures 10 negative and 10 positive effects of items. The other tools that were used for this study were POMS (The Profile of Mood States), which measures psychological mood states such as depression, hostility, vigor and fatigue, to mention a few. ROS (The Restorative Outcome Scale) measures restoration in a forest environment. The authors used SVS (The Subjective Vitality Scale) as well to examine the feeling of vitality. While POMS and PANAS-tools have been proven to be reliable, Bielinis et al. (2018) pointed out that SVS and ROS were used in Polish language for the first time and therefore their reliability was certified in this study. (Bielinis et al. 2018, 277–278.)

The participants in Bielinis et al.'s (2018) study viewed the urban and the forest environments for 15 minutes. Before and after the environment exposure, the participants filled the questionnaires, which measured the above-mentioned factors. The results of this study were clear: the participants who spent the time

forest bathing had a notable effect on their mood, subjective view of vitality and positive feeling of subjective restoration, compared to the control group that spent the time in an urban environment. Winter season was seen as a welcomed aspect in forest bathing since the duration of the growing season in some countries is quite short. Therefore, forest environments can be utilized all year around. (Bielinis et al. 208, 282.)

While most of the research found was focused on highlighting the positive effects of being in nature, it is important to shine some light on the studies where the impact of spending time in nature was either neutral or negative on an individual's physical and/or mental wellbeing. Ultimately, the focus has been somewhat on studying the positive effects that nature provides for the individuals, Soga and Gaston (2022) implied.

While Soga and Gaston's (2022) review was not specifically concentrated on exploring the nature-human relationship only from the perspective of mental and physical wellbeing, they presented a clear overview of the phenomenon of negative nature interactions. Soga and Gaston (2022) explained how nature's negative impacts on the individuals have not been researched as thoroughly as the positive benefits and interactions. (Soga & Gaston 2022, 1127.) They presented their examples of "negative direct human-nature interactions" in a form of a table, dividing the causes of negative emotions in sensory pathways. The sources of negative emotions were also divided in sections, such as ecosystems, animals and plants. The sensory pathways included the olfactory, tactile, auditory and visual contact. (Soga & Gaston 2022, 1129.) Soga & Gaston (2022) explained how the tactile contact with for example different insects or other animals is one evident cause of having a negative impact on an individual's health, as it may cause even fatal consequences at worst (Soga & Gaston 2022, 1129). Moreover, Soga and Gaston (2022) demonstrated how different factors in the nature experienced through "non-tactile sensory channels" might evoke negative psychological responses, such as fear and repulsion. They might be evoked due to different fears related to animals and/or insects. (Soga & Gaston 2022, 1130.) While Soga and Gaston (2022) acknowledged the nature

experiences' important role globally, they argued that there needs to be more research done especially on people's attitudes towards nature conservation willingness and how does the negative interactions might affect on that, amongst other key questions (Soga & Gaston 2022, 1136).

Zamora et al.'s study (2021) concentrated on surveying the beliefs and insights about nature amongst U.S. adolescents. Zamora et al. (2021) stated that it has been proven that the time spent in nature can correlate with both physical and mental wellbeing. The research was conducted amongst adolescent U.S. citizens, aged from 14 to 24 and the data was collected with five open-ended questions given in MYVoice-national text message poll, which is a platform collecting opinions and thoughts concerning policy and health. (Zamora et al. 2021, 2.) While the majority of the respondents (457 out of the 994 total participants) recognized the calming effect on them while spending time in nature, in total of 125 respondents reported that being in nature affects on them either neutrally or negatively (Zamora et al. 2021, 3-4). Some of the respondents commented how being in nature might evoke feelings of anxiety or isolation and how it has not been thought about previously how nature impacts on them (Zamora et al. 2021, 4).

The negative feelings might be explained by an individual's lower connection with nature, Chang et al. (2024) argued. Chang et al. (2024) studied how varied an individual's perceptions of nature are and how does it affect on their perceived wellbeing. The study was conducted in Australia and had in total of 2084 participants answering the online survey. Chang et al.'s (2021) implied that the positive correlation between wellbeing and time spent in nature is stronger amongst those individuals who have a stronger bond to nature itself compared to those, whose attachment to nature is not as solid. (Chang et al. 2024, 2.) The findings demonstrated how the individuals with lower engagement with nature can still benefit from the nature visits but not as well compared to those, who visit nature more frequently. Chang et al. (2024) pointed out that the connection between the perceived wellbeing and nature experiences might be dependent on

the activities the individuals engage in while being in nature. (Chang et al. 2024, 5.)

Further, in a literature review made by Won Top Shin et al. (2010), the themes of forest experience were explored further, especially the benefits of it and its psychological effects. Shin et al.'s (2010) study was conducted in Korea and the authors' aims were to gain more empirical data to support the positive outcomes of spending time in forest environment as well as to learn more from a theoretical point of view which supports the earlier mentioned empirical data. Shin et al. (2010) argued that there is a clear gap in the research that focuses on the relationship between the individual and the forest environment and why and how the positive changes occur in the individuals after spending time in forest environment. (Shin et al. 2010, 39.)

Shin et al. (2010) proposed that one of the key elements in terms of enhancing psychological wellbeing is forest stimuli. Forest stimuli contains minimal levels of noise and movement, small amounts of human population as well as low pace of change. This can be seen as an opposite to an urban environment where an individual's mind is quite often burdened by stimuli that can be perceived as aggravating. Forest stimuli awakens an individual's coping behaviors rather than defensive behaviors. This can be explained with the innate difference between the urban environments versus the forest environments. While the urban environments have expectations on how to be and exist in a societal setting and it contains physical restrictions such as buildings, the forest environments have a lack of these settings in general. (Shin et al. 2010, 40.)

Another example that Shin et al. (2010) used to explore the elements of enhanced wellbeing after forest experience was the concept of flow by Mihály Csikszentmihályi which originates back to 1970. It was explained in Shin et al.'s (2010) study that visiting the forest might have a high chance to produce the state of "flow", where one of the distinctive factors is a combined "sense of action and awareness". Shin et al. (2010) argued that those who visit forest environments frequently are looking for ways to decompress and have some sort of outbreak from everyday life. Forest environment offers a great place to focus your attention

on the aesthetics and wonders of nature, which resembles a lot the state of flow – your focus is narrowed down on a certain stimulus field. (Shin et al. 2010, 42.) While Shin et al.'s (2010) literature review offered great examples on the important role of forest environments in terms of psychological wellbeing, the authors stated that there needs to be more thorough research which emphasizes the wellbeing effects of forest environments. The studies may also affect on how resources will be distributed for forest consequently. (Shin et al. 2010, 46.)

Another study worth mentioning is Berto's (2014) literature review on restorativeness and nature's significant role in it. Berto (2014) explains how stress can be heightened or decreased daily which is dependent on the physical setting we spend time in. Berto (2014) describes that measuring stress can be divided in "three categories": when measuring the changes in behaviors or performance, bodily or neuro-physiological alternations in the individuals or relying on the introspective reports by these individuals. Berto (2014) recognizes the found evidence on nature's role in restoring the individuals from stress and the tendency of thinking more positively when being in nature environments. (Berto 2014, 395.) Since one of the main aspects in stress recovery are shifts in emotional responses, nature environments can be seen as places where visitors can feel heightened positive responses, whereas an urban place with no natural elements in sight can create emotions often perceived as negative such as frustration, anxiety and anger, to name a few. (Berto 2014, 397.)

Berto (2014) explored the behavioral and physiological effects as well as the individual's reports. Berto (2014) argued that there is a lack of long-term focus and more proneness to an impulsive and impatient behavior when the individuals are not spending enough time in nature. When exploring the physiological aspects, Berto (2014) pointed out that based on the literature, even the nature stimuli displayed as a poster or even VR settings, the individuals encountered a decrease of psycho-physiological stress. (Berto 2014, 400.)

As I see it, it seems interesting that Berto (2014) pointed out that natural stimuli does not have to be experienced in a nature environment per se. However, I think that part of the whole nature experience is to physically go out and be in the

nature and use all your senses to appreciate the surrounding environment rather than simply looking at videos of nature environments. On one hand, nature stimuli in nonliving form might offer peace and calmness amid stressful situations when going out is not an option nor a possibility. Similarities can be found in other studies that supported the argument of looking at pictures of greenery can for example improve your attention and lower your stress levels (see Berman et al. 2008; Gamble et al. 2014; Kweon et al. 2007).

## 2.2 Nature-creativity relationship and the perceived effects on wellbeing

As proven, there are strong connections between spending time in nature and forest environments with increased wellbeing of people (see Bielinis 2018; Pichlerová 2023; Shin et al. 2010; Tsugunetsu 2013). It is clear that nature holds massive power within itself by simply just existing. Could this power be harnessed and utilized when talking about creativity and especially creative thinking?

In my study the concept of creativity is defined by the Four C model, originally presented by Ronald A. Beghetto and James C. Kaufman in 2009, while the addition to the pre-existing model, mini-c, was introduced already in 2007 by the same authors. Creativity can be perceived as a four-level model – there are clear distinctions between the great artists and trailblazers in the arts field (Big C) and those everyday people who make their own contribution to art (little-c). (Beghetto & Kaufman 2009, 2.) There has been some critique about not having the focus on the intrapersonal side of creativity and the growth mindset in it. Therefore, Beghetto and Kaufman came up with the mini-c concept to broaden the perspective of creativity. (Beghetto & Kaufman 2009, 2.) The fourth dimension of the Four C model is Pro C, which can be defined as a level of expertise creativity, which has not yet reached quite the Big C-level, but it usually demands some kind of public display of your work, such as an art exhibition or a published paper. (Beghetto & Kaufman 2009, 5.) More detailed definition of the Four C model can be found in subchapter 2.4.

Nature's role in fostering creativity can be visible in Dianne A. Vella-Brodrick et al.'s (2024) scoping review – they explored further the connection between nature and creativity. Vella-Brodrick et al. (2024) recognized the significance of creativity and were interested to find out the evidence that support nature's important role in fostering creativity. There were altogether 45 different published studies which elaborated further the connection between creativity and nature. (Vella-Brodrick et al. 2024, 133.) Several studies supported the fact that nature does indeed foster creativity (see Plambech & Konijnendijk van den Bosch 2015; Yu & Hsieh 2020; Ratcliffe et al. 2022; Williams et al. 2018). These studies will be elaborated further in the following chapter.

In Denmark, Plambech and van den Bosch conducted a study published in 2015 which explored nature's role on creativity within a chosen group of Danish professionals in the creative field. The authors pointed out that while the relations between human interaction and nature and specifically their psychological effects have been studied widely, there is a knowledge gap on how nature impacts on creative thinking. (Plambech & van den Bosch 2015, 255.)

Originally presented by Wallas in 1926, Plambech and van den Bosch (2015) display on creative process and its four phases. During the preparation-phase, a person sees a topic and starts to gather some more data and information in order to gain more information about it and direct their attention fully to it. Next is the incubation-phase, where the creative process is unconsciously continuing, while the direct attention is on other things. Thirdly, the idea-phase can be described as the point where new ideas starts to emerge and previously collected data starts to turn into more palpable and visible ideas. Lastly, the evaluation-phase lets the rationality of one's mind to decide, is the idea beneficial and worthy. With this information, the authors sought more understanding how the creative process is formulated and how nature might play different roles during the changing phases of creative process. Moreover, the authors argued in their hypothesis that the specific type of nature might be more preferred when amplifying creativity and human-nature-interaction stimulates creative thinking. (Plambech & van den Bosch 2015, 256–257.) While there might be a preference

of specific type of nature in terms of the creative process, it is worth mentioning that in Park et al.'s study (2009) it was pointed out that there is no difference in which kind of nature environment one does spend time in from the viewpoint of mental wellbeing.

Plambech and van den Bosch (2015) conducted the research in 2012 and there were 17 participants who were semi-structurally interviewed and the authors used digital images of nature to visualize the variety of Danish nature landscapes that were brought up in the interviewee's answers. (Plambech & van den Bosch, 2015, 257.) The results of this research demonstrated how human-nature-interaction did, in fact, stimulate creative thinking. One of the participants (Man, designer/consultant, 37) elaborated further: "In nature nothing is locked, it changes every day. It appeals to curiosity, alertness, and presence. What's happening here?". The participants also described how nature environments offer a plethora of different sensory stimuli, such as the taste and the feel of air, bird songs, and sounds of water, to name a few. (Plambech & van den Bosch, 2015, 259.) Sensory stimuli are an essential part of practicing shinrin-yoku, too (Li 2018, 12).

Many of the respondents stated that they like to walk when spending time in nature, which Plambech and van den Bosch (2015, 259) noted. They demonstrated how walking takes only a certain amount of attention, which allows the mind to create new connections that are not formed intentionally in one's conscious mind. Additionally, the respondents identified the state of flexibility while viewing different creative problems and ability to synthesize ideas to a larger picture, which helped them to stimulate creative thinking. (Plambech & van den Bosch, 2015, 259.)

Since it was a challenge to clarify specifically which phases of the creative process were impacted the most by nature as their innate tendency to overlap with each other, the authors stated that the incubation phase and the preparation phase were the phases that were mentioned the most by the respondents. Nature was seen as a place which creates calming energy, which helped the

respondents to pinpoint their doing and how viewing, examining and taking pictures of the elements in nature inspire the creative thinking. (Plambech & van den Bosch, 2015, 260.)

Lastly, the last hypothesis and the results showed how the professionals of the creative field preferred certain kinds of nature settings over others (Plambech & van den Bosch, 2015, 260). The findings were based on a study conducted by Patrik Grahn and Ulrika A. Stigdotter in 2010, where they were able to determine perceived sensory dimensions (PSD) which defined the ways one could perceive green spaces. The results of Plambech & Konijnendijk van den Bosch's research (2015) stated that the respondents had a preference of spaces that included the PSD's "Nature", "Serene" and "Space". Two further mentioned PSD's had similar features such as quietness, feeling of peace, whereas the PSD "Nature" was perceived as curiosity and exploration. (Plambech & van den Bosch, 2015, 260.) All the abovementioned features argue strongly that nature is a great source for creative inspiration. The authors stated in the last chapter that they hope creative professionals would have access to nature because of its fruitfulness in the creative process. (Plambech & van den Bosch, 2015, 262.)

Further studies on nature's impact on creativity were made globally (see Yu & Hsieh 2020, Ratcliffe et al. 2022, Williams et al. 2018). Chia-Pin (Simon) Yu and Hsuan Hsieh made a study based in Taipei, Taiwan in 2020 to assess the effects of forest therapy on creativity as well as on mood responses. Taiwan has its own forest therapy program made by the Taiwanese forest therapy professionals, as well as in many Asian countries the benefits of forest therapy have been recognized widely, both physiologically and psychologically. (Yu & Hsieh 2020, 2.)<sup>1</sup>

---

<sup>1</sup> The 23 participants of the study were a part of three-day forest therapy workshop. POMS-scale (The Profile Of Mood States) was used to measure the emotions and creativity. (Yu & Hsieh 2020, 3.)

The study showed that negative emotions were decreasing during the three-day workshop while the positive emotions measured by vigor-activity dimension were increased (Yu & Hsieh 2020, 5). In terms of creativity measurement, Yu and Hsieh (2020) utilized remote association as a symbol for creativity. Remote Associates Test (RAT) and specifically Chinese Word RAT was used as a tool to measure participant's creativity. CWRAT involves two tests, made as a pre-test and a post-test. It contains 30 different test items and for word association they had three different options to choose from, each item worth one point. At the end, the points are calculated. (Yu & Hsieh 2020, 3.) When analyzing the results, the authors measured improvement of creative thinking by 27.74% when comparing the post-test scores with pre-test scores. There was a mitigation of confusion-bewilderment mark which correlated with enhanced creativity. This supports the notion of calmness when performing creative tasks, which can be also linked to results of Plambeck's and van den Bosch's (2015) study. (Yu & Hsieh 2020, 5.)

Kathryn J.H. Williams et al. (2018) conducted a theoretical review where the creativity perks of nature experience were conceptualized - the focus was to explore how mind wandering and attention restoration can be seen as complementary processes in creativity. It is recognized that there is a clear need for research on how the nature experience boosts the creativity and what is the theoretical underpinning. Similar thoughts were raised in Plambeck's and van den Bosch's (2015) study as well. The notion of mind wandering has been linked to the usage of brain region, which is responsible of creativity, as well as Attention Restoration Theory (ART) has been seen as a process that enhances creative thinking. (Williams et al. 2018, 36–37.) Many studies stated how creativity was indeed enhanced when being in nature environments but there is a lack of research on the psychological process on how nature experiences support creativity. Mind wandering can be seen as a way to support divergent thinking which may affect creativity. (Williams et al. 2018, 38.)

The authors proposed that both ART and mind wandering can be viewed as “complementary and mutually reinforcing influences on creativity” (Williams et al. 2018, 41). The concepts of ART and mind wandering have their similarities and

differences but when viewing them side by side, the contrast of them helps to distinct the processes that enhance creativity: while ART focuses on emphasizing the conscious work process during the incubation period where the main attribute is attention control, the mind wandering pinpoints the unconscious work and especially flexibility in doing associations. Together they form a more concrete way to understand how creativity might be enhanced during nature experiences. The authors proposed that nature experience should be a dialogue between the notion of soft fascination and mind wandering – while the mind firstly captivates the external environment's features but since the environment does not seek for any feedback, this cyclical process allows the mind to roam around freely, and the attention can be oriented towards introspection. (Williams et al. 2018, 41.)

Similar findings were published in Eleanor Ratcliffe et al.'s study in 2022. Ratcliffe et al. (2022) explored on the meanings British participants have about nature environments in terms of their creative pursuits, both personal and professional. Ratcliffe et al. (2022) argued that there is some uncertainty about the factors that affect on people's creative processes and what happens when a person is in nature – what are the key points of this transactionality from a creative point of view? (Ratcliffe et al. 2022, 215.) Racliffe et al. (2022) stated that further studies have a strong base in terms of seeking further understanding the “why?” factor of the qualities in nature and name the qualities (Ratcliffe et al. 2022, 217). Ratcliffe et al. (2022) noted that in Williams et al.'s (2018) study made in 2018 it was stated that creativity in nature environments have a strong connection both with introspection and external observation in nature. The aim for Ratcliffe et al.'s (2022) study was to seek out and further the knowledge about the process of nature's and creativity's dialogue with each other. (Ratcliffe et al. 2022, 218.)

Ratcliffe et al.'s (2022) qualitative research included 20 adult participants residing in the United Kingdom and the research was conducted by doing interviews with a head subject of “perceptions of surroundings”. (Ratcliffe et al. 2022, 218.) The data was categorized with thematic analysis, with a result of six master themes including subthemes. The themes were (a) affective, (b) cognitive, (c) aesthetic appraisals, (d) environmental properties, (e) sensory experiences and (f) the self.

Affective appraisals were identified as states when a person experiences pleasure and relaxation. Cognitive appraisals included the feeling of being inspired and interested, keeping or losing focus and a feeling of escapism. (Ratcliffe et al. 2022, 220.) Aesthetic appraisals consisted of participant's views on changes, contrasts and fluctuation in nature and aesthetic attraction, as well as the approachability of nature. Environmental properties consisted of "green/blue spaces, weather and season, plants and animals and landscapes". Lastly, the sensory experiences captured four senses and their connection with nature and the self-subtheme explored the sense of self and the relationship with creativity in nature. (Ratcliffe et al. 2022, 223–224.)

Affective, positive states were seen as important in terms of creativity. Interestingly, there wasn't clear significance on the character of this positive state – both activated, and non-activated states were seen equally as fruitful. (Ratcliffe et al. 2022, 220.) In terms of cognitive appraisal, one of the participants stated that the harmony of nature elements helped them to maintain focus. Some participants told that the nature experiences helped them to revive memories which they found helpful in the creative thinking. (Ratcliffe et al. 2022, 222.)

In terms of aesthetic appraisals, Ratcliffe et al. (2022) were able to find factors that were unquestionably linked to participant's perceptions of creativity. These were things such as contrasts in nature, body movement and easy accessibility to nature, to name a few. When focusing on the environmental properties, the participants explained how for example "green nature and the presence of water" offered them a possibility for some sort of escapism which fostered creativity. (Ratcliffe et al. 2022, 223.) Sensory experiences were self-explanatory – the participants described how smelling, listening, hearing and touching different elements in nature were found exhilarating. Moreover, the identity of themselves in nature facilitated by nature made the participants reflect on their relationship with creativity. While some of the participants did not have a strong feeling of familiarity or they did not recognize a bond between them and the nature, for other participants the bond was strong and it helped to be more mindful about their identity as a whole. (Ratcliffe et al. 2022, 224.) This raises a question: what

are the possibilities to find a source of inspiration from nature for those who cannot find the bond so easily with the nature itself?

Ratcliffe et al. (2022) stated that with this research they were able to better identify the elements of nature which have impact on creative processes and what is their connection with creativity (Ratcliffe et al. 2022, 225). As mentioned earlier, in the results it was seen that both low and high-excited affective states were seen as fruitful for fostering creativity. Ratcliffe et al. (2022) also mentioned how focusing on nature and the variety of elements in different landscapes helped the participants in their creative processes. Although the research offered new data for exploring the further benefits of nature environments, Ratcliffe et al. (2022) expressed that more research is needed to recognize more in depth the elements in the nature experiences that promotes creativity (Ratcliffe et al. 2022, 227).

### 2.3 Nature wellbeing trails in Finland and worldwide

When further exploring the nature environments, it is essential for this study to gain more knowledge and understanding about nature trails, why they exist and their role both in Finland and worldwide. Can the nature task trails or wellbeing trails help the visitors in nature fully immerse themselves into the nature, practise being present in the moment, challenge their way of thinking and with these tasks, help the visitors to potentially support their mental wellbeing and enhance creativity?

To my knowledge there are no found statistics about the amount of wellbeing trails in Finland in 2025. Few worth mentioning are Ikaalinen's "Voimametsä"-trail created by Kalevi Korpela et al. (2017) as a part of four-country wide research (see also Kylvén n.d.), Liessaari wellbeing trail in Lohja (see Makkonen & Ranta 2017; Sormo 2017), Olari health nature trail in Espoo (see Health nature trail Design Guide n.d.) and Vartiosaari health nature trail (see Leppänen et al. 2013).

Kalevi Korpela et al. (2017) conducted a four-country wide study where the visitors in different forest trails performed different tasks printed along the way from a psychological point of view. The aim of Korpela et al.'s. (2017) study was to explore the link between experienced mood raise and the restorative effects that the psychological tasks were meant to offer. (Korpela et al. 2017, 25.) The countries in question were Finland, Sweden, Luxembourg and Sweden and the study was conducted during 2012 up until 2013. Korpela et al. (2017) argued that these psychological tasks might benefit the promotion of public health in a larger scale. Notably, this specific study was novel since there is a clear absence of research that examines the efficacy of such trails. While the importance of this research was stressed, Korpela et al. (2027) wondered the link between an individual's own connectedness with nature and the perceived benefits of these psychological tasks on forest trails. That is, would these kinds of trails serve the interest of a larger group of people evidently? (Korpela et al. 2017, 26.)

The tasks along the trails were inspired with the knowledge of Attention Restoration Theory (ART) by Rachel and Stephen Kaplan (1989) and Stress Reduction Theory (SRT) by Roger S. Ulrich (1991), which will be later elaborated in conceptual framework-chapter of my study. Korpela et al. (2017) thought carefully of the order of these tasks to ensure the restorative nature of this specific trail. Firstly, the visitors of the trails faced "clearing the head"-level, where the aim of the tasks is to gain visitor's straight attention. The second one delved into the visitor's mind and the last level helped the visitors think about their values and ambitions. (Korpela et al. 2017, 26.)

The 299 participants of the study were asked to fill out a questionnaire right after their walks on these forest trails. The majority of the participants were located in Finland (164). Sweden had 54 participants, Luxembourg had 65 and France had 16 participants. The trails in each country were located in forest environments, although there were small differences in which kind of forest areas the trails were located. For instance, in Finland the area included lakeside beside the forest area whereas in Luxembourg, the trail was located in an existing hiking trail with beeches and spruces growing in the forest. (Korpela et al. 2017, 27.)

The participant's results were at the end compared only between Finland, Sweden and Luxembourg (Korpela et al. 2017, 28). France was eliminated due to a small number of participants (Korpela et al. 2017, 27). Korpela et al. (2017) found out that Swedish and Luxembourgian visitors of the trails were altogether more satisfied compared to the Finnish visitors but found the possible reason for this result. Korpela et al. (2017) argued that in the Finnish version of the trails there were more sections on the trails that were not eye-pleasing, whereas in Sweden and in Luxembourg the trails were arguably aesthetically more pleasing. The aesthetic part of nature experience is seen important in the context of *shinrin-yoku* from the perspective of using your five senses when in nature (Li 2018, 12; Guziak 2024).

It was found that the contents of the tasks were associated with better spirits and restorative changes in one's mind, which supported the notion of helpfulness of similar kinds of task trails in existing nature trails (Korpela et al. 2017, 28–29). There was no significant correlation between the nature-connectedness and positive outcomes of this nature experience, which supported the notion of the efficacy of task trails on a larger scale for promoting public health. Notably though, the participants of the study were quite highly measured with high nature connectedness in general, which limits the study's results to be broadly generalized. Korpela et al. (2017) explained that with the interest of these people who enjoy nature environments might be more prone to seek out the nature trails out for their personal interest. (Korpela et al. 2017, 29.) As I see it, Korpela et al.'s study (2017) lays out an interesting ground for further studies to be made, particularly how to engage larger public for the wellbeing trails and what would be the outcomes in terms of wellbeing, restoration and especially creativity.

When exploring more of the studies made on this matter, Pasanen et al. (2018) conducted a two-group study in which the psychological tasks in the nature were explored in the context of "enhanced physiological, affective and attention restoration" (Pasanen et al. 2018, 1). The aim of this study was to find out how these tasks in nature provide and strengthen mood enhancement and restoration (Pasanen et al. 2018, 3). The tasks were constructed by labelling them as

“restoration-enhancement-tasks”. The second set of tasks were the same as the first ones, but they were laid out in the opposite order. Before and after the walk in nature, the participants were asked to fill out a questionnaire to find out about their feelings level of restoration, as well as the questionnaire included a task in which the participants were tested about their level of direct attentiveness. The environments of these studies differentiated from each other – study 1 was conducted in a forest area in the countryside whereas Study 2 was located close to a city center in an urban park. (Pasanen et al. 2018, 3.)

The hypothesis of the first study was that engaging with tasks on the nature trails would enrich valence and restorative levels of the individuals and they would provide less mistakes when focusing on something long-term, with few specifications as well. These specifications included the lesser impact on perceived benefits without conducting the tasks, the best results would gain those who will do the restoration-enhancement-tasks in that specific order and those who do the tasks in opposite order would be placed somewhere in between compared to the achieved benefits. In the second study, the aim was to seek out knowledge on how restoration-enhancement tasks have similarities with other tasks which don't take restoration into account specifically. Pasanen et al. (2018) wondered did the tasks as themselves and their content affect on the healing results they might provide. (Pasanen et al. 2018, 3.)

The study included two control groups in which the first one was conducted in coniferous forest located in the Pirkanmaa region in Finland. This specific route had already existing tasks which were created for Korpela et al.'s study in 2017. (Pasanen et al. 2018, 4.) The participants were divided in three groups in which one group did the tasks along the trail in theory-based order, one group did the tasks in the reverse order and the third group which was split in two, walked the route without the tasks both clock- and counter-clockwise. (Pasanen et al. 2018, 5.)

The second study took place in an urban environment – in a park, to be exact. The park was located in the Pirkanmaa region as well, an area known as

Hatanpää arboretum. (Pasanen et al. 2018, 11.) Pasanen et al. (2018) found out that forest walk enhanced the visitors self-determined restoration and valence. Surprisingly, implementing the tasks in the opposite order, the aim for the second study was to see if these same results would be replicated in an urban environment and examine would there be any effects of urban nature. (Pasanen et al. 2018, 10-11.) As mentioned, one of the interesting results that came up during the first study was that the participants enjoyed more conducting the tasks in enhancement-restoration-order, which is opposite to the theoretic belief. This is why Pasanen et al. (2018) did the change for the second study and the tasks were laid out in reverse order. In the second study the participants were divided similarly in three groups: one of the groups conducted the tasks in the updated order, one of the groups had awareness-enhancement-tasks and lastly, the third group did the walk without the tasks. (Pasanen et al. 2018, 12–13.)

When viewing the results, there were similarities with both studies. The results showed that restoration and valence were increased in all tested conditions, although some of the participants expressed their dissatisfaction with using their smart phones during the walk to see the tasks. (Pasanen et al. 2018, 17.) All things considered, the study demonstrated that visiting nature enhances positive mood changes and affects positively on restoration. The notion of having tasks in nature can be supported by the fact that repeated engagement with nature environments might enhance restoration, but Pasanen et al. (2018) stated that more research is needed in terms of which kind of psychological tasks would be beneficial in long-term exposure. Nevertheless, Pasanen et al. (2018) did argue that the active engagement with nature environments could be beneficial for everyone and the tasks themselves are rather easy to implement in different countries. (Pasanen et al. 2018, 19–20.)

As stated in the aforementioned studies, there is a potential in the efficacy of these task trails in nature which might have a greater impact on public health. Interestingly enough, none of the studies included any mentions about perceived creativity and creative thinking which indicates a clear gap in the research. This is why the need for more knowledge about nature's and creativity's connection is

evident – especially finding out if there is a positive correlation between creativity-based practices on wellbeing trails and enhanced creativity. It is also worth mentioning that most above-mentioned research is based in Finland. While the perceived benefits of nature environments are recognized worldwide, nature trails with embedded tasks along them might not be that common in the other countries. For example, in Korpela et al.'s (2017) study there was no mention about existing nature task trails in Sweden, France or Luxembourg.

## 2.4 Conceptual framework

In this subchapter, I will focus on explaining the conceptual framework of my study, the theoretical background behind them, why these specific theories and concepts were chosen and how their characteristics will be seen in my research. For the conceptual framework I have chosen these theories that I will utilize when analysing the data: Attention Restoration Theory by Rachel and Steven Kaplan in 1989 and The Four C model by Ronald A. Beghetto and James C. Kaufman in 2009. Additionally, I will define the notions of stress and imagination as a perspective and point of view which offers more understanding about the human-nature relationship and its inherent connection to creativity.

It is vital to again define the concept of stress when talking about human-nature relationship because of its significance.<sup>2</sup> World Health Organization (WHO) has defined stress as a “state of worry or mental tension caused by a difficult situation”. Stress is a natural part of human life, and everyone experiences it, although individual navigation through stressful situation(s) varies a lot. The symptoms of stress are recognizable with feelings such as anxiety, heightened irritability, lack of concentration, and possible somatic symptoms such as

---

<sup>2</sup> Stress reduction theory (abbreviated SRT) is a theory created by Roger Ulrich and it originally stems for Ulrich's study made in 1983 about psycho-evolutionary theory. SRT offers an explanation on how nature exposure is linked directly to reduced stress level, both physiological and psychological and heightened performance from cognitive point of view. Ulrich was interested of investigating stress reducing factors and in his study he came into conclusion that especially stressed people benefit greatly from spending time in nature, although non-stressed people also respond to nature more positively compared to urban areas (Stress reduction theory n.d., 143).

headache or upset stomach. Prolonged stress can strongly affect on your mental and physical health. (Stress 2023.) As stated in the previously mentioned studies and articles (see Berto 2014; Brax 2020), spending time in nature can be a great way to reduce the levels of stress. Ocklenburg's (2023) as well as Sudimac et al.'s study (2022) studies support this argument – time spent in natural environments is linked directly to lesser activity in amygdala, the component of stress-connected part of the human brain (Ocklenburg 2023, 1, Sudimac et al. 2022, 4450).

WHO (2023) mentions walking as a great way for stress management (Stress 2023). As I see it, when spending time in nature, some kind of movement is presumably involved. Being around natural environments such as forests, other green spaces and bodies of water, offers a great chance for physical activity such as walking and overall unwinding (Improving health and wellbeing through nature 2025). This arises an interesting question concerning the health benefits of nature environments: what are the key elements of the nature experience that are beneficial for the individuals when talking about the said benefits of spending time in nature? This was also brought up in Morita et al.'s (2006) study, which argued about the elements of a restorative nature experience.

Attention Restoration Theory (ART) was introduced by Rachel Kaplan and Steven Kaplan in 1989. This theory suggests that spending time in nature or looking at nature impacts on one's concentration skills and mental exhaustion positively. They argue that since nature has certain aesthetic advantage, it offers different restorative effects on people compared to places of worship, for example. (Ohly et al. 2016, Kaplan 1989, 172). ART as a theory is very widely cited, but there is a need for more empirical results in order to support the statements (Ohly et al. 2016). With this argument kept in mind, I find that my research would be a great opportunity to explore more on this theory.

ART was developed originally by Rachel and Stephen Kaplan in 1989. In their book "The experience of nature: a psychological perspective" (1991) they introduced two different types of attention originated from W. James (1892): involuntary attention and directed attention. They explained that involuntary

attention did not demand any struggle to pay attention, and the stimulus has a some sort of interesting quality which captures the individual's attention. Directed attention, on the other hand, did not demand an interesting quality – they explained that directed attention required more attention to stay focused on the stimuli because of its lack of interest. (Kaplan & Kaplan 1991, 179.)

The individuals experience many stimuli daily which may lead to directed attention fatigue, which is the underlying reason for mental fatigue, Kaplan & Kaplan (1991, 180) argued. This may cause higher chances of irritability, making unexpected decisions and these experiences might be quite painful mentally, too (Kaplan & Kaplan 1991, 181). To maintain the direct attention, the individuals need restorative experiences outside the resting hours when they usually sleep (Kaplan & Kaplan 1991, 181). Kaplan and Kaplan (1991) introduced four key elements which are a crucial part of restorative environments – escape, extent, fascination and compatibility (Kaplan & Kaplan, 182–186).

- *Escape* in this context can be seen as getting away from the distractions. It can simply mean as leaving the room without your phone, “putting aside the work one ordinarily does”, or it can be a more subjective experience of pausing and taking a moment for yourself without pursuing something that requires intention, for example. (Kaplan & Kaplan 1991, 183.)
- *Extent* can be viewed as two concepts combined: scope and connectedness. Extent can be perceived as physical or perceptual sense – physical as in seeing the immediate environment in a bigger picture or perceptual as in harnessing the imagination when forming a picture of the world and beyond what one can see. (Kaplan & Kaplan 1991, 184.)
- *Fascination* was described as an important notion when thinking about attention restoration – it allows the mind to keep focus while not really using any direct attention (Kaplan & Kaplan 1991, 184). Fascination and extent can be seen as equally supporting each other, because in fascination, an individual needs a longer-term object of fascination

connected somehow to a bigger scale of picture to sustain longer focus on it (Kaplan & Kaplan 1991, 185).

- Lastly, Kaplan and Kaplan (1991) described *compatibility* as an active ingredient in restorative experiences. Compatibility is being nurtured when the environment's elements and the individual's needs are aligned with each other. For instance, if a person needs to read a difficult text in a library with a room full of talking people, the effectiveness suffers, and the reading demands directed attention. (Kaplan & Kaplan 1991, 185-186.)

When combining all these ingredients together, Kaplan & Kaplan (1991) saw the potential in the natural environment: it has a unique relation to all aforementioned ingredients as well as having an aesthetic element complementing it. (Kaplan & Kaplan 1991, 195.) Nature environments were perceived as places supporting human functioning, productive information handling and most importantly, nurturing the process of recovering from mental weariness. From the standpoint of my study, the aim is to find out and explore how the participants of the wellbeing trail experience nature, wellbeing trail and what are the perceived benefits and the meanings of nature and creativity-based practices for an individual's mental wellbeing and creativity. Are there any parallels between finding the active ingredients behind the nature environments and actually experiencing restoration when going through the aforementioned wellbeing trail? While ART is one of the key concepts used in my study, it is crucial to explore a concept behind creativity and its relation with my research.

The concept of Four-C model was introduced by Ronald A. Beghetto and James C. Kaufman in 2009, while the addition to the pre-existing model, mini-c, was introduced already in 2007 by the same authors. Beghetto's and Kaufman's goal was to elaborate the nature of creativity and explain more in detail the characteristics of creativity such as its relation to health outcomes and "other constructs such as personality and motivation". (Beghetto & Kaufman 2009, 1.)

The main idea of the Four-C model consists of different dimensions of creativity – there are clear distinctions between the great artists and trailblazers in arts field (Big C) and those everyday people who make their own contribution to art (little-c). (Beghetto & Kaufman 2009, 2.) There has been some critique about not having the focus on the intrapersonal side of creativity and the growth mindset in it. Therefore, Beghetto and Kaufman came up with the mini-c concept to broaden the perspective of creativity. (Beghetto & Kaufman 2009, 2.) In my study I am especially interested in seeking more understanding about little-c and mini-c creativity. When spending time in nature environments, does the mini-c way of thinking activate and does it inspire people in creating something artistic or creative. Since the research target group is not specifically artists, I want to keep the emphasis on little-c and mini-c creativity.

When defining little c-creativity, Beghetto & Kaufman (2009) mentioned one of the characteristics of little-c including patience of dealing with uncertainty, as well as risk-taking and temperance. Little-c creativity emphasizes on the fact that anyone can be creative in various environments such as schools and it does not require special talents or some sort of nonconformity to happen. Little-c and mini-c can be seen as quite similar concepts but the emphasis on mini-c is clearly on the internal process of creativity – Beghetto & Kaufman (2009) questioned that where the different interpretations and outlooks of creativity in learning are seen and why they are so overlooked. This is one of the reasons why Beghetto & Kaufman (2009) introduced mini-c creativity. (Beghetto & Kaufman 2009, 3.)

When thinking about creativity, the first thing that comes to my mind personally is a thought of creating something innovative and useful in some way. Beghetto and Kaufman (2007) wanted to expand this way of thinking and argued that mini-c can be just as meaningful as Big-C creativity. While Big-C and little-c creativity are heavily influenced by the judgement of others and their opinion of its originality and fit-for-purpose, mini-c creativity relies on an individual's own introspection and opinions. (Beghetto & Kaufman 2007, 73.) As I see it, The Four C-model is a great concept to explore the definition of creativity. The practices along the wellbeing trail in my study are not only focused on being

present in the moment and grounding, but simultaneously the aim is to explore creativity and creative thinking with the help of the practices. I am specifically interested in learning about mini-c and little-c creativity constructs, and how the participants experience and perceive creativity.

Lastly, it is worthwhile addressing the notion of imagination when having a discourse about creativity. One of the key elements of creative thinking is the ability to imagine something that is not necessarily physically present. The definition of imagination is often associated with creativity, and Gottlieb et al. (2018) argued that there cannot be creativity without imagination. Imagination can be both an internal as well as collective process of thinking and it can happen unintentionally or with intention. Besides the temporal and the social-emotional imagination, there are a plethora of different form of thoughts of imagination such as mind-wandering, perspective-taking and constructive internal reflection, to name a few. (Gottlieb et al. 2018, 2.) In relation to Kaplan & Kaplan's ART, specifically the notion of fascination (1991, 184), I am interested of exploring the mind-wandering as part of an imaginative process.

Gottlieb et al. (2018, 19) explains mind wandering as a process where the attention of being present is shifted to more internal thinking and it generally includes imaginative thoughts. The same attributes can be found in ART (1991). When the mind does not have to use direct attention towards something, there is a possibility to let your mind rest and do some introspection. (Kaplan & Kaplan 1991, 193.) From my standpoint, when the mind rests in natural settings, there is more room and capacity for active usage of imagination, which leads to creative thinking, which might then lead to creating something novel. While this thought process of creativity, wellbeing and spending time in nature is well explained and rationalized, one must keep in mind that creativity and imaginative thoughts are unique and therefore they work in different ways for each individual, as well as one might not find any inspiration from nature in terms of their creativity and imagination. I am curious to learn more about the attributes in nature which might activate imagination and creativity as well as how does the visitors of my

wellbeing trail perceive creativity and wellbeing. It also interests me to explore the possible connections or parallels with aforementioned notions.

### **3 Implementation of the study**

In this chapter I will describe the research task and question and the implementation of the study. I will also present the methodological starting points for this research, as well as elaboration on the data collection process. Description of the created wellbeing trail practices and the data analysis will conclude this chapter.

#### **3.1 Research task and question**

The purpose of this master's thesis is to expand existing understanding about the restorative benefits of nature environments on wellbeing and creativity-based practices on nature trails. The aim is to explore the experiences from the participants who visited the wellbeing trail and learn more about their perceptions on nature, wellbeing and creativity. The study aims to broaden the knowledge on how nature and especially wellbeing and creativity-based practices effect on an individual's mental wellbeing and creativity. While there is evidence on nature's and creativity's connection as well as positive correlations between them, my aim is to produce more knowledge for this area and broaden the knowledge in the Finnish context. This study is focused on one recreational area in Helsinki metropolitan area in Finland and the participants are the visitors of the wellbeing trail created for study purposes.

The research question for this study is: In what ways creativity-based practices in nature environment can foster mental wellbeing and creativity?

#### **3.2 Methodological starting points**

This is an empirical, qualitative research with an interpretive-constructivist paradigm, which focuses on understanding an individual's perceptions and interactions in relation to the research (Leavy 2017, 129). The main school of thought for this research is phenomenology. The aim of my study is to form more understanding based on the data analysis on how spending time in nature,

conducting creativity-based practices specifically in nature environments supports mental wellbeing and enhance creativity as well as what kind of meanings and perceptions the participants of the study give to nature, wellbeing and creativity in general. Qualitative research is needed when the aim is to understand people's subjective experiences and meanings they give to different aspects in their lives, such as activities, objects or situations (Leavy 2018, 124). The purpose of qualitative study is to give the voice to the individuals that can elaborately explain their experiences as they live them and doing introspection simultaneously, instead of evaluating one's performance based on the quantitative elements. (Lapan et al. 2023, historical roots of qualitative research.) Additionally, Merriam (2016) added that the roots of qualitative research lie in its belief of knowledge construction. As the individuals give constantly meanings or immerse themselves in phenomena, activities or experiences, the knowledge is built constantly. (Merriam 2016, Basic Qualitative Research.)

Interpretive paradigm focuses on the participant's point of view, their beliefs as well as understandings about the phenomena and the participants are the active ingredients of meaning making in the research (Schensul 2023, Guiding paradigms). This can be also referred as emic perspective. Interpretive paradigm understands the complexity of reality and how it is indeed socially constructed. There are a variety of different contexts for every individual in their respective worlds, affected by social, cultural, personal and historical aspects. Hennink (2020) raised a valid question about contexts – can the individuals be stripped away from their lived contexts, and in that way be studied more objectively? It differs clearly from the positivist paradigm, which is believed to measure the data from a more objective point of view, which is based on “objective measurement of social issues” Lastly, within interpretive paradigm researchers understand value and recognize the multitude of perspectives of realities. (Hennink 2020, 15.)

Phenomenology as a school of thought has originated from the 20<sup>th</sup> century by Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty and Alfred Schutz. The phenomenologists' aim is to seek understanding about consciousness and how it is “experienced” by the individuals and especially in what ways the

individuals form an understanding about social reality. Phenomenologists rely strongly on using “interview and ethnographic methods” in their research. That said, phenomenology is commonly used as a school of thought within the interpretive paradigm. (Leavy 2018, 129.)

One of the characteristics in qualitative research is the ability for reflexivity. Researcher must be able to recognize how they are positioned in terms of their research and how the personal background and the lived experiences might affect how the researcher interprets the data and ultimately, to what direction the researcher might take the study. (Creswell 2014, 186.) Therefore, it is important to mention that the idea for this research stems from my background as a frequent visitor in nature and thorough enjoyer of green and blue spaces. I chose this specific topic for my research because I am interested in learning more about utilizing green spaces both as an oasis as well as a learning environment for creative thinking. Keeping this in mind, my aim is to find out how can creativity-based practices done in nature environments foster both creativity and mental wellbeing.

### 3.3 Data collection

As part of the data collection, I created a wellbeing trail as a part of a recreational area in Helsinki metropolitan area for six weeks. The trail consisted of creative, wellbeing related tasks and a e-form-questionnaire related to the trail experience. The purpose of the wellbeing trail was to support the mental wellbeing of visitors in a recreational area and offer them a possibility to enhance their creativity with the help of set of questions that were related to mental health, grounding, creativity and being present in the moment. My aim was to utilize the nature aspect fully with intertwining the questions to have a dialogue with the surrounding nature. The aim was to bring up valuable information about the restorative benefits of nature environment and collect experiences of visitors about their thoughts and feelings concerning nature, the task points, mental wellbeing and creativity.

The participants of this study were the visitors of an existing nature trail in Helsinki metropolitan area. The initial discussions about recruiting visitors started in February 2025 in collaboration with Helsingin Latu, which is the local chapter of Suomen Latu-association, focusing on organizing different activities in nature environments (Helsingin Latu & Polku n.d.). They agreed on helping to advertise this wellbeing trail in their newsletter and social media outlets such as Instagram. Additionally, the advertisements were sent to different regional groups in Facebook in Helsinki metropolitan area as well as utilizing my personal contacts and spreading the advertisements in different conversational groups. The wellbeing trail was set on 4 May 2025 and it was removed on 15 June 2025, lasting altogether six weeks. The participants carried out seven creativity-based practices that were set along an existing nature trail. Every sign included a qr-code, which opened to Metropolia UAS's official online questionnaire service. The online questionnaire included the introduction and detailed explanation of the study, the contact information of the researcher, the information where the ready study will be published, and five open-ended questions and two Likert-scale questions.

The themes of the survey questions were about participants' experiences on the wellbeing trail and its effect on their overall mood, what kind of meanings nature has in terms of participant's mental wellbeing and creativity and how these creativity-based practices support their creativity and mental wellbeing. Ideally, the participants would have read and implemented all the practices, and they would answer the questions after conducting all the practices. Since the trail could be entered from many different locations, the qr-codes were therefore visible in every practice sheet.

### *Creative practices on the trail*

The wellbeing trail consisted of seven different practices. The inspiration behind the practices was theory-based (Kaplan & Kaplan 1991) as well as using my personal knowledge about how to support mental wellbeing with different aspects. I created the practices keeping in mind that the surrounding nature

would be in a main role to have a more immersive experience. The aim was to create an opportunity for the participants to have a dialogue with the nature and by that, have the effects from the standpoint of mental wellbeing and creativity. The practices were created during spring 2025. The pictures below in this subchapter demonstrates the practice signs' location and the surrounding environment.



Picture 1. Practise sign number 1 and the surrounding area.

1. Take ten deep breaths in and out and try to relax your body. Tense your whole body for a few seconds and then release. How does your body feel today? What does your surroundings look like right now? Enjoy the fresh air and explore the trail at your own pace.

2. Stop for a moment and let your eyes rest on the landscape. What kind of details do you notice? What colors do you see around you? What sounds do you hear? Which smells do you recognize?



Picture 2. Practise sign number 3 and the surrounding area.

3. Choose one element around you to focus on, e.g. a tree, a rock, the roots of a tree. What kind of patterns can you see on that element? What does it remind you of? Let your imagination guide you in this exercise.



Picture 3. Practise sign number 4 and the surrounding area during a sunset.

4. Place your feet firmly on the ground and start stretching your body the way you want. Finally, walk on the ground and feel a rock/tree/moss. How does it feel under your hand? Focus on that sensation for a while.
5. Sit down on a bench and close your eyes for a while, while breathing calmly in and out. Listen to the forest soundscape - What kind of sounds do you detect? Write a short story about the soundscape in your phone notebook.
6. Look around you. Can you find something in the environment that speaks to you today? Find a detail and write down what comes to mind about that

detail. Your thoughts can come in a stream or in the form of a poem, for example. Only the sky is the limit.

7. Pause for a moment and reflect on your day and how you're feeling right now. What has been the best part or moment of your day? How do you feel after spending time in nature? Write down your thoughts. Hopefully, these reflections will bring you back to nature again soon.

The questions that were formulated for the questionnaire can be seen here. The Finnish version of the questionnaire can be seen in the appendices.

1. How did you find your way to this path?
2. How much time do you spend in nature?
3. Would you recommend this trail for your friend? (Likert-scale)
4. Have you previously visited similar kind of wellbeing trail elsewhere in Finland?
5. What did you think about the tasks of this wellbeing path? Anything in particular that stood out for you? What didn't you like?
6. Which of the following tasks you completed on the path? (Choose 1-7)

### **Questions about nature, mental wellbeing and creativity**

1. How would you describe your experience on the wellbeing trail today?
2. How would you describe the importance of nature in supporting your mental wellbeing?
3. What kind of meaning does nature hold for your creativity?

4. In what ways do nature-based practices support your creativity and mental wellbeing?

### 3.4 Data analysis

For this research I did thematic analysis, and I used in-vivo coding as my data analyzation approach. I chose in vivo-coding since I would like this study to have the participant's thoughts to be portrayed as they are and not lose anything in translation when going through the participants' answers. I wanted to find out if there are reoccurring themes and descriptions of feelings that can be later categorized, which will define the possible similarities of participant's experiences. Qualitative data analysis is used when the aim is to understand deeper the non-numerical data that was identified. The goal is to clarify the unsaid things reoccurring in the data: the hidden meanings, the themes and the patterns that helps the researcher to better understand the phenomena behind the answers. (Steward 2025, What is qualitative analysis?.) Thematic analysis offers a flexible, yet coherent way to approach the data by "identifying, analysing, and reporting patterns or themes within a dataset" (Ahmed et al. 2025, 1).

It is vital to get acquainted with the existing data in order for the initial coding process to begin (Ahmed et al. 2025, 2). Coding helps the researcher to develop segments out of the data by using frequently occurring phrases or words (Leavy 2018, 151). For my research the best way to analyze the data was to use in-vivo coding, since my goal was to learn more and find meanings in respondent's answers in terms of the significancy of nature from a mental health- and creativity-point of view. In vivo-coding allows the researcher to develop the codes organically and using the exact language which is seen in the data. This helps the researcher capture the essential expressions, words and phrases occurring in the data. (Leavy 2018, 151.)

In my study I had 14 printed pages of data and altogether 32 respondents participated in my study. After the first round of coding, I identified up to 173 different codes. I started the coding process by printing all the respondent's

answers and underlining words and phrases. After underlining them, I opened the data on Microsoft Word and pasted the same codes into a different file, which allowed me to create different color codes for the words and phrases. I did some field notes and tried to understand the meanings behind the codes. At this point I managed to find five different larger categories, which included 13–25 codes per category. Initially before thinking about my research question, I tried to recognise reoccurring themes or words that came up in multiple answers. After finding those codes, I started to process the data with the original research question in my mind.

Ultimately, I was able to formulate three different themes based on the coding. The themes can be found in a table shown below. The aim of this table is to present the themes in a comprehensive form to get a better understanding of the meanings behind the themes.

Themes	Categories	Example quotes	Example codes
<b>The grounding and calming effect of nature</b>	The feeling of ease and peace of mind as well as calmness when being in nature, sense of healing and rejuvenation after spending time in the nature.	P14: <i>“Hugging a tree or touching it feels very comforting and restoring to me”</i> , P16: <i>“The time spent in nature gives space for pondering and grounding”</i> , R20: <i>“The wellbeing trail brought relaxed energy”</i> , R27: <i>“Nature gives me inner peace”</i> , R32: <i>“In nature your brain gets to rest”</i> .	Mindfulness, calming and grounding nicely, peace of mind, stay away a while from the life pressure, relaxed, walking in nearby nature relaxes the mind, tranquil, slowing down.
<b>The aesthetics and finding joy in sensory experiences</b>	With the help of practices the ability to pay attention to details and the diversity of your surrounding area, using the senses to enjoy the nature.	R4: <i>“(The wellbeing trail)...captivated your attention to the diversity and beauty of nature”</i> , R9: <i>“The mind feels refreshed when you look at the small details in nature”</i> , R15: <i>“The surrounding soundscape and the views calms you down when you focus on them”</i> , R20: <i>“I was happy to see a woodpecker drumming nearby, otherwise I would have not noticed it”</i>	The sound of birds, warmth of sunshine, forest scents and sounds, looking at the small details, collecting wildflowers, soundscapes, views, beautiful details, imagination trip, visual observation
<b>Nature as a catalyst for new ideas and creative inspiration</b>	The space created by the surroundings to think more creatively, developing new thoughts and ideas, new perspectives	P6: <i>“Being in nature helps me to stay away a while from the life pressure and nature is like a surprising box that I know I would find something interesting from”</i> , P12: <i>“The best ideas or solutions are born on a jogging path. Especially in situations, when one is so relaxed that the train of thought is just flowing effortlessly”</i>	Implementing new ideas, inspiration, stimulation of creativity on random base, thought processing, focusing on details and on the breath, space for new ideas, broader and versatile point of view, space for creativity

Table 1. The main themes of the data analysis.

### 3.5 Research ethics

In this research I followed carefully the official guidelines of Metropolia University of Applied Sciences as well as the guidelines by the Finnish National Board of Research Integrity, known as TENK (2019, 2023). I did not collect any personal data of the participants such as name, age, sex or health conditions. An approval to implement my thesis from my official thesis supervisor was given. Prior to this, an official research plan was conducted, stating clearly the plan of implementing this study.

In this research I ensured that all the literature used in the literature review was scored in JUFO-portal, which is a service providing information for example on scientific publications. Additionally, it also contains a classification system which helps researchers identify the quality of the published pieces. I made sure that all the articles used were classified at least on level 1, which is the basic level classification. However, the majority of the publications were scored as level 2 or 3. Level 2 represented leading level pieces and level 3 is considered as the top level Publication Forum category. (JUFO portal n.d.) Referencing is done accordingly and carefully, always respecting the researcher(s) and their previous extensive work (TENK 2023, 14). The main principles guiding this research were based on “reliability, honesty, respect and accountability” (TENK 2023, 11).

Since this wellbeing trail was implemented in an area owned by the city of Helsinki, I filed an official application to hang the practice signs. I applied for the permit in March 2025 and got the acceptance in April 2025. The permit was applicable from 4 May 2025 until 15 June 2025. The signs were hanged in a most environmentally friendly way and they were hanged in such places that could have not caused any damage to the surrounding nature. After the official wellbeing trail was finished, the signs were collected while simultaneously ensuring that they shall leave no trace to the nature.

I collected answers from the respondents that participated to the wellbeing trail and left their answers through the official Metropolia UAS online questionnaire. Online questionnaire was the only available platform that was safe to store the collected information. The made questionnaire included the participation info sheet both in Finnish and in English (see Appendix 1, 2). As TENK (2019, 9) stated, “the participants have the right to participate voluntarily but also refuse to participate”. This was stated in the e-form questionnaire clearly as well as in the participation info sheet.

While no personal data was collected, I carefully followed the guidelines of TENK (2019) when handling the data. The data was stored both in a hard drive under supervision and behind password-protected services such as the Metropolia

UAS' e-form website and my own computer. The collected answers that were used in this research as example quotes, were not edited nor beautified, and all of them were anonymized by using nicknames such as R1, R2 and so forth.

To be transparent in my research, there was a participant information sheet attached to the e-form questionnaire to explain the further details about the research and its ethical considerations. Each participant had the opportunity to decide whether they want to answer the questions about the practices, and it was completely voluntary to participate in the study even though the participant would have done all the practices. The participants remained anonymous, and no personal data was collected in this research.

## 4 Findings

In this chapter, I present the findings of this research. The subchapters are based on the three categories that were discovered during the analysis phase. To provide evidence on the perspectives that were found in the data analysis, each subchapter will include direct quotes from the respondents of this study. Since the respondents of the study were able to answer both in Finnish and in English, all the quotations written in Finnish have been translated to English. The subchapters will include tables and pictures from the wellbeing trail to create a more comprehensive understanding of the findings. The research question is: In what ways creativity-based practices in nature environment can support mental wellbeing and enhance creativity? Figure 1 shown below presents the three main themes based on the findings.

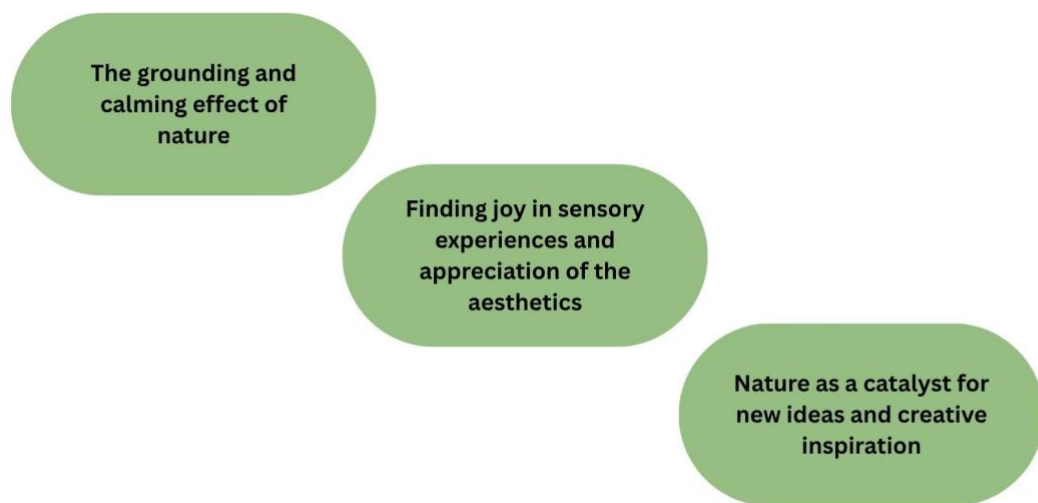


Figure 1. The three themes based on the findings.

## 4.1 The grounding and calming effect of nature

It was found in the data analysis that 24 of the 32 respondents were able to recognize the grounding and calming effects of nature. The analysis brought up the respondents' urge to get out of the hectic city environment and rewind in the nature environment. Respondent R6 described that "being in nature helps me to stay away from the life pressure". Respondent R12 added that "...stress and feeling of rush stays in the forest trails. The nature calms and lifts the mood". It seems that the respondents enjoy spending time in nature due to its possibility to experience tranquility. The answers rising from the data compliments the notions of Ulrich's Stress reduction theory (Stress reduction theory n.d.,143) as well as Kaplan and Kaplan's Attention Restoration Theory (1989, 1991). Ulrich (Stress reduction theory n.d.,143) states that time spent in nature benefits greatly people who are experiencing stress. However, he saw the potential benefits occurring also for non-stressed people, when comparing to urban areas in general. (Stress reduction theory n.d.,143.) Kaplan and Kaplan (1991, 175) argued that no matter the life situation, the individuals can look for restoration and comfort from the nature. Respondent R17 shared their insight: "I gravitate towards the nature to recover from stress."

Kaplan and Kaplan (1991, 180) pointed out that directed attention fatigue is one of the reasons people might experience mental fatigue. There are stimuli in daily life which affect the individuals. When being in nature, the individuals can experience what Kaplan and Kaplan (1991) described as "escape" as one of the ingredients of a restorative environment. In this context, escape means taking a moment for yourself and stepping away from the other distractions. There are three aspects of escape: one being escaping physically away from "the noise, crowds or routine", second one meaning getting away from the usual work one does, and the third one is experiencing a form of rest and relaxation from the mental load. (Kaplan & Kaplan 1991, 183.) Some of the practices of the wellbeing trail were constructed in a way that the participant had a possibility to write their insights to their notes-application on their phones. Respondent R27 pointed out that "taking out the phone took away a little bit of the peace of mind I longed for."

This reflection brings up an interesting perspective on phone usage and technology. On the other hand, many of the respondents stated that they enjoyed the practices on the trail, but some brought up the fact that it was distracting their experience of enjoying the nature. One could assume that when in nature, the goal is to enjoy your surroundings without any other distractions, which I assume many of the respondents thought about. As respondent R18 stated: “[the wellbeing trail] offered a relaxing moment in otherwise a scheduled and a hectic day”.

The quotes from the data can be associated additionally with World Health Organization’s notion of stress and especially the ways of how to cope with the feeling of stress. It was mentioned that walking is a great way to manage stress and especially in green or blue spaces (Stress 2023; Improving health and wellbeing through nature 2025). One of the elements of my wellbeing trail inherently included walking in a nature environment as a part of conducting the practices on the trail. Respondent R30 elaborated: “The experience was grounding and relaxing. As a person living in Helsinki, these effects were really much needed, since the hustle and bustle of the city needs the balance of nature experiences.”

The respondent explained that living in the city might take a toll on you and this is why they enjoyed the nature experience. As Kaplan and Kaplan (1991) stated, the aspect of urbanization, industrialization as well as the growth in population are all factors that affect on the stress levels as well as the ability to experience directed attention. The individuals have more struggles to find the persistence on such tasks that demand this kind of attention. (Kaplan & Kaplan 1991, 172, 182.) Respondent R28 explained that “the practices support (me) strongly, offering a space for grounding and stabilizing the state of alertness”. This is why the need for green spaces is evident and it can have longitudinal positive effects on your mental health (see Alcock 2014). As respondent R29 stated: “Nature helps me to relax and be free, processing emotions is easier, and thoughts have more space. In nature I feel like I can return to a so-called normal state, to a balance.”

The respondent explained how nature indeed serves many purposes in their lives: On one hand, the tranquillity of the environment helps them to relax and enjoy the feeling of freedom and on the other hand, it also helps them to ponder on their emotions and why they feel a certain way. One could imagine that many people in general seek out comfort from the nature due to its calm and restoring factors. As seen in the picture below, nature environments can indeed bring calmness and tranquillity to one's mind.



Picture 4. The surrounding area on the wellbeing trail.

## 4.2 Finding joy in sensory experiences and appreciation of the aesthetics

Out of 32 respondents, it was possible to identify 15 answers that share the similarities of finding joy in sensory experiences and the common factor of finding appreciation in the aesthetic dimension of nature. The respondents brought out feelings of joyfulness, higher alertiveness towards your surroundings, and feeling of respect towards the nature, to name a few. Respondent R17 explained how they enjoyed listening to the environment. Respondent R19 elaborated their thoughts: “[the wellbeing trail] helped me to see and listen to the forest in a new way and pay attention to the details.”

Again, this quotation can be linked to ART (Kaplan & Kaplan 1991) and more specifically the elements of fascination and extent. The respondent R19 described how the practices on the wellbeing trail helped them to see the forest in a new light and bring closer attention to details, which compliments the aforementioned notions. Fascination as an element helps people experiencing nature be interested in their surroundings but still have the capability to be attentive without additional burden (Kaplan & Kaplan 1991, 184). Extent, as Kaplan and Kaplan (1991) argued, is a state of mind which requires a feeling of “interrelatedness”: the feeling that some elements in the surrounding environment create something bigger together. While extent can be experienced both by avid nature visitors and the more inexperienced ones, they both share common factors – building new narratives of one’s surroundings. (Kaplan & Kaplan 1991, 190.)

Fascination and extent are usually connected with each other when reviewing the elements of a restorative environment. While the participant can form a perceptual imaginary of their surrounding environment, for it to be restorative, there needs to be fascination towards the environment. The mind is focused on something but is not really struggling when doing so. (Kaplan & Kaplan 1991, 184-185.) This might create a right place for the participants to appreciate and be thankful of the surrounding environment and focus on the smaller details. When the mind is not occupied with mindful tasks such as work, the element of escape

can be recognized (Kaplan & Kaplan 1991, 183). Respondent R29 continued with a similar kind of thought: "I especially enjoyed visual observation of the nature."

Many respondents appreciated that there was a possibility for them to visually enjoy the nature environment with intention. I am assuming that observing nature with intention is not something that some of the respondents do on a regular basis or have not done in a while, based on the received answers. Respondent R18 said that they particularly enjoyed a practice where the task was to listen to your environment eyes closed and respondent R23 mentioned how nice it was to focus on the moment and find the beautiful details from the nature. Kaplan & Kaplan (1991) would see these quotes having commonalities with the element of fascination and more precisely, soft fascination. The meaning behind soft fascination is dependent on the environment. If nature environment has elements that draws attention and even captivates, it can be seen as soft fascination. (Kaplan & Kaplan 1991, 192.) In the picture seen below, it is demonstrated how the leaves of aspen are rustling in the wind. The swish sound which emerges from the aspen leaves has its own term in Finnish language called "havina".



Picture 5. The leaves of aspen rustling in the evening sun in June.

Respondent R20 shared their insight: “It was good to pause with the guidance. I was happy to see a woodpecker pecking nearby, I would have not noticed it otherwise.” The respondent realized that without the practices, they would have not been able to pay attention necessarily to the woodpecker pecking next to them. The respondent recognized a feeling of happiness when experiencing this. Kaplan and Kaplan (1991, 192) stated that the feeling of soft fascination inherently included pleasure in addition to actual fascination. In addition to forest scenery that was present in the wellbeing trail, things such as cloud formations, leaves rustling in the wind or for example a sunset can evoke the feeling of soft fascination – it allows a person experiencing it to ruminate when seeing above mentioned things. (Kaplan & Kaplan 1991, 192.)

### 4.3 Nature as a catalyst for new ideas and creative inspiration

The data emerging from the questionnaire responses indicated that 15 respondents had a possibility to reflect on new ideas and additionally, find some creative inspiration during the visit on the wellbeing trail. The analysis brought up a variety of emotions related to nature and the practices on the wellbeing trail. One of the biggest things that appeared from the respondent's answers was the ability to form new ideas when they are in the nature. Respondent R7 described how the thought processing is better in nature and respondent R15 continued that the practices helped them to take the thought away from work and focus on the environment. They also continued and described how during a walk in a nature environment they occasionally get good ideas. It is worth mentioning that most of the respondents did not describe further what kind of meanings "new ideas" holds for them and how they utilize these ideas in their everyday lives. However, respondent R23 brought their insight: "The sounds of nature take me on an imagination journey, the rustle of the trees sounds like the waves in the ocean and different hues of colors help me in my own colouring picture project. " Similar thoughts were expressed in respondent R30's insight: "The nature adds more inspiration and brings up new perspectives. One could observe nature endlessly; in between the practices on the nature trail I stopped to observe the details of a June forest."

In both quotations there are visible similarities – both respondents identified the joy of finding creative inspiration. Respondent R23 further explained how the different aspects in nature inspire them in their own arts-based project. This quote can be linked to the concept of creativity and especially the Four C-model by Beghetto and Kaufman (2009). The concept of mini-c can be overlooked easily, since it focuses on the intrapersonal side of creativity. Respondent R17 elaborated on their experiences on everyday creativity in their answer: "I like the fact that I see so called smart decisions in the nature. For instance, yellow chanterelles in symbiosis with birch, whose yellow leaves looked "planned". This impacts on décor solutions, among other things. "

When being in the nature, respondent R17 pointed out that they enjoy seeing smart decisions in nature, which impacts on their décor choices. It captures greatly the spirit of mini-c creativity as well as little-c, regardless of if the décor choices were actually made. Creativity can be perceived from this perspective as well – the aim is to create more understanding in what ways creativity-based practices can make an impact on creative thinking and imagination, for example. Mini-c creativity as Beghetto and Kaufman (2009) explained it, is the creative process that happens internally. Complementing the notion of mini-c, the little-c creativity symbolizes on the other hand the everyday creativity that can be very versatile and does not require any special talents to make it happen. (Beghetto & Kaufman 2007, 73; 2009, 3.)

When thinking about the notion of imagination and the different aspects it holds, it is worth mentioning that only few of the respondents identified the mind-wandering process happening during their visit on the wellbeing trail. Notably, many of the respondents did mention that during the visit on the wellbeing trail they recognized the feeling of having new ideas after the practices. The practices were constructed in that manner, which would hopefully inspire visitors to wander, and get inspired. Respondent R29 shared their insights about the wellbeing trail and about nature in terms of their creativity: “[The nature] helps me to think in a broader way as well as from seeing things from different perspectives. It can evoke new ideas and thoughts. Freeing the thought process creates space and makes me feel relaxed and safe. It also helps me to be more creative.”

In respondent’s R29 insight, one can identify that to have a creative mindset, one must experience the feeling of relaxation. Respondent R33 described also how nature provides them peace, which supports their inspiration. That being said, creativity and a relaxed state of mind might go quite well hand in hand. This would create an interesting connection between the Four C-model, imagination as a part of creative thinking and ART. For an individual to feel creatively inspired, they might need a way to feel relaxed at first. Nature environments could offer a great opportunity for that.

## 5 Conclusions and discussion

In this last chapter of this thesis, I will summarize the findings and present the conclusions based on the findings. I will examine the trustworthiness of this study, as well as suggest some topics and themes that might be worth studying in the future in terms of this theme. This research was made to explore the experiences of the visitors of the wellbeing trail created for this thesis' purposes and how creativity-based practices in nature could support mental wellbeing and enhance creativity. My research question was: In what ways creativity-based practices in nature environment could support mental wellbeing and enhance creativity?

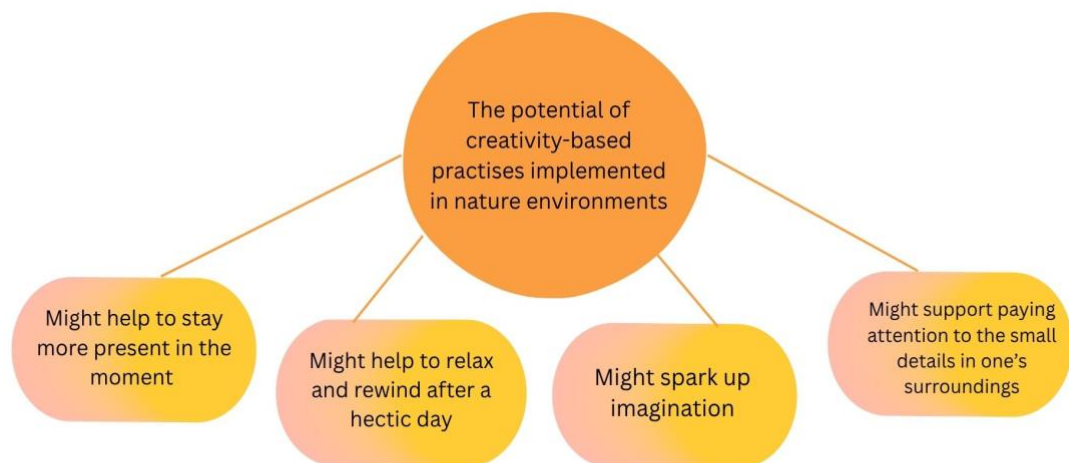


Figure 2. The key findings.

The key findings of this study showed that creativity-based practices implemented in nature environments have a great potential in helping the individuals to stay more present in the moment and offer them a possibility to rewind after a full day. Additionally, the creativity-based practices helped the participants to pay attention to the small details in nature and boost their imaginary skills.

The individuals have an urge to shift their focus away from the everyday life struggles and find alternate ways to decompress in fast-paced reality. Creativity-based practices could be utilized easily and in diverse ways in nature environments. Creativity-based practices in nature could be a viable solution for relieving stress and further studies should be done, how to incorporate creative methods in nature to get a broader understanding of its potential. It is evident that the results are aligned with many previously made studies in terms of supporting mental wellbeing (see Bielinis et al. 2018; Park et al. 2009; Tsugunetsu et al. 2013). The majority of the respondents of my study acknowledged the importance of nature for their wellbeing. Tsunetsugu et al. (2013) mentioned how their study's analysis supported the hypothesis of positive psychological effects when spending time in forestry especially from a viewpoint of relaxation (Tsunetsugu et al. 2013, 93). This was also proven in Pichlerová's et al.'s (2023) study.

While the nature environment as well as the creativity-based practices were proven to be good for the individuals based on the findings of my research, the impact of the practices on respondent's creativity was not as clear as wished in my study. It made me think about the questionnaire and how the questions were formulated. In hindsight, I would have added or changed a few questions to get more specific answers. I would have concentrated more on trying to formulate thoughtful questions about the respondents' views on creativity, how they express their creativity and what elements specifically in nature grabs their attention. Although the answers of the respondents were interesting and insightful, with formulating more in-depth questions I might have been able to receive more detailed answers. It would have been particularly interesting how the participants perceived everyday creativity from the standpoint of the Four C model by Kaufman and Beghetto (2009). Therefore, the notion of creativity and its connection with nature should be studied more. It would help to create a more robust understanding of the phenomenon when considering creativity-based practices as an option in supporting an individual's wellbeing.

The findings are aligned with previously made research on similar topics, where spending time in nature helped the individuals to feel more feelings of calmness,

reducing fatigue and enhancing the feeling of restoration and supporting emotional wellbeing (see Bielinis et al. 2018; Park et al. 2009; Tsugunetsu et al. 2013). While it is possible to get the benefits from spending time in nature without any additional practices, it was enlightening to see how positively the respondents reacted to the practices.

The notion of mental wellbeing is represented thoroughly within the findings. Creativity-based practices in nature environments helped the participants to slow down and pay more attention to their surroundings. The practices made the participants appreciate the small details in the environment that might have been left unseen if they were not being mindful during their stroll. Additionally, the practices helped to spark up one's imagination when being surrounded by different patterns, colors, hearing sounds and being overall receptive with your senses. Most of the respondents reported that they gained overall good experiences from visiting the trail.

Despite the small deficiency of creativity-aspect in the findings, the findings were aligned with the previously made research: as reported in Plambech and van den Bosch's study (2015), the respondents in my study recognized how nature stimuli impacted on their creativity and especially the elements such as "Serene", "Nature" and "Space" could be identified in the findings. The perceived sensory dimensions "Serene" and "Space" included features such as the feeling of peace and quietness, whereas "Nature" was perceived as curiosity and exploration. The perceived sensory dimensions were based on a study conducted by Patrik Grahn and Ulrika A. Stigdotter in 2010, where they were able to determine perceived sensory dimensions which defined the ways one could perceive green spaces. (Plambech & Konijnendijk van den Bosch 2015.)

There was a clear pattern seen in the findings. It was the inescapable connection between the discourse about the nature as an entity and the practices on the wellbeing trail. The respondents brought up in the results how being in nature in general had a direct effect on their wellbeing. While it is unavoidable to speak about these notions since they are collectively connected due to practices'

location in nature, this wakes up a question were the practices immaterial compared to simply being in nature and being present in one's surroundings. There is research made on the health benefits of spending time in nature (see Bielinis et al. 2018; Park et al. 2009), but there could be more studies made about how especially creativity-based practices in nature environments might affect on the wellbeing of the individuals. While it is necessary to think also critically about the true impact of the practices, there were also clearly satisfied visitors on the trail who gained the benefits from the practices. From that standpoint, it made a positive impact on their mental wellbeing and affected on their creative thinking.

While many of the findings emerged from the data analysis were relatively positive, the practices brought to surface a few critical perspectives. One of them was the accessibility of the wellbeing trail. One of the respondents brought up the fact that "the trail was not fully manageable to walk with prams". Indeed, this acknowledgement raised more questions about how to provide more accessible nature experiences for everyone and how to ensure that. The wellbeing trail was constructed to an already existing nature trail in Helsinki metropolitan area, and it would have been difficult, if not impossible to modify this trail in this area. There were certain limitations to it, due to its nature protection aspects affecting on the area. I found it easier to create my own trail to a place that is already known and which had existing walkable paths throughout the trail. The trail's terrain was versatile: it had flat and wide gravel roads as well as narrower small paths leading to a rocky and a bit steep terrain.

While my intention was to create a trail on to that existing nature trail, it is evident that there should be trails which would take accessibility into thorough consideration. Luckily in Finland there are many accessible nature trails maintained by Metsähallitus, which is a "state-owned enterprise that produces environmental services for a diverse customer base ranging from the private individuals to major companies" (Metsähallitus in brief n.d.). The trails are easy to walk and they are suitable for people using assistive devices or prams, for example. The trails are usually man-made, and the path itself does not include any obstacles that might interfere with the journey such as soft terrains, potholes

or root balls. (Esteettömyys luontokohteilla 2025.) It would be interesting to learn the actual amount of accessible wellbeing trails in Finland and how well accessibility in nature is taken into consideration in other countries in Europe.

The second critical perspective was related to the usage of phone during a couple of practices. The reason for the phone usage was the fact that I did not want to assume that the participants of the wellbeing trail carried a pen and a piece of paper with them to write their thoughts down. I assumed that the participants would carry their phones with them since the accessibility to the questionnaire was only available through qr-code. Few respondents pointed out that the usage of their phones to write down the notes distracted them on the trail. As they saw it, it would have been more intentional to keep the trail as a “phone-free” experience. These thoughts are indeed valid and made me think of alternative ways to implement the aforementioned practices. Did it add more value or depth to the practice that the participants wrote down their thoughts? On the other hand, one of the practices included storytelling, in which the aim was to strengthen one’s imagination. It might have been more challenging without writing the thoughts down.

The aspect of writing one’s thoughts raised some more critical questions in my mind. Would the practice have been impactful despite the fact that one’s thoughts were not written out? Not all respondents did all the practices on the wellbeing trail, which was identified during the data analysis phase. There were presumably other people as well who did not do these practices in a way that they were presented. This brings a valuable view about the wellbeing trails – when the individuals are visiting similar kinds of wellbeing trails elsewhere, the main expectations might not be related to writing down thoughts that occur to one’s mind or doing all the practices that are on the trail. On the contrary, it might be somewhat refreshing to empty your head from the internal thought processing and focus on the things that are in front of you, as argued in Attention Restoration theory as well (see Kaplan & Kaplan 1991).

All practices might not resonate with the person on the trail. When doing practices for a larger crowd, it is inescapable that some practices won't be as interesting as others. The individuals have the opportunity to choose freely which practices to conduct and which ones to pass. Additionally, in relation to the phone aspect, it would have been interesting to know whether there would have been more responses if the questionnaire would have been also available in a traditional paper form. Some might feel uninterested in filling out an online questionnaire on their phones because they don't want to take out their phones during their outdoor walk. Nevertheless, considering the time limit and the available resources, I was content with my decision and grateful for all respondent's answers.

Good research is transparent and needs thorough assessment in terms of its credibility and trustworthiness. Leavy (2018) states that in good research it must be clear to the readers why certain things were done and why the researcher chose certain methods for their research. (Leavy 2018, 154.) There are multiple ways to assess the credibility of the research, and Leavy (2018) points out especially the vividness and the transferability of the research (Leavy 2018, 155). Throughout this thesis writing process I have been trying to be as transparent as possible and justify my decisions in the best way possible. Given the fact that this was my first time doing a study on this scale with no prior experience on gathering data and coding it, it went better than expected. Simultaneously I do recognize my own limitations of knowledge and will gladly learn more in future if doing more research. One of the things that I would have done differently in hindsight would be having face to face interviews with the participants of the wellbeing trail. I had a strict time limit to conduct the study and unfortunately with my resources it would have been a lot more difficult to arrange in-person interviews.

When writing the findings, it was interesting to notice how much I thought about making assumptions and how it even brought up feelings of anxiety. How can I make sure that I present the findings in a most clear and comprehensible way? Qualitative validity is imperative for the study. The researcher has to use certain procedures, such as triangulation, to check the exactness of the findings (Creswell 2014, 201). Creswell (2014) argued that it would be good to use

multiple approaches to ensure evaluating the validity of the findings as a researcher and from the reader's perspective, too. (Creswell 2014, 201.) As for this research, I made sure that I used versatile references when writing the literature review as well combining different theories to create a fit-for-purpose conceptual framework. Additionally, versatile references helped me to formulate suitable questions for my questionnaire. Triangulation can add validity of the study: the purpose is to check out the sources of information and see if they can "build a coherent justification for themes" (Creswell 2014, 201). Creswell et al. (2021) added that triangulation is a fairly easy method to help strengthen the validity of the research (Creswell et al. 2021, 203).

When doing the data analysis, I tried to be as thorough as possible in terms of the translations from Finnish to English as well as choosing interesting and captivating quotes to represent the findings that were found in the data analysis. The aim was to bring out the experiences of the participants on the wellbeing trail and by adding photographs to the text, I wanted to enrich the reading experience. With this small detail it might make the reader more engaged to the text. Rich descriptions of the text can elevate the reading experience and "may transport readers to the setting", as Creswell (2014) described (Creswell 2014, 202).

Creswell (2014) also acknowledged how important it is to bring up the bias that might influence on how the researcher interprets the findings (Creswell 2014, 202). I chose this particular subject out of my personal interests since I have seen and felt the benefits in my personal life when surrounded by greenery and bodies of water. They helped me to expand my mind to new places and calmed me down in those moments where everything else felt uncertain. This is why I found it crucial to elucidate the critical outlooks on the findings too. Negative or conflicting information should be presented as valuable, because it makes the study more realistic (Creswell 2014, 202). This thesis was peer reviewed throughout the writing process by fellow colleagues as well as the supervisor in charge of the thesis advising. The thesis was also audited by an external person to ensure "the overall validity of a qualitative study" (Creswell 2014, 203). There were also thesis

advising meetings throughout the process to ensure the well-functioning process of making this research.

Given the topic of my thesis, I found that the phenomenological approach was a fitting way to gather more information on the individual's experiences about nature, creativity and mental wellbeing. The findings were presented in such a way which acknowledged the diverseness of the individual's stories. I do acknowledge that there is always a possibility for improvement and as mentioned earlier, I would do better formulation of questions for the online questionnaire and consider the chance to do interviews in person with the participants. That way it might have given me more detailed answers about the themes discussed. In terms of better measurability, it would be beneficial to further continue and deepen the research about creativity-based practices implemented in nature environments in fostering creativity and mental wellbeing and how nature's role might influence on creativity and mental wellbeing. My study successfully encapsulated the potential of the practices made in green spaces despite its limited scope and it offers a great start to continue future research on aforementioned themes.

When looking at the future of utilizing nature as part of supporting the individual's holistic wellbeing in Finland, the future looks indeed promising. Luonnonvarakeskus (Natural Resources Institute Finland) has launched a project of Nature Prescription lasting from 2024 up until 2026, and the pilot cities are Lahti and Kajaani. The aim of Nature Prescription is to increase municipalities' usage of nature-based practices in supporting health promotion. The results will bring more knowledge on how nature can be utilized better for promoting mental and physical wellbeing in different municipalities. (Nature Prescription - introduction of nature-based methods in municipalities 2024.) In the United Kingdom, a similar kind of program is called "Green social prescribing" and its aim is to support mental and physical health of the individuals by prescribing interventions happening in nature. The activities are divided as blue and green activities, and they can vary from "local walking schemes, community gardening projects, conservation volunteering, green gyms, open water swimming or arts

and cultural activities which take place outdoors”. The findings indicate the positive correlation between enhancement in overall wellbeing as well as stronger connection to the communities. (Green social prescribing n.d.) Similar kind of programs based on prescriptions on utilizing green and blue spaces can be found globally for example in New Zealand, South Korea, Japan (see Park et al. 2009) and the United States (Broom 2022).

Future research could explore the potential of Nature Prescription offered in Finnish social and healthcare system as an intervention method throughout Finland. If this would be the case, it would add more beneficial value if the creative aspect of an individual’s wellbeing in Nature Prescription would be examined as well. The previously mentioned studies speak for themselves on how creativity supports wellbeing (see Ratcliffe et al. 2022; Plambech and van den Bosch 2015, Williams et al. 2018). In addition, Holinger and Kaufman (2024) argued that there is a connection between being creative and experienced wellbeing in the individual’s implicit beliefs (Holinger & Kaufman 2024, 8). Could the Nature Prescription entail practices that include creative aspects, for example? Additionally, could there be a possibility to have ready-made flash cards as a part of Nature Prescription? The cards could be easily carried around, having the opportunity to reflect on one’s wellbeing and creativity while spending time in nature. This could also be an easier way to implement the practices without the distraction of the phone. The cards could contain both practices and questions to deepen the individual’s connection with everyday creativity. They would concentrate on practices which could help evoke the thoughts and creative capabilities that are already existing within an individual. Ultimately, the aim would be to have fun and enjoy the nature holistically with the chance of making the experience possibly more playful.

There is a bond between being playful and creative in nature environments and it holds a tremendous potential that could be harnessed to support the overall wellbeing of different individuals. Hopefully in the future, the themes of creativity, wellbeing and nature could be studied as their relation to each other. The findings could expand our knowledge about the versatility of creativity-based interventions

happening in green spaces. Additionally, one future aspect for further research could concentrate on the experiences of mini-c creators and what are their experiences of using nature as a source of inspiration and what methods they use to cultivate creativity in nature environments. It would be ideal to do interviews to get a comprehensive understanding of the phenomenon and explore the notion of creativity from the viewpoint of self-determination theory, for example. Putney et al. (2024) studied the reasons why creative activities have a positive impact on one's wellbeing and the results indicated that "everyday creative engagement is closely linked to emotional wellbeing" since it is meeting the needs of relatedness, autonomy and competence based on the self-determination theory. (Putney et al. 2024, 6.)

It will be fascinating to see how creativity-based practices will continue to evolve and how often they would be used individually and within groups when fostering an individual's wellbeing. Since we have already existing wellbeing trails in Finland, could we have more creative trails that are focused on strengthening everyday creativity? The country of thousand lakes and forests seems quite a suitable place in creating more innovations such as this.

## References

Ahmed, K.S., Mohammed, R.A., Nashwan, A.J., Ibrahim, R.H., Abdalla, A.Q., Ameen, B.M.M. & Khdir, R.M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health* 6 (2025). <<https://doi.org/10.1016/j.glmedi.2025.100198>>. Read 7.11.2025

Ainasoja, P. (2024). Mielenterveys maksaa Suomelle 11 miljardia euroa vuodessa – "Säästöt eivät synny leikkaamalla". Mtv Uutiset. Retrieved from <<https://www.mtvuutiset.fi/artikkeli/mielenterveys-maksaa-suomelle-11-miljardia-euroa-vuodessa-saastot-eivat-synny-leikkaamalla/8963608>>. Read 12.11.2025

Alcock, I. et al. (2013). Longitudinal Effects on Mental Health of Moving to Greener and Less Green Urban Areas. *Environmental Science & Technology* 48/2. <<https://pubs.acs.org/doi/10.1021/es403688w>>. Read 27.9.2025

Ayton, D. (2023). Chapter 6: Phenomenology. In Ayton, D., Tsindos, T. & Bercovic, D. (2023). *Qualitative Research: A practical guide for health and social care researchers and practitioners*. Monash University. <<https://oercollective.caul.edu.au/qualitative-research/>>. Read 31.10.2025

Beghetto, R. A. & Kaufman, J. C. (2007). Toward a Broader Conception of Creativity: A Case for mini-c. *Psychology of Aesthetics Creativity and the Arts* 1(2). <<https://doi.org/10.1037/1931-3896.1.2.73>>. Read 20.11.2025

Beghetto, R. A. & Kaufman, J. C. (2009). Beyond Big and Little: The Four C Model of Creativity. *Review of General Psychology*. <[doi.org/10.1037/a0013688](https://doi.org/10.1037/a0013688)>. Read 20.11.2025

Berman, M.G., Jonides, J. & Kaplan, S. (2008). The Cognitive Benefits of Interacting With Nature. *Psychological Science* 19 (12). <<https://doi.org/10.1111/j.1467-9280.2008.02225.x>>. Read 24.6.2025

Berto, R. (2014) The Role of Nature in Coping with Psycho-Physiological Stress: A Literature Review on Restorativeness. *Behavioral Sciences* 4 (2014), 394–409. <<https://doi.org/10.3390/bs4040394>>. Read 26.4.2025

Bielinis, E., Takayama, N., Boiko, S., Omelan, A., Bielinis, L. (2018). The effect of winter forest bathing on psychological relaxation of young Polish adults. *Urban Forestry & Urban Greening* 29 (2018). <<https://doi.org/10.1016/j.ufug.2017.12.006>>. Read 1.3.2025

Brax, A. (2020). Luonnolla on tutkitusti suuria terveystaivaikutuksia – ”Olet, mitä syöt, juot, hengität ja kosketat”. WWF. Retrieved from: <<https://wwf.fi/wwf-lehti/wwf-lehti-1-2020/luonnolla-on-tutkitusti-suuria-terveysvaikutuksia-olet-mita-syot-juot-hengitat-ja-kosketat/>> Read 14.12.2024

Broom, D. (2022). Health: What are green prescriptions and which countries offer them? World Economic Forum. Retrieved from <<https://www.weforum.org/stories/2022/02/green-prescriptions-health-wellbeing/>>. Read 5.11.2025

Chang, Cc., Lin, B.B., Feng, X., Andersson, E., Gardner, J. & Astell-Burt, T. (2024). A lower connection to nature is related to lower mental health benefits from nature contact. *Scientific Reports* 14, 6705 (2024). <<https://doi.org/10.1038/s41598-024-56968-5>>. Read 10.11.2025

Creswell, J. (2014). *Research Design*. Sage Publications.

Creswell, J. & Creswell-Báez, J. (2021). *30 Essential Skills For The Qualitative Researcher*. Sage Publications.

Esteettömyys luontokohteilla (2025). Metsähallitus. Retrieved from <<https://www.luontoon.fi/fi/artikkelit/esteettomyys-luontokohteilla>>. Read 25.10.2025

Fernandez, C. (2024). Finland is the happiest country in the world for the seventh year in a row. CNBC. Retrieved from:

<<https://www.cnn.com/2024/03/20/happiest-countries-world-happiness-report-2024.html>> Read 14.12.2024

Fritze, J. (2023). Mitä hallitusohjelma tarkoittaa metsiemme näkökulmasta? WWF:n asiantuntijat vastaavat. WWF. Retrieved from: <<https://wwf.fi/uutiset/2023/06/mita-hallitusohjelma-tarkoittaa-metsiemme-nakokulmasta-wwfn-asiantuntijat-vastaavat/>> Read 14.12.2024

Gamble, K. R., Howard, J. H., & Howard, D. V. (2014). Not Just Scenery: Viewing Nature Pictures Improves Executive Attention in Older Adults. *Experimental Aging Research* 40(5), 513–530. <<https://doi.org/10.1080/0361073X.2014.956618>>. Read 24.6.2025

Gottlieb, R.J.M. et al. (2018). Imagination is the Seed of Creativity. In Kaufman, J.C. & Sternberg, R.J. (2018). *The Cambridge Handbook of Creativity*. New York, NY: Cambridge University Press. <<https://scottbarrykaufman.com/wp-content/uploads/2017/12/Gotlieb-et-al.-final.pdf>>. Read 14.6.2025

Green social prescribing n.d. NHS England. Retrieved from <<https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/>>. Read 5.11.2025

Guziak, M.A. (2024). Aesthetic Experiences in Western Philosophy and their Articulation in the Context of Forest Experiences. Shinrin Yoku Association. Retrieved from <<https://shinrin-yoku-association.com/2024/07/06/aesthetic-experiences-in-western-philosophy-and-their-articulation-in-the-context-of-forest-experiences/>>. Read 25.10.2025

Health nature trail Design Guide n.d. City of Espoo. Retrieved from <<https://www.espoo.fi/en/sports-and-nature/health-nature-trail-design-guide>>. Read 14.6.2025

Helsingin latu & Polku n.d.. Helsingin Latu & Polku. Retrieved from <<https://helsinginlatu.fi/>>. Read 5.11.2025

Hennink, M., Hutter, I. & Bailey, A. (2020). *Qualitative Research Methods*. Sage Publications.

Hildén, K. (2023). Mielen ja luonnon hyvinvoinnin kriisi vaatii kulttuurista murrosta. Sitra. Retrieved from <<https://www.sitra.fi/artikkelit/mielen-ja-luonnon-hyvinvoinnin-kriisi-vaativat-kulttuurista-murrosta/>>. Read 14.11.2025

Holinger, M. & Kaufman, J.C. (2024). Measuring self-beliefs of creativity and well-being. *Thinking Skills and Creativity* 53 (September 2024.) <<https://doi.org/10.1016/j.tsc.2024.101604.>>. Read 6.11.2025

Improving health and wellbeing through nature (2025). World Health Organization. Retrieved from <<https://www.who.int/europe/activities/improving-health-and-well-being-through-nature>>. Read 27.9.2025

JUFO portal n.d. Federation of Finnish Learning Societies. Retrieved from <<https://jfp.csc.fi/jufoportala>>. Read 5.11.2025

Jussila, N. (2023). Luonnolta leikkaaminen on lyhytnäköistä politiikkaa. WWF. Retrieved from: <<https://wwf.fi/uutiset/2023/08/luonnolta-leikkaaminen-on-lyhytnakoista-politiikkaa/>> Read 14.12.2024

Kansallispuistojen käyntimäärässä kova kasvu – Kansallispuistojen palveluilla selkeä kysyntä. (2020). Metsähallitus. Retrieved from: <<https://www.metsa.fi/tiedotteet/kansallispuistojen-kayntimaarassa-kova-kasvu-kansallispuistojen-palveluilla-selkea-kysynta/>> Read 20.11.2025

Kaplan, R. & Kaplan, S. (1991). *The Experience of Nature - psychological perspective*. Cambridge University Press. <[https://www.hse.ru/data/2019/03/04/1196348207/%5BRachel\\_Kaplan,\\_Stephen\\_Kaplan%5D\\_The\\_Experience\\_of\\_\(b-ok.xyz\).pdf](https://www.hse.ru/data/2019/03/04/1196348207/%5BRachel_Kaplan,_Stephen_Kaplan%5D_The_Experience_of_(b-ok.xyz).pdf)> or <<https://archive.org/details/experienceofnatu00kapl/page/n17/mode/2up>> Read 27.6.2025

- Korpela, K., Savonen, E-M., Anttila, S., Pasanen, T. & Ratcliffe, E. (2017). Enhancing wellbeing with psychological tasks along forest trails. *Urban Forestry & Urban Greening* 26 (August 2017). <<https://doi.org/10.1016/j.ufug.2017.06.004>>. Read 29.3.2025
- Kweon, B-S., Ulrich, R.S., Walker, V.D. & Tassinari, L.G. (2007) Anger and Stress. The Role of Landscape Posters in an Office Setting. *Environment and Behavior* 40 (3). <[doi.org/10.1177/0013916506298797](https://doi.org/10.1177/0013916506298797)>. Read 24.6.2025
- Kylvén, A. n.d. Voimaa metsäpolulta. Mieli Ry. Retrieved from <<https://mieli.fi/vahvista-mielenterveyttasi/ymparisto-vaikuttaa-mieleen/voimaa-metsapolulta/>>. Read 14.6.2025
- Käyntimäärät maastossa 2024. Metsähallitus. Retrieved from <<https://www.metsa.fi/vapaa-aika-luonnossa/kayntimaarat/kayntimaarat-maastossa/>>. Read 12.11.2025
- Lapan, S.D., Quartaroli, M.T. & Riemer, F.J. (2011). Introduction to Qualitative research. In Lapan, S.D. et al. (2011). *Qualitative Research: An Introduction to Methods and Designs*. <<https://learning.oreilly.com/library/view/qualitative-research-an/9781118118832/chap4-sec019.html>>. Read 10.6.2025
- Leppänen M. & Pajunen, A. (2013). Vartiosaari health nature trail. Sitra. Retrieved from <<https://www.sitra.fi/en/publication/vartiosaari-health-nature-trail/>>. Read 14.6.2025
- Li, Q. (2018). *Shinrin-yoku. Japanilaisen metsäkyllyn salaisuudet*. Readme.fi
- Makkonen, A. & Ranta, L. (2017). Hyvinvointia pitkin polkua. Liessaaren luonto- ja hyvinvointipolku. Laurea University of Applied Sciences. <<https://www.theseus.fi/bitstream/handle/10024/133507/Laurea%20Julkaisut%2083.pdf?sequence=1&isAllowed=y>>. Read 7.11.2025

Merriam, S.B. & Tisdell, E.J. (2016). *Qualitative Research. A Guide to Design and Implementation*. <<https://learning.oreilly.com/library/view/qualitative-research-a/9781119003618/c02.xhtml#c02anchor-1>>. Read 10.11.2025

Metsähallitus in brief n.d.. Metsähallitus. Retrieved from <<https://www.metsa.fi/en/about-us/organisation/>>. Read 3.11.2025

Metsäkato n.d.. WWF. Retrieved from: <<https://wwf.fi/uhat/metsakato/>> Read 14.12.2024

Morita, E., Fukuda, S., Nagano, J., Hamajima, N., Yamamoto, H., Iwai, Y., Nakashima, T., Ohira, H., Shirakawa, T. (2006). Psychological effects of forest environments on healthy adults: Shinrin-yoku (forest-air bathing, walking) as a possible method of stress reduction. *Public Health* 121, 1 (2007). <<https://doi.org/10.1016/j.puhe.2006.05.024>>. Read 16.2.2025

Nature Prescription - introduction of nature-based methods in municipalities n.d.. Luonnonvarakeskus. Retrieved from <<https://www.luke.fi/en/projects/luontolahete>>. Read 31.10.2025

Ocklenburg, S. (2023). The positive effects of time spent in nature on stress: considering climate change. *Molecular Psychiatry* 28 (8). <[doi.org/10.1038/s41380-023-02122-y](https://doi.org/10.1038/s41380-023-02122-y)>. Read 7.6.2025

Ohly, H., White, M. P., Wheeler, B. W., Bethel, A., Ukoumunne, O. C., Nikolaou, V. & Garside, R. (2016). Attention Restoration Theory: A systematic review of the attention restoration potential of exposure to natural environments. *Journal of Toxicology and Environmental Health, part B*, 19. <<https://doi.org/10.1080/10937404.2016.1196155>>. Read 14.12.2024

Park, B.J., Tsunetsugu, Y., Kasetani, T., Kagawa, T., Miyazaki, Y. (2009). The physiological effects of *Shinrin-yoku* (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan. *Environmental Health and Preventive Medicine* 15, 18–26 (2010). <<https://doi.org/10.1007/s12199-009-0086-9>>. Read 16.2.2025

- Parsons, G. & Carlson, A. (2024). Environmental Aesthetics. in Zalta, E.N. & Nodelman, U. (2024). *The Stanford Encyclopedia of Philosophy* (Fall 2024 Edition). Retrieved from <<https://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/>>. Read 11.11.2025
- Pasanen, T., Johnson, K., Lee, K. & Korpela, K. (2018). Can Nature Walks With Psychological Tasks Improve Mood, Self-Reported Restoration, and Sustained Attention? Results From Two Experimental Field Studies. *Frontiers in Psychology* 9 (2018). <<https://doi.org/10.3389/fpsyg.2018.02057>>. Read 29.3.2025
- Pichlerová, M., Výboštok, J., Önkál, D., Ekiawan Lamatungga, K., Tamatam, D., Marcineková, L. & Pichler, V. (2023). Increased appreciation of forests and their restorative effects during the COVID-19 pandemic. *Ambio* 52. <<https://doi.org/10.1007/s13280-022-01816-x>>. Read 12.11.2025
- Plambech, T., Konijnendijk van den Bosch, C.C. (2015). The impact of nature on creativity – A study among Danish creative professionals. *Urban Forestry & Urban Greening* 14 (2/2015). <<https://doi.org/10.1016/j.ufug.2015.02.006>>. Read 1.3.2025
- Putney, H., Silver, S., Silvia, P.J., Christensen, A.P. & Cotter, K.N. (2024). Why does Creativity Foster Well-Being? Autonomy, Competence, and Relatedness during Everyday Creative Activities. *Journal of Research in Personality* 113, 2024. <<https://doi.org/10.1016/j.jrp.2024.104552>> Read 17.11.2025
- Ratcliffe, E., Gatersleben, B., Sowden, P.T., Korpela, K.M. (2022). Understanding the Perceived Benefits of Nature for Creativity. *Journal of Creative Behaviour* 56 (2/2022). <<https://doi.org/10.1002/jocb.525>>. Read 22.3.2025

Salumäki, T. (2019). Yle Luonnon kysely: Suomalainen on yllättävän vahvasti luontoihminen – sienestys, kalastus ja kansallispuistot eivät silti kiinnosta useimpia. Finnish Broadcasting Company (Yle). Retrieved from: <<https://yle.fi/aihe/artikkeli/2019/09/27/yle-luonnon-kysely-suomalainen-on-yllattavan-vahvasti-luontoihminen-sienestys>> Read 14.12.2024

Schensul, J. (2011). Methodology, Methods and Tools in Qualitative Research. in Lapan, S.D. et al. (2011). *Qualitative Research: An Introduction to Methods and Designs*. <<https://learning.oreilly.com/library/view/qualitative-research-an/9781118118832/>>. Read 10.6.2025

Shin, W S., Yeoun, P S., Yoo, R W., Shin, C S. (2009). Forest experience and psychological health benefits: the state of the art and future prospect in Korea. *Environmental Health and Preventative Medicine* 15 (2010), 38–47. <<https://doi.org/10.1007/s12199-009-0114-9>>. Read 5.4.2025

Soga, M. & Gaston, K.J. (2022). The dark side of nature experience: Typology, dynamics and implications of negative sensory interactions with nature. *People and Nature* 4 (5). <<https://doi.org/10.1002/pan3.10383>>. Read 11.11.2025

Sormo, K. (2017). Luonnon vaikutus ihmisen hyvinvointiin. Laurea-ammattikorkeakoulu. <<https://www.theseus.fi/bitstream/handle/10024/124643/Luonnon%20vaikutus%20ihmisen%20hyvinvointiin.pdf>>. Read 7.11.2025

Stress (2023). World Health Organization. Retrieved from: <<https://www.who.int/news-room/questions-and-answers/item/stress>>. Read 7.6.2025.

Steward, Lauren (2025). Qualitative Analysis. Definition, Steps & Examples. ATLAS.ti. Retrieved from <<https://atlasti.com/research-hub/qualitative-analysis#what-is-qualitative-analysis>>. Read 7.11.2025

Sudimac, S. Sale, V., & Kühn, S. (2022). How nature nurtures: Amygdala activity decreases as the result of a one-hour walk in nature. *Mol Psychiatry* 27, 4446–4452 (2022). <<https://doi.org/10.1038/s41380-022-01720-6>>. Read 13.6.2025

Suomalaisten luontosuhteet -kysely. (2021). Kantar TNS. Retrieved from: <<https://www.sitra.fi/julkaisut/suomalaisten-luontosuhteet-kysely/>> Read 14.12.2024

Suomen metsävarat n.d. Maa- ja metsätalousministeriö. Retrieved from: <<https://mmm.fi/metsat/suomen-metsavarat/>> Read 14.12.2024

Tam, K-P. (2013) Dispositional empathy with nature. *Environmental Psychology* 35 (2013). <<https://doi.org/10.1016/j.jenvp.2013.05.004>>. Read 24.6.2025

TENK (2023). The Finnish code of conduct for research integrity and procedures for handling alleged violations of research integrity in Finland. The Finnish National Board on Research Integrity TENK 2023. <[https://tenk.fi/sites/default/files/2023-11/RI\\_Guidelines\\_2023.pdf](https://tenk.fi/sites/default/files/2023-11/RI_Guidelines_2023.pdf)>. Read 7.11.2025

TENK. (2019). Guidelines for research ethics in Finland. <[https://tenk.fi/sites/default/files/2021-01/Ethical\\_review\\_in\\_human\\_sciences\\_2020.pdf](https://tenk.fi/sites/default/files/2021-01/Ethical_review_in_human_sciences_2020.pdf)>. Read 14.12.2024

Tsunetsugu, Y., Lee, J., Park, B-J., Tyrväinen, L., Kagawa, T., Miyazaki, Y. (2013). Physiological and psychological effects of viewing urban forest landscapes assessed by multiple measurements. *Landscape and Urban Planning* 113. <<https://doi.org/10.1016/j.landurbplan.2013.01.014>>. Read 16.2.2025

Ulrich, R. S. (2024). Stress reduction theory. <[https://www.researchgate.net/profile/Roger-Ulrich-2/publication/377281012\\_Ulrich\\_RS\\_2023\\_Stress\\_reduction\\_theory/links/659e](https://www.researchgate.net/profile/Roger-Ulrich-2/publication/377281012_Ulrich_RS_2023_Stress_reduction_theory/links/659e)

9458c77ed940476dab17/Ulrich-RS-2023-Stress-reduction-theory.pdf> Read 14.12.2024

Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., Zelson, M. (1991). Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology* 11 (1991). <[https://psych.utah.edu/\\_resources/documents/psych4130/Ulrich%20et%20al\\_1991.pdf](https://psych.utah.edu/_resources/documents/psych4130/Ulrich%20et%20al_1991.pdf)> Roger Ulrich 1991 stress reduction> Read 14.12.2024

Vella-Brodrick, D.A., Lewis, K.J. & Gilowska, K. (2024). Exploring the Nature-Creativity Connection Across Different Settings: A Scoping Review. *Educational Psychology Review* 36 (2024). <<https://doi.org/10.1007/s10648-024-09964-0>>. Read 25.3.2025

Williams, K.J.H., Lee, K.L., Hartig, T., Sargent, L.D., Williams, N.S.G., Johnson, K.A. (2018). Conceptualizing creativity benefits of nature experience: Attention restoration and mind wandering as complementary processes. *Journal of Environmental Psychology* 58 (October 2018). <<https://doi.org/10.1016/j.jenvp.2018.08.005>>. Read 9.3.2025

Yle News (2025). Finland ranks as world's happiest country for eighth year in a row. Finnish Broadcasting Company (Yle). <<https://yle.fi/a/74-20150702>>. Read 12.11.2025

Yu, C-P. & Hsieh, H. (2020). Beyond restorative benefits: Evaluating the effect of forest therapy on creativity. *Urban Forestry & Urban Greening* 51 (2020). <<https://doi.org/10.1016/j.ufug.2020.126670>>. Read 9.3.2025

Zamora, A.N., Waselewski, M.E., Frank, A.J., Nawrocki, J.R., Hanson, A.R. & Chang, T. (2021). Exploring the beliefs and perceptions of spending time in nature among U.S. youth. *BMC Public Health* 21, 1586 (2021). <<https://doi.org/10.1186/s12889-021-11622-x>>. Read 10.11.2025

## Appendices

### Appendix 1. Participant information sheet

#### TIEDOTE TUTKIMUKSESTA

**Paranemista ja kukoistusta luonnossa. Elämyksiä luovasta toimintapolusta metsäympäristössä mielen hyvinvoinnin tukena ja luovuuden edistäjänä.**

#### **Pyyntö osallistua tutkimukseen**

Teitä pyydetään mukaan tutkimukseen, jossa muodostetaan ymmärrystä luonnossa palautumisesta. Kerään hyvinvointipolun kävijöiltä ajatuksia ja näkemyksiä liittyen luontoon, hyvinvointipolulla sijaitseviin toimintarasteihin, mielen hyvinvointiin sekä luovuuteen.

#### **Vapaaehtoisuus**

Tutkimukseen osallistuminen on vapaaehtoista. Voitte myös keskeyttää tutkimuksen koska tahansa syytä ilmoittamatta.

#### **Tutkimuksen tarkoitus**

Tämän tutkimuksen tarkoituksena on tukea kävijöiden mielen hyvinvointia luontopolulla ja tarjota heille mahdollisuus parantaa luovaa ajattelua luontopolulla sijaitsevien toimintarastien avulla. Tavoitteena on luoda arvokasta tietoa luonnon palauttavasta voimasta. Luontopolun kävijöiltä kerätään heidän ajatuksiansa ja näkemyksiä liittyen luontoon, luontopolulla sijaitsevista toimintarasteista, mielen hyvinvoinnista, sekä luovuudesta.

#### **Tutkimuksen toteuttajat**

Aineistonkeruun toteuttaa Karolina Sihvonen, osana YAMK-opinnäytetyötä. Sihvosen tutkinto-ohjelma on Creativity and Arts in Social and Health Fields master's degree, Metropolia Ammattikorkeakoulussa. Tutkimuksella ei ole ulkopuolista rahoitusta.

#### **Tutkimusmenetelmät ja toimenpiteet**

Tutkimus toteutetaan kävijäkyselyn avulla, joka on saatavilla QR-koodin avulla. Pohjana käytetään Metropolia Ammattikorkeakoulun virallista sähköistä lomaketta. Tavoitteena on saada selville kävijöiden ajatuksia liittyen luontopolun varrella sijaitsevista toimintarasteihin sekä yleistä pohdintaa liittyen luontoon ja sen vaikutuksiin mielen hyvinvointiin ja luovuuteen. Kävijäkysely on saatavilla 15.6.2025 asti, jonka jälkeen tutkija tekee sisällönanalyysin löytääkseen aineistosta toistuvia teemoja. Tutkimuksessa ei kerätä kävijöiden henkilö- tai tunnistetietoja. Tutkimusaineisto hävitetään tutkimuksen valmistumisen jälkeen.

#### **Kustannukset ja niiden korvaaminen**

Tutkimukseen osallistuminen ei maksa teille mitään. Osallistumisesta ei myöskään makseta erillistä korvausta.

#### **Tutkimustuloksista tiedottaminen**

Karolina Sihvosen YAMK-opinnäytetyö julkaistaan Theseus-verkkopalvelussa (<https://www.theseus.fi/>) tutkimuksen valmistuttua. Kuten aiemmin mainittu, tämä tutkimus ei kerää henkilökohtaisia tietoja ja näin ollen kyselyyn vastanneet eivät ole tunnistettavissa valmiissa työssä.

#### **Lisätiedot**

Pyydämme teitä tarvittaessa esittämään tutkimukseen liittyviä kysymyksiä tutkijalle/tutkimuksesta vastaavalle henkilölle.

#### **Tutkijoiden yhteystiedot**

Opinnäytetyötekijä  
Nimi: Karolina Sihvonen

Opinnäytetyön ohjaaja  
Sanna Kivijärvi MuT, vanhempi lehtori  
Metropolia Ammattikorkeakoulu

## Appendix 2. The advertisements for the wellbeing trail



# HYVINVOINTIPOLKU MAUNULAN LUONTOPOLVILLA

Tule maadoittumaan ja herättelemään luovuuttasi polulle!

Hyvinvointipolun varrella on erilaisia tehtäviä liittyen läsnäoloon, luovuuteen ja lempeään ympäristön havainnointiin.

Sijainti Maunulan Majalta lähtevän (Metsäläntie 9) luontopolun varrella. Seuraa käpyopasteita, sekä kallioisella osuudella kallioon maalattuja vihreä-valkoisia tienviittoja!

Noin 2km pitkä hyvinvointipolku päättyy Maunulan vanhalle hyppyritornille.  
Polku on saatavilla 15.6. asti.

Hyvinvointipolku on osa YAMK-opinnäytetyötä, jonka tarkoitus on tutkia luonnon, sekä luontolähtöisten harjoitteiden vaikutusta mielen hyvinvointiin ja luovuuteen. QR-koodin lukemalla pääset vastaamaan kyselyyn, joka tuottaa arvokasta tutkimusdataa liittyen luonnon parantavaan voimaan.

# WELLBEING TRAIL ON MAUNULA NATURE TRAIL

Come ground yourself and awaken your creativity on the trail!

Along the wellbeing trail there are different activities related to presence, creativity and gentle observation of the environment.

Located along the nature trail near Maunulan Maja (starting from Metsäläntie 9). Follow the pinecone markers and painted green-white marks on rocky trail. Approx. 2km long wellbeing trail ends at Maunula's old ski jump tower.

The trail is available until 15<sup>th</sup> of June.

This wellbeing trail is part of a Master's thesis study exploring the impact of nature and nature-based practises on mental wellbeing and creativity.

By scanning the QR code, you can participate in a survey that provides valuable research data on the healing power of nature.

## Appendix 3. The online questionnaire for the wellbeing trail

### Hyvinvointipolku Maunulan luontopolulla - kävijäkysely

Hei!

Kiitos osallistumisestasi hyvinvointipolulla. Hyvinvointipolku on osa YAMK-opinnäytetyötä, jonka kyselyyn vastaamalla olet mukana luomassa arvokasta tutkimusaineistoa liittyen luonnon sekä luontopolkujen harjoitteiden vaikutusta mielen hyvinvointiin ja luovuuteen. Opinnäytetyöntekijä Karolina Sihvonen opiskelee Metropolia Ammattikorkeakoulussa Creativity and Arts in Social and Health Fields Master's degree -tutkinto-ohjelmassa.

Alla näet kysymyksiä, joiden teemat liittyvät hyvinvointipolkuun sekä omiin käsityksiisi luonnosta ja siihen liittyvistä vaikutuksista mielen hyvinvointiin sekä luovuuteen. Tässä tutkimuksessa ei kerätä henkilö- tai tunnistetietoja (nimi, yhteystiedot jne.). Eihän myöskään kirjoita vastauksiisi tunnistettavia tietoja itsestäsi. Jos tunnistettavaa informaatiota sisältyy vastauksiin, ne poistetaan kokonaisuudessaan.

Tästä linkistä löydät tarkemman tiedotteen tutkimuksesta: [Informointilomake\\_21425.docx](#)

Kiitos jo etukäteen!

You can find the English version of this questionnaire through this link: <https://elomake.metropolia.fi/lomakeet/45208/lomake.html?rinnakkaislomake=Rinnakkaislomake1>

[Tietosuojaseloste](#)

#### Kysymykset hyvinvointipolusta

Miten löysit tämän polun äärelle? \*

Kuinka paljon aikaa vietät luonnossa? \*

Suosittelisitko tätä polkua tutullesi? \*

Täysin samaa mieltä   Jokseenkin samaa mieltä   Ei samaa eikä eri mieltä   Jokseenkin eri mieltä   Täysin eri mieltä

Oletko aiemmin vierailut vastaavanlaisella hyvinvointipolulla muualla Suomessa? \*

Kyllä  
 En

Mitä mieltä olit tämän hyvinvointipolun tehtävistä? Jäikö jokin erityisesti mieleen? Mistä et pitänyt? \*

Mitkä tehtävät suorittit polulla? \*

1) Hengitä ja havainnoi  
 2) Aistit käyttöön  
 3) Elementin tarina  
 4) Tunne keho ja metsä  
 5) Metsän sulosoimmut  
 6) Eräs tarina metsästä  
 7) Tässä ja nyt

#### Kysymykset luonnosta, mielen hyvinvoinnista, sekä luovuudesta

Miten kuvailisit kokemustasi hyvinvointipolulla tänään? \*

Miten kuvailisit luonnon merkitystä sinun mielen hyvinvoinnin tukijana? \*

Miten kuvailisit luonnon merkitystä sinun mielen hyvinvoinnin tukijana? \*

#### Kysymykset luonnosta, mielen hyvinvoinnista, sekä luovuudesta

Miten kuvailisit kokemustasi hyvinvointipolulla tänään? \*

Miten kuvailisit luonnon merkitystä sinun mielen hyvinvoinnin tukijana? \*

Miten kuvailisit luonnon merkitystä sinun mielen hyvinvoinnin tukijana? \*

Millaisia merkityksiä luonnolla on sinun luovuuden suhteen? \*

Millä tavoin luontolähtöiset harjoitteet tukevat sinun luovuutta ja mielen hyvinvointia? \*

Millä tavoin luontolähtöiset harjoitteet tukevat sinun luovuutta ja mielen hyvinvointia? \*

Millä tavoin luontolähtöiset harjoitteet tukevat sinun luovuutta ja mielen hyvinvointia? \*

Millä tavoin luontolähtöiset harjoitteet tukevat sinun luovuutta ja mielen hyvinvointia? \*