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## Evoking the Art of Nature

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This thesis, written under the direction of the candidate's thesis advisor and approved by the program chair, has been presented to and accepted by the Department of Art Therapy, at Dominican University of California, in partial fulfillment of the requirements for the degree of Master of Arts in Marriage and Family Therapy.

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**Evoking the Art of Nature**

By

Tessa R. Evans Keime

A culminating thesis submitted to the faculty of Dominican University of California in partial fulfillment of the requirements for the degree Master of Arts in Marriage and Family Therapy

Dominican University of California

San Rafael, CA

2023

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## **Abstract**

This international study aimed to investigate the therapeutic potential of nature-based art therapy, an innovative approach that combines artmaking with the healing power of nature. The research aimed to examine the synergistic effects of nature and artmaking, as well as the impact of the eco-art experience on adult individuals' connectedness to nature, emotional well-being, and existential understanding, while addressing gaps in literature.

Employing an arts-based research design, participants took part in a nature-art-making session, and their experiences were evaluated through pre- and post-art questionnaires, as well as an analysis of their artistic creations by trained inter-raters. The nature art-based experience served as both the intervention and assessment, using participants' artwork and experiences to gain insights into the effects of eco-art therapy and the application of eco-arts in nature forest therapy.

The findings of this study highlight the transformative potential of eco-art therapy in fostering personal growth, emotional well-being, mindfulness, bodyfulness, environmental awareness, and expanding the scope of artistic expression and connection to nature. By exploring the intersection between art and nature, participants were able to create meaningful experiences that transcended traditional artistic boundaries and fostered a deeper understanding of themselves and their surroundings.

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## Chapter I: Introduction

### Foundation of Nature, Art, and Humans

Humans are made from earthly material and are an element of the cycle of life (Chester, 2018). Human art making has long-standing ties to nature through the use of natural pigments, dance, poetic story, song, and ceremony (Dissanayake, 1995; Dzombak, 2021; Brooks et al., 2018). Dissanayake (2013) explains how premodern humans fully participated in the arts. Art (creating and witnessing) did not discriminate in traditional societies; it was for all. Art was a way of learning and knowing. Humans “make special” through their use of art in ritual (Dissanayake, 1995). Art was once viewed as practical and necessary; teaching children about their community through art (Dissanayake, 2013). Art holds meaning, purpose, and has been essential for societal progress and functioning. People can understand the creative process, as they naturally respond and participate on this Earth (Atkins & Snyder, 2018). Thousands of generations have been in relation with art and nature, indicating a deep integration and fusion of humanity, art, and nature. All humans have an innate ability to partake in creation, which makes creating art one of their defining characteristics.

Research suggests that there is great therapeutic value in being exposed to nature and/or green environments, along with creating art (Atkins & Snyder, 2018; Gabrielsen & Harper, 2018). “Hippocrates, the father of western medicine, identified that it is nature that is the source of health and the healer of disease” (Clifford & Page, 2020, p.7). Countless individuals encounter newfound peace, healing, gratitude, love, and self-acceptance in nature (Fernee, & Gabrielsen, 2020), and the art making process promotes contemplation, relaxation, hope, imagination and can alleviate psychological and emotional struggles (Moon, 2009). These two practices, while

different in many ways, can be used together for combined therapeutic benefits (Atkins & Snyder, 2018).

### **Merging of Metaphors**

Working closely with the earth and natural materials allows for life insights and metaphors (Fernee, & Gabrielsen, 2020; Gabrielsen & Harper, 2018). For instance, creating a sand painting at low tide, and the sea washing the creation away over time; a beautiful metaphor of letting go and acceptance of change. Some other therapeutic tropes found in nature and art that mirror human life are death, decay, growth, birth, home, relationships, community, and resiliency. For example, after a wildfire sweeps through a forest, everything may look barren and dead, but the fungi, whilst invisible to the naked eye, regenerates itself and spreads nutrients to different root systems and seeds for regrowth, making the forest flourish and healthier than before the fire (Schwartzberg, 2019). Just as humans can suffer from trauma, humans can also be resilient. Nature can remind people that like the fungi in fire, going through disasters that appear hopeless can make one grow stronger, wiser, and open a door to nurturing others (Gabrielsen & Harper, 2018). Witnessing natural metaphors “help us remember that we belong, that we matter and that we can manage the storms of life, creating, shaping and reshaping our way forward” (Atkins & Snyder, 2018, p. 120; Clifford, 2018). This research builds on those premises by exploring what creating art in nature using natural materials evokes in adults around the world.

### **Opportunity for Understanding**

As a society, humanity is disconnected from nature, contributing to a “degradation of human health” (Clifford & Page, 2020, p.7). With the heightened accessibility to man-made objects, technology, and an excessive orientation towards productivity, the human consciousness

has lost its association to the natural cycles and connection to the earth (Clifford, 2020, p.10; Kopytin, 2016). Carl Jung, the founder of analytical psychology, wrote:

As scientific understanding has grown, so our world has become dehumanized. Man feels himself isolated in the cosmos, because he is no longer involved in nature and has lost his emotional “unconscious identity” with natural phenomena. These have slowly lost their symbolic implications... No voices now speak to man from stones, plants, and animals, nor does he speak to them believing they can hear. His contact with nature has gone, and with it has gone the profound emotional energy that this symbolic connection supplied (Jung, p. 85, 1964).

Connection to the natural world by being present and creating art gives space for the living to happen (Hansen, Jones, & Tocchini, 2017). Without nature and art making, humans can easily get stuck in arbitrary destinations of overwhelming busyness, stress, and lose sight of life’s meanings. The process of creating art in nature has the potential to reveal to individuals what they are needing to heal or express and to find inner peace (Clifford, 2018).

### **Purpose of the Study**

The nature art-based experience used the creative process to induce connectedness to nature, the practice of presence, existential thought, and making meaning of experiences (Moon, 2009; Hansen, Jones & Tocchini, 2017). This study discusses the synergy of nature and art making by using the participant's artwork and experience as the basis for the research - used as the intervention and assessment (Atkins & Snyder, 2018). The nature-based art therapy field is young and has lacked extensive investigation, therefore this study blended and integrated these fields, addressing the gap in the literature. This study sought to understand the larger picture of creating art within nature and provided information that could be used in future work concerning the effects of art therapy in nature, along with the application of eco-arts in nature therapy. Earthen art research gives insight into where natural materials have fallen on the art medium continuum, greatly influencing the art therapy field and interventions. This research worked

towards addressing Clifford and Page's (2020) call for expanding research, adding dimensions to the Association of Nature and Forest Therapy (ANFT) practice.

### **The Environmental Crisis**

Climate change is one of the most pressing and important challenges facing humanity (Schwartzberg, 2019). A basic understanding of this crisis is integral for this study. There is overwhelming scientific evidence to support the fact that significant global warming of the planet has been happening in the last century (United Nations, 2021). This change manifests itself by a global temperature rise, warming oceans, shrinking ice sheets, rising sea level, and ocean acidification (Chester, 2018; Schelbli, 2019; NASA, 2021). Global scientific research points in the direction of human activity as the principal cause; the burning of fossil fuels over the last century almost doubled the atmospheric concentration of carbon dioxide (World Wildlife Fund, 2021).

If left unchecked, this behavior is likely to have severe adverse consequences on the environment and humanity alike. Such consequences could include certain regions being rendered uninhabitable, leading to mass migration, frequent and extreme weather events (heatwaves, wildfires, coastal storms...), and global food shortages (NASA, 2021; United Nations, 2021). It would also greatly impact wildlife, likely resulting in the extinction of a significant number of species, drastically impacting the natural food chain stability (National Wildlife Federation, 2021).

This study aimed to help individuals form a relationship with nature, encourage connectedness, and find value (greater than mere objects) in the outdoors. The foundational bond was expected to motivate sustainability, encourage co-existing with nature, and result in actions to effectively deal with the global environmental crisis, one person at a time (Atkins & Davis,

2009; Clifford, 2018; Friedenwald-Fishman, 2011; Kopytin, 2016; Roszak, Gomes, & Kramer, 1995).

### **Theoretical Rationale**

In this paper, an existential theoretical perspective along with logotherapy is often used. Bruce Moon (2009) an existential art therapist, explains that due to the nature of the theoretical orientation, there is no concise definition, although existentialism art therapy can briefly be described as “arts processes and imagery that focuses attention on the ultimate concerns of human existence” (p. xviii). An existential perspective does not promote labeling, interpreting, or pathologizing, and “does not necessarily encourage clients to understand the meaning of personal artworks; rather, it advocates for a willingness to embrace multiple possibilities and meanings in life, which can be discovered through art making, even when meanings are unclear or perplexing” (Moon, 2009, p.xix). “Logos” in Greek is translated to “reason”, and logotherapy is based on the notion of an individual finding meaning which gives reason to live (Frankl, 1978). Viktor Frankl, the founder of logotherapy attests in *Man’s Search for Meaning* (1978), “those who have a 'why' to live, can bear with almost any 'how'” (p. 80). Frankl’s theory falls under the existential theoretical umbrella, and has been explored, with evidence pointing to meaning in life being linked to better mental health (Frankl, 1978; Steger, 2017). Creating art gives a sense of purpose, adds meaning to life, and supports systemic change (Frankl; Friedenwald-Fishman, 2011, Moon, 2009).

### **Definition of Terms**

For this study, the word *nature* is used to broadly describe a natural environment. In the forest therapy community, nature is called the more-than-human world (Clifford, 2018). For some, nature may mean the local city park, for others it could signify a remote off-grid location,



not accessible by car. Throughout the study, the word *nature* is interchanged with the *more-than-human world*, *green space*, *outdoors*, *natural environment*, and other similar words.

The words *eco-therapy* or *nature-based therapy* has the potential to signify many things, such as being present in nature, outdoor therapy sessions, animal-assisted therapy, wilderness adventures, or garden cultivation therapy. In this paper, the term *eco-therapy* or *nature-based therapy* refers to therapeutic experiences being held in nature, and/or using natural materials with a therapeutic mindset.

*Art* is also a word that has many definitions. Understanding art is daring to go beyond paintbrushes, pens, paper, and canvas, and instead thinking in terms of ancient traditions. The Navajo Nation uses the word *hohzo* to describe the ‘art of beauty’. *Hohzo* surpasses attractiveness, it means “to live in a way that is in balance and harmony with all other living things, recognizing and honoring the interconnectedness of everything” (Atkins & Snyder, 2018, p. 70). Nature-Based Expressive Arts Therapists, Atkins, and Snyder (2018) said, “beauty is not in things, but in the dynamic relationship among things” (p. 71). Beauty is in the process of creating and in the interaction among living systems. Humans are “capable of creative acts and of shaping the world in harmony with nature when our creative behavior relies on *aesthesis*, our experience of the world and its embodied beauty” (Kopytin, Levine & Alexeyev, 2021, p.4). The term *art* in this paper is defined as a form of creating *hohzo*, and the process of making something special in all imaginative forms (Dissanayake, 1995).

## Chapter II: Literature Review

### Art Therapy

Art therapy is an integrative mental health profession that aids individuals in processing and communicating through the artistic process. Instead of participants only communicating verbally, like traditional talk therapy or clinical counseling individuals can use expressive mediums. The American Art Therapy Association (AATA) affirms that art therapy “enriches the lives of individuals, families, and communities through active artmaking, creative process, applied psychological theory, and human experience within a psychotherapeutic relationship.” (AATA, 2021). Art therapy can only be done with licensed and trained art therapists. It can benefit everyone, not just children or the mentally distressed. Unlike other forms of therapy that often focus on the past or future, art therapy can be centered on the present moment and the artist's ability to choose how to respond to their situation. This aligns with Viktor Frankl's alleged quote, "Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom" (Pattakos & Dundon, 2017). Art therapy provides an opportunity for self-expression, and the resulting art process can reveal insights into our own identities. History and individual experiences everywhere in the world attest that art heals, both physical, spiritual, and mental ailments.

Art is more than just therapy, art opens people to a creative ‘energy’ and a larger process (McNiff, 2004). Art therapy can be a somatic experience, activating the whole body. Creating art can draw one out of their head, which gives space for physical expression and healing. Art is a way of knowing, with the ability to tap into creativity, fear, imagination, memory, soul, story, life, grief, and unknowns (Allen, 1995; McNiff, 2004). Some artists use art to heal, and others use art to express. Winfred Rembert, a self-taught artist survived a near-lynching, in 1967, and

spent many years incarcerated where he learned how to carve leather (Ducat, 2011; The New Yorker, 2021). Rembert's art tells the story of the Jim Crow South, and memories of his youth as a black man. His work depicts vivid scenes of encounters with racial and police violence, working in chain gangs, picking cotton, busting rocks in his zebra-stripe uniform, and the aftermath of the civil rights protests (Kelly, Rembert & Stevenson, 2021). Rembert used art to express his pain, to tell history beyond the charm politicians promoted. The art process is a powerful source for storytelling and societal transformation (hooks, 1995; Friedenwald-Fishman, 2011; McNiff, 2004).

Art therapy aids in reshaping and rebuilding individuals, communities, and relationships. AATA (2021) explains that art therapy improves “cognitive and sensorimotor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change.” The benefits of art therapy are heightened by being in a natural environment. Art therapy does not have to be limited to a counseling room, individuals can create and heal in nature. Art therapy can be a tool for relating to the more-than-human world and creating beauty without toxins.

Through art-making individuals can create a linkage, the missing liminal piece, closing the loop of experience. Making art asks individuals to respond to their experiences and environment, potentially leading to different understandings of experience and an ability to synthesize events. Art is a way to spiritually connect and communicate - a sacred experience (Allen, 1995; Gablik, 1991). Art can “dissolve boundaries and reveal our interconnectedness with one another, as well as reveal the dignity of our uniqueness” (Allen, 1995, p. xvi). Therapeutic artmaking connects individuals, but also to nature, humanity's rooted foundation (Clinebell, 1996). The artmaking

process, requiring no talent and can be found in nature. The natural creative journey offers something a person can walk away with, bringing restoration, along with physical health benefits, and potentially joy to others who pass by.

### **Nature Therapy**

Human health directly correlates with being exposed to natural elements, like clean air, sunshine, water, and plants (Atkins & Davis, 2009; Clifford & Page, 2020). It should be no surprise that physical ailments would arise with a disconnection from nature. The accessible remedy to treating human health that modern medication cannot fix is retreating into nature (Clifford & Page).

Eco-therapy or nature-based therapy is the application of eco-psychology within a therapeutic space. Eco-psychology is the study of the human mind and behavior in relation to nature (Atkins & Davis; Roszak, Gomes, & Kramer, 1995). Eco-psychologists have a fundamental belief that humans are inherently connected and dependent on Earth (biophilia and reciprocity) (Tudor, 2013). Thus, nature therapists work from a perspective of questioning assumptions, and how humans live in the world (Clinebell, 1996; Atkins & Davis, 2009; Roszak et al., 1995). Eco-therapy draws upon indigenous perspectives, deep ecology, biocentric (giving intrinsic worth to all living things), positive psychology, and sustainable inter-modality (Atkins & Davis; Atkins & Snyder, 2018; McGeeney & Kingsley, 2017). Eco-therapy or nature-therapy is not a new idea, as many cultures throughout the world have been practicing similar concepts (Clifford, 2018, p.10; Kopytin, 2016). Atkins and Davis (2009) teach, ecotherapy's intention to:

invite an openness to learn from indigenous, earth-based cultures. This is not a naïve "new age" infatuation with imitating the rituals of such cultures without understanding the depth and complexity of their worldviews. The goal is to learn from, not just about, people whose beliefs about reality offer a contrast to and perhaps an enlargement of our Western linear, deterministic, mechanistic, objectivistic, and materialistic views of reality. Such worldviews offer a vision of

reality as circular, cyclical, and multidimensional, one in which everything is alive and interrelated (p.275).

The Japanese practice, Shinrin-Yoku, which directly translates to ‘Forest Bathing,’ falls under the nature therapy spectrum. Forest bathing is the act of being present in nature, investigating all sensory modalities while metaphorically speaking, being bathed in the natural environment (Hansen et al., 2017). Forest bathing invites a healing interaction when individuals slow down, become curious and listen to their body and surroundings (Clifford, 2018). Shinrin-Yoku therapists or guides work from the perspective of “nature is the therapist and the healer, and the guide opens the doors” (Clifford & Page, 2020, p.23; Williams & Wong, 2020). “It’s not just about healing people; it includes healing for the forest, river, desert, or whatever environment” one finds themselves in (Clifford & Page, 2020, p.14). Forest bathing holds great importance on reciprocity, taking care of all beings on this earth, including global ecology, not just how humankind can benefit from the more-than-human world. Without a healthy, diverse biosphere, human existence will not be sustained (Clifford & Page, 2020, p.8). Mary Oliver (2016), a poet, once wrote, “Teach the children... Stand them in the stream, head them upstream, rejoice as they learn to love this green space they live in, its sticks and leaves, and then the silent, beautiful blossoms. Attention is the beginning of devotion.” With stillness, comes love and with love comes devotion and one’s desire to protect the natural environment.

The Association of Nature and Forest Therapy (ANFT), framework and goal are to evolve and change the ways individuals relate to the forest and other natural environments, so they feel deeply connected to those places. Going beyond, the Forest Bathing practice desires to transform how people relate to themselves, to others, and to the present moment. M. Amos Clifford, the founder of ANFT shares:

Once such connections are generated, we believe that they act as gateways to prosocial and pro-environmental behavior changes at a societal level. In this way, we understand the main purpose of Forest Therapy as being a vehicle for accelerating cultural change in the interest of community, reciprocity, and love. If our health is the gift we may receive from Nature, and ecological renewal is our reciprocation, then we might consider our relationship as an act of devotion that ensures we may never forget our interconnectedness again (Clifford & Page, 2020, p.9).

The quote suggests that creating connections with nature through Forest Therapy can lead to positive societal changes towards pro-environmental and prosocial behaviors, emphasizing the importance of reciprocity and interconnectedness with nature. To experience these benefits, individuals can follow simple steps to deepen their connection with nature. While there are no rigid rules for forest bathing, there are general guidelines to consider. Slowing down and intentionally connecting with nature in a healing way, mindfully moving through the space and opening the senses to nurture present consciousness are key aspects. “It’s more about being here, than it is about getting there” (Clifford & Page, 2020, p.14). The process of becoming present can unveil the impact of over-stimulation caused by constant communication, technologies, which can sedate the senses, cloud reality, and impede one's ability to break free from repetition and comparison (Caldwell, 2014; Caldwell, 2018; Clifford & Page, 2020; Siegel, 2007). Finding a sense of calm by immersing oneself in a green space can reorganize internal dialogue and foster a new perception of self.

Mindfulness is a practice of being fully present in the moment and non-judgmentally observing one's thoughts and surroundings. Through mindfulness, individuals can cultivate a heightened awareness of their mental, physical, and emotional states. However, for some, the reflective mindfulness practice of getting to know oneself by being present may prove challenging to develop.

## **Bodyfulness**

With mindfulness comes increased somatic awareness, called 'bodyfulness' (Caldwell, 2014; Caldwell, 2018). Bodyfulness involves shifting attention from the mind to a deeper awareness of the physical sensations in the body, fostering a greater connection between the mind and body. Bodyfulness goes against the troubling and prevalent culture of body shaming, and idealization of the perfect body. These societal habits cause individuals to develop internalized 'somatophobia', running away from pure clarity of what it means to be in the body (Caldwell, 2014; Caldwell, 2018). With heightened somatic attention, uncomfortable feelings could surface due to irregulating of body attunement, and the daily marginalization of being in the body. To truly understand oneself, it's important to be able to feel and understand physical sensations. One must acknowledge and respond to these feelings to navigate life safely. While ignoring or compensating for these sensations might make things more bearable, it comes at a cost of losing awareness of inner bodily experiences, and a diminished sense of being fully and sensually present (van der Kolk, 2014).

Incorporating art therapy in this context serves as a powerful tool for self-exploration and cultivating bodyfulness. Art making can be a strategic way to (re)gain a relationship with the self and sensations. The state of natural wakefulness while creating art gives purpose to the physical body and allows for bodily identity to have authority over direct lived experiences. Art making can formulate and modify conceptual reality - how a person discerns and thinks about the world. Conscious control of movement can enhance bodyfulness by developing attentional focus (Caldwell, 2014, p.90). Bodyfulness challenges thinking and somatic being.

Bodyfulness aspires to embrace the entirety of human experience and potential. According to Caldwell (2014), it encapsulates the idea that a person "breathes as well as thinks, moves as

well as sits still, takes action as well as considers it, and exists not just because it thinks, but because it dances" (p.84). Engaging in forest bathing and art creation in the form of art therapy and nature forest therapy can stimulate bodyfulness, fostering a heightened state of wakefulness and a profound awareness of the present moment.

A crucial aspect of bodyfulness is the incorporation of somatic modes of attention, which involve focusing on and interpreting bodily sensations and experiences as a way of connecting with the self and the environment. These modes of attention enable individuals to develop a deeper understanding of their own body's responses to various stimuli, as well as facilitate the formation of multiple relationships.

As an individual becomes more attuned with themselves through somatic attention and engages in eco-art, they can cultivate a three-part relationship that involves the art, its creator, and nature. This interconnected relationship is made possible by the art coming from nature, allowing the individual to connect with themselves and the environment simultaneously. Supporting this notion, Dr. Morganti (2008) emphasizes that "humans' primary way of relating to things is neither purely cognitive nor sensory, but rather bodily and skillful" (p. 5). At times, certain lived experiences may be so powerful and transcendent that they elude verbal description or full comprehension, resulting in what is known as the ineffable. Ineffable experiences, which go are intimately connected to somatic modes of attention.

Caldwell (2014) explains that "it is often the ineffable experience that we choose to express in bodily ways—through movement, gesture, dance—so that implicit neural mechanisms can process and express wordless experiences directly, creating a powerful intersubjective resonance within and between people" (p.79). Engaging in eco-art allows for the activation of subconscious neural processes, making sense of the ineffable experience and fostering bodyfulness, a state of



heightened awareness and connection with one's own body. This, in turn, encourages a powerful, deep emotional connection between individuals and the more-than-human world. This interconnectedness contributes to the holistic benefits of nature, promoting overall well-being and a deeper understanding of the self.

### **Holistic Benefits of Nature**

Many experts tie the current health epidemic and rapid rise in mental health struggles to digitalization, urbanization, overwork, stress, and loneliness (Clifford & Page, 2020, p.7). People are living in sensory overload, constantly stimulated by screens, and spending large amounts of time indoors, which inevitably changes the human nervous system (Rømer, 2013; Williams, 2018). There are various research studies done to document social skills and health deterioration due to technology. Stanford University sociologist Clifford Nass and his colleagues found that individuals absorbed in media “have an impaired ability to focus on cognitive demanding tasks... and were less developed socially and emotionally.” (Williams, 2018, p. 40). The need for disconnection of technology and reconnection to nature is essential to welfare. Studies of time spent in nature have shown large amounts of health benefits of the physiological and psychological systems. Such healing components of forest bathing include the immune system function, cardiovascular system, respiratory system, depression and anxiety, mental relaxation, happiness, and overall well-being (Capaldi et al., 2014; Hansen et al., 2017; Kopytin, 2016).

Nature forest therapy stems from an understanding that the human species developed alongside the natural world. The human body adapted to breathing the fresh air, soaking up ultraviolet sun rays, and taking in the essential oils of certain plants. For instance, sunlight helps the body create vitamin D, which is needed for human skin (the largest organ and first line of defense against microbes and the elements). Vitamin D also helps the absorption of certain

minerals like magnesium, calcium, and phosphorus. Too much sunlight can cause cancer like melanoma, but not enough sunlight can cause autoimmune diseases and vision deterioration. The eyes need sunlight to set the body's internal clock, impacting sleep regulation. Sunlight also boosts the brain chemical, serotonin. Low levels of serotonin due to lack of natural light, may cause seasonal affective disorder (SAD) and other types of depression. A balance of natural elements is restorative and important for the human body.

A substance emitted by trees, called phytoncides is anti-fungal, anti-bacterial, antimicrobial, and antiviral. Phytoncides are natural killer cells (Li & Kawada, 2011). Research has found that those who spend time in nature have an increase in natural killer cells, which prevents cancer cell growth within the immune system (Hansen et al., 2017). Being in nature affects the cardiovascular system, decreasing hypertension and coronary artery disease due to reduced blood pressure (systolic and diastolic) and lowered pulse rate. The outdoors enhances energy level while restoring mental relaxation, reducing the stress hormone (cortisol) level, and lowering anxiety (Fukuda et al., 2007). A direct effect of nature specifically targets attention-deficit/hyperactivity disorder, leading to better concentration, promoting social skills (Kuo, 2015). Some specific skills individuals can develop while exploring nature are categorization, sensory, schematic memory, attribute orientation, and hierarchical reasoning (Louv, 2008). This developmental experience has the potential to attune individuals in and outside of the workplace. Additionally, happiness, empathy, gratitude, and selflessness increase when people spend direct time in the more-than-human world (Capaldi et al., 2014; Kopytin, 2016).

Some indirect or long-term health effects of regular nature exposure include an increased overall fitness level and an improved immune system. Being in nature is thought to produce an onset of allergies, but continual exposure encourages the human body to strengthen, alleviating

allergies and respiratory diseases (Kuo, 2015). Along with enhanced fitness levels, an individual may lose weight, reducing the risk of obesity, heart, and lung disease. Outdoor activity regulates sleep leading to better rest, a more stable personality, positive mood, motivation, and boosting self-confidence. Individuals are less likely to feel stressed in daily situations with regular walks in nature, lowering continual anxiety and depression.

Nature and art making have been a neglected resource in the mental and physical health care fields for many years (Atkins & Snyder, 2018). Many forest and natural medicine researchers have found that “exposure to the many shades of color that comprise the “green” we see in plants is itself calming and healing” (Clifford & Page, 2020, p.13). Exposure to green spaces bathes humans in healing influences impacting restoration. If greater populations had prolonged or direct exposure to green spaces society would see a decline in physical and mental sickness. Nature enables creative exploration, growth, and willingness to engage with the world and other humans (Atchley et al., 2012; Louv, 2008). Eco-art making begins the healing, mending, and connecting process of humans in relation to art and nature (Atkins & Davis, 2009; Atkins & Snyder, 2018; Kopytin, 2016; Roszak, 1995; Clinebell, 1996).

### **Eco-Art Therapy**

The contemporary health care practice of forest bathing, works toward restoration of the relationship between nature and humans, reflecting similar characteristics of the art therapy practice. Eco-art making is “medicine for the soul” (McNiff, 2004, p.7). The medicinal creative process, being present, and feeling deeply connected to nature, may bloom a greater purpose.

Eco-art therapy is the intersection of art therapy and nature therapy. Being in nature and working with earthen materials is a holistic approach, “promoting balance and harmony with ourselves, our lifestyles and our environment and in doing so, aims to alleviate the ever-

increasing stresses and anxieties of this world” (McGeeney & Kingsley, 2017). Using natural materials within a green environment makes room for total expression and reflection (McNiff, 2004). The act of making gives space for individuals to ponder, make sense, tell a story, and grow in relation to nature - closing the liminal circle of the natural experience. Eco-art therapy invites individuals to see the world differently, and learn how to think, feel, and perceive in new ways (Clifford, 2018; hooks, 1995; Kopytin, 2016). Eco-art therapy, like Forest Therapy and Art Therapy, is not about an outcome but the process of inward transformation and creating *hohzo* with the ecosphere. Clifford and Page (2020, p.9) believe the greatest promise is “the feeling of being-ness and an appreciation for all things in this world.”

Being in nature and making art earnestly compels humans to be actively present and be in the body - bodyfulness. Engaging in the natural environment promotes tactile movements, and sensations in the immediate moment (Chapman, 2014; Lusebrink, 2004). Dr. Moon (2009) states that “an advantage of art therapy is that the art product is a present object, and relating with the object is a here-and-now process. Even when a client chooses to create artwork related to a long-past event, the experience of making the art piece is a present-tense experience” (p. 202). The art experiential allows for creative self-expression, a basic human need provoking the participant to create their own path and reconnect to nature (Moon, 2009). The stimulus of forging their own way, a body-based experience in nature, calls for acknowledging personal existence; potentially setting in motion the process of communicating, and making-meaning of lived experiences.

Modern eco-artist, Andy Goldsworthy builds site-specific sculptures and land art using natural materials. Goldsworthy consciously works with the awareness that the landscape will change and documents the passing of time. The natural collaboration is “not about art. It's just about life and the need to understand that a lot of things in life do not last” (Art Net, 2021).

Goldsworthy goes into nature not to impose anything upon it, but to learn and try to understand. Andy Goldsworthy explores color, which gives him insight into the more-than-human world, seen in *Rowan leaves laid around hole, Yorkshire Sculpture Park, 25 October, 1987* art piece (Figure 1) (Riedelsheimer, 2001).



*Figure 1 Rowan leaves laid around hole, Yorkshire Sculpture Park, 25 October 1987*

Eco-art can include examinations of material, bringing material to life, or working to get into a personal flow.

Eco-art therapy “is rooted in the belief that creative processes are reflected in the cycles of the natural world” (Atkins & Davis, 2009, p.274). Creating art in nature can bring greater understanding to life's balance. Earth art opens the ability to match the energy inside everyone with the energy within the land (Riedelsheimer, 2001). The human body is part of the material, the art, and the place. Individuals use their hands to create the object, in response to geographical

factors. Earthen artists make from the environment, being sensitive to the ecosystems. Their bodies become part of the material and the place. The hands are the means to make from the place, creating a relationship and reciprocity between the body and the art (Elbrecht & Antcliff, 2014). The hands, body, landscape, and art go together in the web of nature (Atkins & Davis, 2009).

Developing the ability to be present and observe the natural world without constantly seeking answers is essential to truly connecting with nature. It is important to take time to slow down and appreciate the intricate details of the environment, using senses to engage with the more-than-human world. Recognizing the interconnectedness of all things, including the link between human health and the health of the environment, is crucial. As part of nature, humans need to nurture a healthy relationship with the environment. This reflective, creative, growing process and being still in nature is like cultivating land. One must continue retreating into nature and creating art to sow the seed, until the bloom is ripe for harvest. The harvest is healing, deepened connection and the holistic benefits of nature and art. The process takes time and is vital for human well-being and for the well-being of the planet. “Through honoring these connections with nature and environment we honor ourselves” (Atkins & Davis, 2009, p.274).

### **Mind-body Interaction**

Art and nature as therapy is a mind-body interaction that has different levels of complexity within the brain (Lusebrink, 2004). Art making in nature activates neuro-brain functioning. Different types of artistic expression and perceptions stimulate different brain processing systems. For instance, spatial placement and visual feature recognition are processed through the ventral and dorsal branches of the visual information processing system. The therapeutic art process supports the somatic aspects of memory, uncensored sensations and thoughts that are

stored in the artist's right hemisphere (Chapman, 2014; Lusebrink, 2004). Body stimulation activates the right hemisphere of the brain that stores imagery and brings forward perceptions and emotions. The "right-hemisphere visual representation of internal sensations is achieved through the body via rhythm and movement-nonverbal methods of expression" (Chapman, 2014, p. 22). The neurophysiological systems and brain stimulation are active throughout eco-art making (Chapman; Lusebrink, 2004). One may come across certain sensory elements in nature that have the potential to trigger a memory (both symbolic and cognitive aspects) (Lusebrink). For instance, the fragrance of a flower or tree, the feeling of sand or a tree branch brushing against a bare leg during a walk, or the sound of an animal can serve as such stimuli.

The sensate qualities within materials are highly explored in art therapy. The material exploration process helps the unknown become known. This forms the way of expressing, knowing, and communicating experience. Art therapy uses the bottom-up approach, meaning, one must engage and integrate body awareness through sensorimotor processes, which then give rise to cognitive, speech, and higher thought processes.

Materials bring awareness of instinctive motor impulses within the body, including the muscles, organs, heart rate, and breath. Sensorimotor art therapy involves expressing and then perceiving these impulses through the senses, which promotes the development of fresh neurological pathways that have the potential to heal distressing memories. By using this bottom-up approach, individuals can restore their overall wellbeing and sense of wholeness.

The kinesthetic and motor impulses 'lead the way' in the therapeutic experience. Creating is mostly perceived through the tactile-haptic, visual sensory and perception avenues of the brain. When someone is making eco-art all the senses are stimulated and called upon leading to an art piece or visual imagery. Concrete visual imagery allows for easier access to emotions than

through verbal communication alone (Kaminski-Cohen & Weihs, 2016). Once the body perceives, the sense is then processed for meaning, feeling, associations through cognitive and verbal routes. Kinesthetic, sensory art experience (like eco-art) can help externalize memories and feelings (Atkins & Snyder, 2018; Chapman, 2014). This study's nature-based expression process involves a multitude of visual, emotional, motor, and somatosensory stimulation, which are very important in therapeutic experiences (Kaplan, 1998; Lusebrink, 2004; McNiff, 1998).

Art making in the wilderness could tap into aromatherapy. For instance, smelling eucalyptus trees, grass after a heavy rain, and lavender, arouses senses to surface in the body, like awakening and relaxation. The sensation of smell can create deep connections tied directly to emotions. Association of scent may help individuals recall memories, emotions, and has the power to create feelings and emotion. Scents are processed and perceived in the olfactory cortex, located in the temporal lobe, which organizes sensory input. The brain processes scent, memory, and emotion in the limbic system. Within the limbic system, the olfactory cortex (where odor is processed and perceived) directly interacts with the amygdala (where emotions are processed) and the hippocampus (where new memories are formed). A smell can act as a trigger for recalling events or experiences, for example the scent of blooming jasmine conjuring up memories of a joyful childhood picnic. Working with raw earthen material brings forth smells, potentially stimulating feelings and emotions.

The sounds one may hear in nature engages the brain in making meaning of the present environment. Making sense of the natural surroundings emulates similar patterns as the art making discovery experience. The artist needs to explore the material, how the material holds space, moves, sounds, looks, and feels in order to discern placement within the artwork, just as



one explores land while walking in order to stay safe (Lusebrink, 2004). The basic human instinct of exploration, through listening, cultivates presence and meaning making.

White, Wallace, and Huffman (2004), state that artmaking is a nonverbal method of assessment and gives way to an “uncensored view of a child’s [or adult’s] thoughts and feelings.” Participants in nature-based art making do not have to talk, sit still, or make eye contact while creating (Atkins & Snyder, 2018). This could be of special interest to individuals who are diagnosed with Attention-Deficit/Hyperactivity Disorder, on the Autism Spectrum, those who have experienced trauma, or those who wish to take a break from social interaction. The nonverbal method of artistic expression while in nature can bring forth untamed experience and a greater opportunity to tap into one’s senses.

Through movement cognitive connections can be formed and enriched. Eco-arts call the maker into movement, mentally and physically. Patterns of repetitive behaviors may be common in creating art in nature, like picking up and stacking stones from the earth. The repetition mimics rhythms found in nature known to be soothing, like the sound of ocean waves crashing on the shore, or a light rain on trees. Natural environments give abundant space to act out, opposed to indoor rooms that may suppress needed movements or actions, heightening feelings of entrapment. The execution of movement allows palpable relief within the body, opportunity to develop a more caring relationship to the body, along with learned self-regulation (van der Kolk, 2014). Eco-art invites experimentation.

Through focusing on sensorimotor processes body awareness increases in therapeutic art making. Touch is important for human experience. Stimulation through touch provides feedback to the brain, stimulating neural pathways. Involving the tactile-haptic pathway through therapeutic art making “allows non-verbal access to psychological and sensorimotor processes,”

a link to neurobiology and lived experiences (Elbrecht & Antcliff, 2014). German art therapist Heinz Deuser developed the Clay Field therapeutic approach. Clay Field uses non-gritty clay within a rectangular box to access the haptic perception with clients who have experienced trauma (developmental, complex, and single incident). The Clay Field approach “provokes touch as a means to find oneself: as I touch the other, I am being touched; as I make an imprint, this imprint reflects me. The material provokes basic needs such as to touch and to find the other, to grasp and grab to have for oneself, to find and know one's own rhythm with movement, to discover one's sense of unity and wholeness through balance” (Elbrecht & Antcliff). Through the clay work the participant expresses, through sensorimotor actions, a somatic reality - giving insight to the interaction of internal and external lived experience. Touch provides an increased awareness, bodyfulness, that may be wordless, fulfilling a human need.

Eco-art experiences encourage self-soothing, grounding, and sensory development. These benefits are especially important for those who have experienced trauma. Evidence points to the great need in therapy and recovery to engage the body and cultivate sensory awareness with people who have undergone trauma (Elbrecht & Antcliff, 2014; van der Kolk, 2014). Trauma is complicated, the body may hold and remember, even if the mind does not. The body:

remembers its injuries and traumas, but it also remembers its needs, its instinct to survive and to heal... Trauma is a psychophysical event that can result in residuals of these experiences being held within the body long after the event and are manifest through the human psyche, relational system and nervous system (Elbrecht & Antcliff, 2014).

Trauma affects the internal and the external world of individuals. The invisible wounds of trauma that are imprinted and stored within the central nervous system can be brought out and reworked. Rather than cognitive recall (potentially retraumatizing the individual), art therapy invites the body to express, and tell the story through present moment sensory experiences.

Becoming aware of physical senses can trigger impulses in which individuals may have had to abandon to survive during the trauma. It is critical to re-engage and experiment with the impulses to “ultimately bring the incomplete trauma-related action tendencies to completion” (Elbrecht & Antcliff; van der Kolk, 2014). In *The Body Keeps the Score*, Dr. van der Kolk (2014) explains that “traumatized people need to learn that they can tolerate their sensations, befriend their inner experiences, and cultivate new action patterns” (p.275). By engaging in activities that allow for the exploration of physical sensations, such as sensorimotor art therapy, the body and mind can develop interoceptive abilities that pave the way for greater emotional awareness and healing.

Creating art can then become a means of entering the liminal state, a transitional space where processing and growth can take place. Liminal space can be described as, being on both sides of a fence or threshold, where time stops, and worries go away. This flow mind set is not in a dissociation type of way, but rather a healthy meditation. The flow or ‘being in the zone’ is helpful for therapeutic intervention (Czamanski-Cohen & Weihs, 2016). Andy Goldsworthy speaks of the natural found *flow* in nature, and the goal to replicate and match that way of being within himself while creating eco-art (Riedelsheimer, 2001).

### **Existential Psychology & Logotherapy**

Existential psychology falls under the large umbrella of humanistic theoretical approach. Many humanistic and existential therapists “share a deep conviction that individuals long for, and strive to create, meaning in their lives” (Rubin, 2011, p.123). Existential psychologists look at the ‘whole’ person, and view an individual as more than just parts, understanding that a person has multiple layers and levels of self-awareness (May, 2015). For healing to occur the physical, emotional, spiritual, and mental aspects all need to be addressed (McNiff, 2004). People have

free will and are participants in their journey, rather than mere observers. The underlying principle is that people's lives have purpose, value, and meaning.

Both existential therapists and participants dive into the therapeutic process and pain together. The role of an existential therapist is to love, be open and willing to sit in the pain, walk alongside the individual and be present for their journey (Moon, 2009), aiming for "authenticity rather than objectivity" (Rubin, 2011, p.189). Participants are not objects and do not have fixed symptoms, but instead, they are the creators of their lived experiences and have the power to adapt and change life circumstances. An individual may seek therapy due to internal struggles, not feeling grounded, and loss of meaning. Through creating art and becoming one with nature, individuals can answer the question, "What is the point of life?" in order to "transform their self-view from victim to hero" (Moon, 2009, p.16). The psychotherapy and creation process can help "detect or discover the meaning of life by exploring the soul of what we invent in our creative work" (Moon, p. 44). Through exploring artistic channels an individual can tap into self-awareness and self-expression. Pat Allen (1995), an art therapist, explains:

My existence was marginal, uncomplying, because my feelings, necessary for a sense of meaning, were missing. Art making is my way of bringing soul back into my life. Soul is the place where the messiness of life is tolerated, where feelings animate the narration of life, where story exists. Soul is the place where I am replenished and can experience both gardens and graveyards. Art is my way of knowing who I am (p.ix).

Through the art making process, an individual can experience the purpose for existence. One can find meaning in creating images with simple material while being present in nature (Allen, 1995).

James Hillman's (1992) essay "The Soul of the World" points to the ecotherapy field coming into being. Hillman contends that psychopathology cannot exclusively be an individual's reality, as that subdues authentic experience (Atkins & Davis, 2009). Hillman (1992) petitions

for an “aesthetic response to the world, returning it to soul, a living responsive reality” (Atkins & Davis, p.275; Dissanayake, 1995). Art making in nature is an aesthetic intervention, calling to respond to living (hooks, 1995; Dissanayake, 1995; Hillman, 1992). Art has the amplitude to stimulate *defamiliarization* (hooks, 1995; Kremer, 2020). Eco-art making can help individuals to see or experience something different, taking them “away from the real only to bring us back to it in a new way” (hooks, 1995, p. 4). Jolting people into seeing differently (Kremer, 2020). Earthen art can “open a door of inquiry or spark a sense of intuitive recognition” (Clifford & Page, 2020, p.12). Participants may feel the act of making in nature to be inherent, cultivating the human biophilic tendencies, helping manage existential anxieties (Chaudhury & Banerjee, 2020). Eco-art can support the forging of identity, facilitate choice-making, self-direction, and empowerment.

If an existential, art, and nature therapist were to be with an individual while creating, the therapist and participant together could look at Ludwig Binswanger’s three different aspects of human existence to begin to understand the individual fully and as they truly exist. Binswanger, a leading Swiss existentialist, describes the aspects as *Umwelt*, or "world around," pointing to the biological drive and relationship between the being and its environment; *Mitselt*, or "with world," the social and inter-human relationships; and the *Eigenwelt*, or "own world," the subjective world and experiences of the self (Avila, 2012). Art transcends the being and can help “reflect on and articulate our total existence, the "essence" and "form" of being human” according to Binswanger (Roger, 1997, p.22).

The danger of artmaking is to become aware of oneself and the situation one is in, existential anxiety (Leclerc, 2011). Leclerc (2011) brings forward the idea of witnessing through artmaking - a double bind. A creative act may produce awareness and bond to the world, human

life, and an individual's past identity. In the context of the Holocaust, artists in concentration camps grew conscious of these links of existence which the Nazis wished to eradicate. The stark contrast of the concentration camp and life before internment caused psychological torture, loss of spirit, meaning, hopelessness, and even death (Leclerc, 2011). The artwork produced in the Holocaust "are images in search of witnesses to represent them, to harbor and respond to them, and to respond to the offense committed against all that is made visible by them" (Leclerc, 2011). The artworks call the viewer's attention to give purpose, recognize and imagine all the images that were destroyed, representing daily reality, adding new layers of meaning (Haen, 2017, Leclerc, 2011). To barre "witness to the witness," and to the past is significant in the therapeutic existential journey (Leclerc, 2011).

Through nonjudgmental witnessing the participants in this study are called to hold space and make sense of their material, artwork, and environment potentially resulting in making meaning of their life's experiences (Moon, 2009). Viktor Frankl developed logotherapy, an existential theoretical perspective. Logotherapy was brought to fruition from Frankl's (1978) experiences and observations while in multiple concentration death camps during World War II. According to Frankl, a human's "main concern consists in fulfilling a meaning, rather than in mere gratification or satisfaction of drives or instincts" found in Freud's psychoanalysis (Avila, 2012; Frankl). Frankl (1990) suggests that by finding meaning, humans can overcome the worst of suffering and that no matter how much is taken away, humans can retain the power and freedom of thoughts to find meaning in existence. The Holocaust gave Frankl (1990) insight, he spoke in an interview of discovering a meaningful life in three distinct ways:

namely, by doing a deed or creating a work, second by experiencing something or someone, something refers to nature, culture, and someone, another human being whom we are loving...and by the attitude we take towards unavoidable suffering.

To find meaning or purpose one needs to create and experience nature (Moon, 2009; Frankl, 1978).

The restoration process can be joined with an environmental and artistic metaphor for deep contemplation. Existentialist, Moon (2009) accounts: "Theologians discuss metaphor as a concept that holds in tension the potential for multiple interpretations; their purpose being to illuminate or expose truth" (p. 10). Creating a metaphor invites individuals to have multiple perspectives while exploring their present truth. Eco-art can elicit meaning making through creating a metaphor. The study's intentional ambiguity of the natural art experiential allows for unique life experiences to come into existence. Being called to witness the artwork and process, participants are asked (in the post-art questionnaire) if creating eco-art unearthed any metaphors and stimulated a greater understanding of life.

Human health is linked to the health of the earth, not just physically, but psychologically and spiritually (Atkins & Davis, 2009; Clinebell, 1996). Thus, if an individual wants to heal, find purpose, and rejuvenate their whole person, they need to be relating the more-than-human world and take active responsibility for the health of the earth. The existential therapeutic journey is a constant process of change and spiritual challenge (Moon, 2009). This eco-arts study looks at the emotional, physical, and spiritual experience in terms of existence.

### **Population**

The population of interest for this research are 'normally' functioning adults aged 18 years or older, from any location around the world. 'Normally' functioning adults are people who self-

identify as not having a psychological disability. The student researcher recognizes the importance of establishing a baseline or normative data through research with a population that is deemed to be functioning within a typical range, to better understand and identify differences from typical or expected patterns of behavior. However, the student researcher also believes that there is no such thing as 'normal' in an absolute sense and hopes to challenge society's narrow definition of what is considered normal and promote acceptance and inclusivity of all individuals regardless of their differences. This means recognizing that people's experiences are diverse and varied, and that everyone has strengths that should be celebrated. Therefore, while there is a need for research with a 'typically' functioning population to establish a baseline, this should be done with an awareness of the limitations and potential biases of such an approach, and with a commitment to promoting inclusivity and diversity in all aspects of research and practice.

Adults are accustomed to the tamed world, the comforts, distractions and demands. Clifford mentioned that it is very difficult competing with the tamed world, beckoning individuals into a nature experience (Clifford & Page, 2020, p.11). Due to the difficulty of finding adults who are willing and able to go into nature and create, the student researcher sought participants on social media platforms that had existing communities of adults interested in nature or art. It's important to note that recruiting participants solely from existing social media communities may limit the diversity of the sample and potentially bias the results. Therefore, it is crucial to consider how the participants' backgrounds, experiences, comfort in nature, level of adult's aesthetic knowledge widely contributes to the eco-art making, influencing this study.

Adult aesthetic knowledge broadly contributes to art making in different natural environments (Carpenter, Gabrielsen & Harper, 2018; Dissanayake, 1995; McGeeney & Kingsley, 2017). Young children may not have a deep understanding, explicit knowledge and



appreciation for beauty and aesthetics which is used to inform the creation of art. Although, some may argue that children often have a natural sense of curiosity and wonder about the world around them that can inform their artistic creations and lead to unique, pure, and valuable perspectives. The researcher chose the adult population mainly for safety considerations of the participant and comprehension of the study's questionnaires.

A study done in Dublin, Ireland by Aimee O'Neill, and Hilary Moss, focused on art therapy with adults with chronic pain. The art therapy group addressed emotional and psychological issues, exploring the individual's experience of pain, moving beyond the pain, along with integration, reflection, and moving forward into the future (O'Neill & Moss, 2015). Many adults live with different pain, whether it be physical, mental, and/or spiritual. The O'Neill and Moss study indicates that art making with adults can create opportunity for self-expression, reflection, a sense of control over one's life situations, along with enhancing adaptive coping skills and reducing stress (O'Neill & Moss, 2015, p.159). Reduced anxiety and stress, due to creating art improves overall well-being which unavoidably benefits the whole community.

By asking adult participants to engage with nature and create art using natural materials, this study not only provides a therapeutic opportunity for adults, but also has the potential to educate and inspire younger generations about the benefits of spending time outdoors. The founder of Taoism, Lao Tzu, is known for his proverb "Give a man a fish; feed him for a day. Teach a man to fish, feed him for a lifetime" (Makokis, 2009). The fishing paradigm of self-agency and teaching can be connected to therapeutic actions giving purpose or meaning. If an adult finds meaning, or significant satisfaction while making art in nature, their new findings can transfer over to children affecting society overtime. Atkins and Davis (2009) took out a group of graduate school adult students into nature. "What we find from creating and sharing direct

sensory experiences in nature in the context of a graduate class is a sense of belonging and renewal, a deep respect and humility in the presence of the beauty and the creative complexity of the natural world” (p.281). This suggests that taking adults out into nature can create a sense of connection and appreciation for the natural world that goes beyond the present moment.

### **Setting**

The concept of a therapeutic setting is challenged in this study, and argues for a more inclusive orientation, as nature plays an active role in the creative and therapeutic experience (Carolan, 2001; Kopytin, 2016). Nature develops awareness and awakening, which can help initiate action, change, and self-actualization. Being in nature aids the cognitive meaning-making process and helps understanding in all fields of life.

Nature can be unpredictable and when a person fully engages, heightened emotions and potential distress may surface, like uncertainty and fearfulness. This could be viewed as a limitation or risk, although it is believed it can be transformed into awareness, growth of connection and resilience (Kopytin, 2016). “Fear is one indication that one’s sense of awareness is increased within the connection of nature. This is not fear of nature itself, but fear of how powerless one can be within the context of the wildness of nature and the realization that nature is much more powerful than any one individual.” (Atkins and Davis, 2009, p. 277). The somatic mode of attention is a state of true wakefulness and attunement with nature (Caldwell, 2014).

Western culture “thinks of nature as a luxury, not a necessity. We don’t recognize how much it elevates us, both personally and politically” (Williams, 2018, p.12). The O’Neill and Moss Ireland art therapy study found that moving clinically ill patients from creating art in a hospital environment to an artistic environment (outside of the hospital) highly correlates with artistic activity giving space for processing and living (O’Neill & Moss, 2015, p.166). A

conducive safe, creative, imaginative space and creating art provides a distraction from pain and other struggles, which is noted in many qualitative articles (O'Neill & Moss 2015; Lynch et al., 2013; Moon, 2009; Shapiro, 1985). The role of art and nature extends farther than changes in physical symptoms, psychological well-being, and/or social interaction; it is vital to human existence (Atkins & Davis, 2009; Kopytin, 2016; O'Neill & Moss 2015, p.159). Nature is not a luxury; it is a necessity. Richard Louv (2008), conveys that people are losing connection with nature, which is causing 'nature deficit disorder.' This disorder can cause a decline in physical health, mental health, and emotional well-being (Pointon, 2014). The natural setting in this study encourages rejuvenation and calls for a redefining of 'therapeutic setting'.

Howard Gardner (1999), a developmental psychologist, and professor at Harvard University explains that the ability to recognize the natural world is a form of intelligence, called naturalist intelligence. "All of us can do this [recognize]... While the ability doubtless evolved to deal with natural kinds of elements, I believe that it has been hijacked to deal with the world of man-made objects" (Louv, 2008, p.72). Digitization manufactured highly accessible and addictive machinery, raising issues with those who wish to reconnect with their naturalist intelligence and detox from technology. Sherry Turkle, a professor at Massachusetts Institute of Technology (MIT) recognizes that it is important and necessary to have no-phone zones and have unwired places, like the wilderness (Turkle & Doughty, 2015). This is because nature helps restore attention and makes humans have sharper cognition (Williams, 2018). David Strayer, neuroscientist, and professor said being in nature is a "recalibration of your sense, of seeing and noticing" (Williams; 2018, p.37).

David Strayer has been taking students on multi-day seminars into the wilderness for many years (Williams). His research focuses on how students' mental experience is connected to the

environment. Strayer believes that the campfire setting is much more superior than the classroom because, “by the fire they [students] come alive” (Williams, p.188). The French philosopher Gaston Bachelard wrote in 1938 that fire brought about philosophy (Bachelard). Fires bring people together for warmth, communion over meals, both basic human necessities and meeting Maslow’s hierarchy of needs (Maslow, 1943). Professor Strayer emphasized on the social and communal aspect of having students together in awe of the fire rather than their phones (Williams). After leading students in the outdoors, Strayer was able to conclude that the students were “starved for social interaction, for connection” (Williams, p.191). To reduce this deprivation, adults can begin by feeding the intrinsic need by going outside and engaging in a natural interaction, like eco-art making.

Strayer also studied creativity in fifty-six Outward Bound participants. After participants spent a few days in nature, Strayer found that there was a 50 percent improvement in creativity (Atchley et al., 2012). Strayer’s findings indicate the importance of nature on generative cognition, connection, and creativity. John Dewey, an American philosopher, psychologist, and educational reformer, insisted that human life follows the patterns of nature (Dewey, 2008). Dewey has expressed in his past works that thinking is not derived from nature, it is part of nature (Rømer, 2013). Humans reflect their environment; it plays a critical role in how an individual acts and thinks (Atchley et al., 2012). If an individual is regularly outside, peace, presence, relaxation, clarity, and decision making can be elicited. Both Buddha, Jesus, and many other key religious figures retreated into the wilderness to seek freedom, and wisdom in order to love and accept others radically (Williams, 2018).

Green spaces are accessible regardless of ‘outdoor skill’ and physicality. The open invitation summons individuals who may have never created art or gone into nature with a

therapeutic mindset. Having an earthen arts study enables full inclusion with the aspiration to dismantle racism, socioeconomic status, judgement, and body shaming in the outdoor industry (Allan, 2008; Demos, 2016; Kjaran & Kristinsdóttir, 2015). Earthen art can give power to the suppressed or voiceless and be used as visual politics - rising awareness and compelling society to evolve (hooks, 1995). The experience has one direction with no boundaries, giving freedom and access to all possible people and creations (Moon, 2009).

Additionally, this study has been conducted during the COVID-19 pandemic, being outside aligns with safety and social distancing protocols. Nature itself is one of the primary therapeutic sources for participants, as they interact with wildlife, plants, heightening social connectedness, and experiencing the more-than-human world (Chaudhury & Banerjee, 2020). The participants created memories, in which they cherish, through the art documentation process (photographs, poems, etc.). Reflecting on memories can encourage positive thought, help deal with loneliness and strengthen well-being. There are many additional health benefits to being in nature that are paramount during a state of national crisis (as stated in the Holistic Benefits of Nature thesis section).

## **Materials**

The natural human activity of being in a green space and creating art is an ancient practice that created culture. Ordinary people would make objects and images to celebrate, mark and remember important dates, such as births and deaths (Allen, 1995). Utilizing natural materials dates as far back as 2 million years ago, during the Stone Age, where the early human species would hunt and gather to survive (Carpenter, Gabrielsen & Harper, 2018). Natural materials are free and relatively easy to acquire (Rolston, 1982). Collecting materials is instinctive and built into the human mind and body makeup (Atkin & Davis, 2009; Gabrielsen & Harper, 2018).

“Intentional choosing of natural elements heighten awareness of the beauty” one can find in nature (Atkin & Davis, p.280). Repetitive acts like gathering or moving natural materials (i.e., textile arts) have been found to be therapeutic (Potter, 2019). Collecting, scavenging, and using raw earthen material brings individuals into the physical environment, stimulating the mind, body and arguably the spirit. Many indigenous communities would use found objects as art materials to create images. Pacific Northwest First Nation peoples like the Tlingit (pronounced KLIN-kit) and Haida would use rock tools to carve into large western red cedar trees to tell a story, honor a family, person, or event. The carvings, called totem poles, would then be painted with natural pigments from berries and mixed with oil from salmon eggs, to deepen the symbolism.

Taking away complex, man-made, synthetic materials, eliminates potential preconceived notions about what art should be and anxiety about personal limitations of artistic ability (O’Neill, Moss, 2015, p.166). Individuals may find the creative endeavor welcoming, due to the familiarity of the simple art materials and natural environment. This may make the natural materials easier to engage with, with no judgement.

Creating art, using natural materials in a green space is not about exploiting nature, becoming primitive, or adding another ‘resource’ for the art classroom. This study does not wish to plunder nature, but instead calls for individuals to *be* in nature, in harmony and in relation to the more-than-human world. Through observation and continual analysis of land through making, a connection occurs and a state of discovery of belonging to nature (Clifford, 2018; Hjorth & Ikonen, 2021). The use of natural materials brings forward the fundamental importance of the earth systems (Dzombak, 2021). The use of raw earth asks individuals to think broadly about material and how one can communicate.

Soil scientist, Doctor Karen Vaughan, bridges the gap between art and science. Vaughan collects soil pigments and creates watercolor works for educational and conservation purposes, bringing attention to the critical role of soil and terrestrial biodiversity (Pressler & Vaughan, 2021). The immense variability and beauty of the raw earthen material, stirs curiosity and appreciation. Soil and pigment color can tell a lot about the natural history of areas: “Bright reds and oranges mean the soils were exposed to the oxidizing effects of intense climates, long stretches of time or both. Dark browns and blacks represent rich organic matter, reflecting the cycle of life and death at the Earth’s surface... Stark whites could mean acid once trickled down through the soil from a pine copse, or that ash once settled over the landscape” (Dzombak, 2021). Vaughan’s small batch watercolor pallets tell stories of the land, experiences, and reflections of people. The California 2020 September wildfire became a pallet of ash-infused pigments, then used to create works communicating wildfire distress and textures. Soil can be more than ‘just dirt’ (Dzombak).

Creating art from natural materials introduces profound metaphors. From the very beginning artists are turning ‘nothing’ into something. Potentially bringing natural elements together that “can jar people into thinking and seeing differently, perform cultural critique, produce connections, or associations or refining or enhancing meanings” (Chilton & Scotti, 2013; Kremer, 2020; Vaughan, 2004). The artist is creating a conversation within space from which the materials have been formed. The composition may be left in the environment to naturally disappear, calling the artist to let go. A passersby could observe the art piece if the creator left the artwork, eliciting a new exchange of emotion, and thoughts evoked.

Sometimes natural materials do not hold, they break, and the artist must learn to pick up the broken pieces, mend them back together, and continue forward. The artist is faced with

numerous choices, demanding debate of personal preferences, to compose from the broken pieces, creating a new dialog, to stop and start over, or to use only some of the pieces. The trauma of the material breaking mirrors the breaking of one's life, which may in fact develop an internal dialogue between different parts of the self. The creator is issued with the call of constructing a resolution to the crisis (Potomac, 2004). If the artist does not experience ruptured material during the creation process, they may encounter the loss once the art is complete.

Oftentimes eco-artists, like Andy Goldsworthy, leave their creations to decay, mirroring nature's rhythms. Because the materials are beckoned back to their home one way or another, part of the process of nature-based arts is to document the work created. Some document by taking photographs, others may document through various artistic means, like poem, story, song, film. The final artwork is not necessarily the photographs or documentation, but the documentation is one of the results of the artwork. It is important to note that the documentation or photography is not the reason for creating art in nature, but the act of photography can be therapeutic (Wolf, 2007). Phototherapy is a recently developed modality, and sector of art therapy. The documentation process tells the story and occasionally is the only record that the artist was in the environment.

Artists like Finnish-Norwegian duo Riitta Ikonen and Karoline Hjorth create works that blur the line between nature and human. Their international work seeks to give new perspectives, understand "who we are and where we belong" (Hjorth & Ikonen, 2021). Ikonen and Hjorth give voice to what it means to be human, bringing attention to the senior population typically marginalized. The elder models (retired farmers, fishermen, zoologists, plumbers, opera singers, housewives, etc.) put on elaborate tactile wardrobes immersing into found material in local landscapes. Morphing the human into nature, pushes definitional boundaries of the natural world.



Ikonen and Hjorth document the living sculptures through photography and storytelling, engaging the viewer as if they were on the earth alongside the living sculptures. By using raw earthen materials, eco-artists can explore the fine line of belonging in the web of life.

The study aims to mirror nature's autonomy by avoiding any prescriptive art guidelines, enabling participants to have a more self-directed approach to nature-based art. The absence of set rules allows for greater freedom of expression and encourages individuals to explore. In addition, the integration of multi-sensory stimulation and somatic experience further enhances and informs the emotional, creative, and nature experience, allowing for a profound and holistic connection with nature (Grosz, 1994).

## Chapter III: Methodology

### Population

This study was carried out with a 15 normally functioning adults aged 18 or older. Participants self-reported if they are ‘normally functioning adults’ on the consent form. Minors were excluded in this study due to an increased level of risk, and the vulnerability of the population. The adult population was identified and recruited through friends, family, organizations, word of mouth, and social media. Participants ideally were able to safely go and move in natural, outdoor spaces. Posters calling for participants were made for digital and physical distribution (see Appendix B). This research asked for participants who were willing and ready to engage in an art activity in a green space, on their own time, and in a location of their choosing (see Appendix I, Plan #2 for accommodations).

### Location

Adult participants lived anywhere in the world, which allowed for a diversity of natural environments to be utilized for this study. There were no constraints to where the more-than-human world was located. Some participants may have gone to their local park, beach, or bay, others created art in more remote and less accessible locations. In the demographic pre-art form, participants were asked to define nature. This allowed the researcher to better understand the participant’s view of the outdoors. Typically, individuals act upon their definition of words. The definition of nature or green space has a significant correlation to the participant’s chosen art location. The risk of harm to the participants was largely due to the outdoor location, but resources on physical safety (in the form of recommendations) were created to mitigate that risk. (see Appendix J). The resources were made available to all participants before going out into

nature. Individuals were not forced to go outdoors and the participant's signed a consent form prior to the nature-art engagement (see Appendix I).

## **Materials**

As evidenced by the findings in the literature review, using found natural objects as art materials should be reasonably easy to come by, and should evoke an additional sense of reciprocity with the land. Due to the variety of locations, the natural materials used within the participant's artwork were diverse. Some participants found and used similar objects, but the specific material was unique. No two leaves or two beaches are the same, they may have a different texture, color, grain size, origin, etc.

## **Research Design**

This research sought to understand what art making in nature using natural materials evokes in adults around the world. An arts-based research design was utilized to emphasize new insights awakened from the power of creations in nature. The synergized effect of nature and art was explored and communicated through the participants' art creations, imagery, metaphors, and written responses.

The artwork informed the research, as the artist's process and their completed work is the inquiry. The art-based research design emphasized the artwork, the process, the relationship between art and the universe, and the relationship between art and maker (Carolan, 2001; Leavy, 2020). Using an arts-based lens gave space for another way to look at meaning and alternative ways of knowing (Carolan, 2021). The participants were asked to sign a consent form, fill out a demographic pre-art questionnaire, make art, document their creation in the natural environment, and fill out a post-art making questionnaire. If an individual chose not to photograph their artwork as documentation, the participant was welcomed to compose alternative artistic

documentation. Such documentation consisted of, but was not limited to, drawing, written description, film, poem, song, and dance. This art documentation was used as data. These tools helped generate knowledge through “resonance and understanding” (Leavy, 2020).

### **Accommodations Offered**

In the hopes of accommodating individuals with different abilities and making the research study accessible to all, the researcher offered a diverse range of accommodations (see Appendix D). However, despite these accommodations being made available, no individuals requested them. Considering the COVID-19 pandemic, it was important to note that some participants may have been unable or unwilling to go outside due to health concerns or social distancing measures. If such measures were in effect during the study's duration, participants were advised to follow local regulations and limit gatherings to reduce the spread of the virus. Everything was subject to change depending on the participant's location and comfort level. The researcher interacted with participants virtually and only used online methods of recruiting. Participants were able to access and send all forms, questionnaires, and artistic data to a confidential online platform. All post-study continued inquiry was done via email, phone, or video conferencing. If an individual was worried about contracting COVID-19 or was feeling sick, it was acceptable for individuals to interact with nature through a window, rather than being immersed in nature, in order to protect themselves and others. This study allowed alternative artistic responses, without natural materials (to an individual's involvement with nature through a window). It was also acceptable for individuals to use natural materials inside a building to mitigate risk and accommodate the participants.

If an individual with a physical disability and/or a visual impairment showed interest in participating in this nature-based art study, but their ability caused difficulty, the individual could

reach out to the researcher to request special accommodation. To accommodate different sight abilities the questionnaires and consent form were formatted in large text sizes and/or special font style. Upon request, the researcher could provide the individual with contacts of local supporting organizations to help with accessing outdoor locations. To accommodate different physical abilities that may cause difficulty accessing a natural environment, the researcher could help participants acquire natural found objects to use as art materials. If the participant and researcher could not find a local resource, the researcher could send a packet of natural objects (such as leaves, sticks, pebbles, etc.). The participant had to share their contact information to receive the packet. As with the COVID-19 arrangements, it was acceptable for individuals to interact with nature through a window, rather than being immersed in nature. It was also acceptable to create an artistic response (to an individual's involvement with nature through a window) without natural materials.

Additional accommodations included participants having the questionnaires and forms translated into their native language to better comprehend questions, their rights, and/or the study's intentions. If a translation was requested, the participants had to indicate as such in the post-art questionnaire. If an individual did not have access to a camera, they were welcome to compose alternative artistic documentation of their art experience in nature. All forms of artistic documentation were acceptable, as long as they could be transferred via email.

### **Data Collection**

The data was collected through the participant's eco-artwork response and forms. The participants filled out a consent form (see Appendix A), demographic and pre-art questionnaire (see Appendix D). The participants' written answers to the follow-up questionnaire (see Appendix F) were collected after the art making occurred. The consent, demographic, pre-art,

and post-art questionnaires were shared with the participants virtually. These forms were collected through a study-specific and secure email address. The data collected included photographs of participant's artwork, other alternative art documentation/response, and the artist's experiences, which were gathered through the demographic form, pre and post questionnaires, and, if the participant agreed to future contact, through continued inquiry.

### **Maintaining Access to Participants**

Participants were welcome to share their contact information if they wished to be contacted about future opportunities outside the scope of this study to further advance the findings, co-present, or to further discuss the participant's experience with the researcher. Participants were reminded in the forms to reach out to the researcher and/or principal researcher if they had any questions, concerns, or comments. Additionally, a contingency/accommodation plan was made to maintain access to participants (see Appendix I).

### **Participant Process**

Individuals viewed the call for participants and emailed the study-specific email address, stating their interest. The researcher then provided the individuals with study information, documents, and a consent form (see Appendix A, Appendix E, and Appendix J). Participants filled out the demographic and pre-art questionnaire (see Appendix D) and emailed the pre-art forms to the study's private email address. Next, participants interacted with nature (anywhere in the world) and created art with natural objects, documenting their art creation and/or creating an artistic response to their experience (ex. photograph, poem, story, etc.). Participants then filled out the post-art questionnaire (see Appendix F) and sent the documentation of their artwork and/or artistic response and post-art questionnaire to the study's private email address.

### **Demographic/Pre-Art Interview Questionnaire**

The demographic section of the form included the participant's name, gender, age group, and location. The pre-art questionnaire asks questions using different Likert-type scale anchors (see Appendix D). The aim was to clearly understand the participants' feelings, perspectives, and frequency of art practice. The respondents were asked to choose one option that best aligns with them for each statement.

The frequency statements and level of support statements in the questionnaires informed the research. If the participant was new or adept at art making and nature, it may have impacted comfort level, and creativity in this study. The connectedness and comfort of the environment may have influenced the art and may be reflected in the analysis. If an individual had never gone into nature or used natural elements as materials, their final artwork may have looked strikingly different than other participants. An individual may have marked that they do not enjoy making art and do not enjoy being in nature, potentially causing a negative experience with no found personal insights; hence these statements were important to note.

The participants were instructed to briefly respond to two short response questions. The first question is, 'How do you define nature?' The word nature can be defined in many ways because it can be a phenomenon, concept, specific location, characteristic, etc. Nature is relative. An individual's definitional understanding of nature affected where they go to make art. A participant may have considered their backyard nature, another may have found the ocean or a lake nature. Natural environments on this Earth are abundant.

### **Post-Art Exploratory Questions**

The exploratory questions in the post-art questionnaire explored the participant's natural art making experience (see Appendix F). The researcher sought to learn how the participant felt

after the eco-art experience compared to before. The distinct written data could be linked directly to eco-art unless otherwise specified by the participant. Throughout the inquiry participants explained what they created, their eco-art inspiration, their process, timing, what they did with the art piece, and newfound insights. The researcher was curious about auditory stimulation as it affects brain processing and feelings of safety. If a participant heard constant truck noise due to a nearby highway their guard may have been up, inhibiting liminal space and meaning making. Individuals were prompted to describe their emotional, physical, and spiritual experience while being in nature and making art. The written account may have dove into becoming present in nature, awareness of outside textures, kinesthetic movements, and thoughts or feelings that surfaced. The participant was then asked about any specific metaphors that surfaced, if the experience stimulated greater understanding and if anything caught their attention that they would normally not notice. These responses might point to participants' meaning making, and present awareness.

The last section of the post-art questionnaire asks for a level of support to various statements. The researcher contemplated safety, comfort, benefits, peace of mind, relaxation, and satisfaction of the art nature experience. The declarations also look at what feelings natural materials evoke. The only prompt found in both the pre- and post-art questionnaires is 'I feel connected to nature.' Participants were able to circle how much they agreed or disagreed with that statement. The purpose of replicating this statement is to uncover if an individual has grown in relation to nature. As stated in the literature review, if a person has a relationship with nature, feels connected, and sees value (greater than mere objects), they will sustainably coexist with nature, and potentially solve the global environmental crisis. Lastly, the participant was asked if they would make art in nature again and recommend it to others. If an individual thoroughly



enjoyed the experience, they are asked to share their email or any form of contact information for future contact for continued inquiry of their experience in the study.

### **Data Analysis**

The data from the participant's written questionnaires were analyzed by grouping and compiling them together and reviewing. The answers were analyzed by the researcher for major points, general, common, and unique themes, outliers, and recurring words. The researcher understood the participant's experiences through the questionnaires, artwork, and continued inquiry. The researcher approached this study with the view that the participant is the expert of their own experience, thus the questionnaire will ask the participant what their artwork means or represents to them.

The response artwork data was analyzed through thematic analysis, generating visual art genres, and allocating themes of common visual elements. The thematic analysis was done by the researcher, along with a team of trained inter-raters. The skilled team of assessors looked at the artistic elements of the works (i.e., the use of space, color, textures, common shapes, and materials). Through external dialogue with the researcher's peers, feedback has been solicited and noted. If the participant agreed to future contact, the researcher sought out data validation from the participant. Potential validation happened after the researcher sat with the data in the context of the study and was then confirmed by the participant.

### **Risks**

Humans engaging in natural environments and materials come with health and safety risks, such as unforeseen natural disasters, harmful habitats, or conditions potentially causing injury. Due to being in the outdoors or an unfamiliar location, eco-art making may have caused increased levels of stress and/or anxiety for the participants. Individuals were asked to leave their

homes and/or create art using natural materials during the COVID-19 pandemic. This was potentially putting the participants at risk of catching COVID-19 through touching unknown objects and going outside where the individual could be exposed. The researcher addressed these risks and liability through the informed consent form (see Appendix A). Additionally, the participants received two safety recommendation resources before going out into nature (see Appendix J). One resource highlighted what to bring into nature, the 10 essentials, nature ethics, and recommendations. The second, informed the individual about safely participating in outdoor activities during the COVID-19 pandemic. Participants were not forced to participate in this research, they could withdraw with no repercussions. The researcher was not liable for any injury or harm to the participant that may have happened during participation in this study. The researcher sent the debriefing documents when/if an individual chose to withdraw.

The nature-based art directive was believed to help promote physical health and mental health through therapeutic art making, kinesthetic movement, tree phytoncides, and other known benefits. The researcher believed that the limitations and risks of this study could be transformed into awareness, growth, and resilience (Chaudhury & Banerjee, 2020; Kopytin, 2016). The researcher and licensed mental health professional were available during the study to help participants process any discomfort that may have arisen. The debriefing statement was given for additional aftercare support. The researcher also included a resource sheet that is relevant to the study, in case any participant needed additional assistance (see Appendix H). Referrals for mental health services were provided for any participant who requests them.

### **Considerations**

This study considered many matters and aimed to have an absence of directives, rules, and regulations while keeping participants as safe as possible. To limit risk and exposure to COVID-

19, the researcher did not have any in-person contact with participants. This study was virtual; thus, the participants must have had access to the internet to complete the questionnaires and send in the artistic documents. Without internet access, the participant was unable to sign the informed consent and confidentiality form. The participant is allowed to have another individual help them complete the forms and send documents over the internet. Due to the nature of this international study, individuals who choose to participate must speak a little English. A language barrier could have been an issue affecting consent, rights, art ownership, and safety. If any or all parts of the study were translated for greater understanding the participants were required to indicate that in the post-art questionnaire. The researcher sought to be culturally sensitive and accommodating for those with different abilities (see Appendix I or Accommodation section).

The researcher also considered the environmental impacts of participant creations. Participants received hyperlinks and resources to heighten environmental consciousness and engaged in learning (see Appendix H). The researcher asked every participant to leave no trace. Meaning if an individual carried something into nature, they should have carried it out of nature. Participants were also recommended to stay on the trail, which kept the participant, flora, and fauna safe, along with minimizing erosion. This study did not desire to exploit nature for art materials, rather brings environmental awareness and a sense of 'awe.' If an individual forms a relationship and grows to love nature, they will protect what they love.

The researcher desired participants to create their own art piece in nature, although participants were encouraged to not go into nature alone - a safety precaution. For this reason, it was acceptable to have groups of people go out into nature who were participating in the study. Although, having multiple people engage in one eco-art piece could affect the natural noise intake/production and generate a communication component affecting the experience, study's

purpose, and findings. To participate in this study, each individual worked on an eco-art piece, signed the consent form, and fill out the pre- and post-art questionnaires.

### **Protection of Participants**

Participants submitted all the forms and attachments online via a secure platform. There was a specific email for this study only for data collection. The email address was multi-step password protected, and all the data is in the locked file. Once the study was complete, all data on the email platform was erased and the email address was permanently shut down. All participant's personal data collected was kept confidential and was only shared with written consent from the individual. The researcher coded all participant responses, for example: "Gender Identity (number) and location" or "W1\_California," or Participant (Number).

The participants had no face-to-face contact with the researcher, protecting them from potential exposure to COVID-19. The participants were not forced to touch or use any natural material they were not comfortable with. The Center for Disease Control and Prevention (2021) stated that people are less likely to catch COVID-19 if they are outside and wearing a mask. The researcher suggested to the participants to wear a mask and stay socially distant during the art making, outdoor experience (see Appendix J). The safety recommendation resources were given to the participants before going out into nature. The researcher also included a referral sheet that was relevant to the study, in case any participant needed additional support (see Appendix H). Information on the referral sheet included a link for international crisis text lines, suicide hotlines, Forest Therapy websites, and Art Therapy websites. If a participant was unable to participate, the researcher sent them the resource pages.

## **Research Timeline**

The exploration was conducted between January and August of 2021, and the study was completed by May 2023. The published study should be available, by June 2023. Participants may receive an email copy of the final report if they reach out to the researcher. Most results have been grouped; therefore, individual results are not available. The researcher will potentially create an online art exhibition of the international earthen artworks via participant's documentation once the study is complete.

## **Implications**

Creating art in nature may inform the art therapy field in where natural materials fall on the art medium continuum. The study could indicate the importance of creating art to make sense of an outdoor experience. Along with helping individuals heal in a natural and holistic manner. This research may reveal the strengths and benefits of the intersection of nature and art. Creating art in nature may encourage meaning making, bodyfulness, and a greater connection between mind, body, and spirit.

## **Idea of Outcome**

Creating art in nature with natural materials, evokes feelings of peace, connectedness to nature, stimulating meaning making or existential thought. The therapeutic act of collecting natural materials/found objects, then creating something out of nothing may lead to adults recalling childhood experiences, spawning a sense of nostalgia. The researcher thinks most artworks will reflect the natural environment and existing shapes, patterns, found in nature (circles, spirals, lines, stacking). The researcher believes that most participants will leave their artwork in the natural environment, allowing the materials to decay and disperse over time. The

outdoor space will most likely affect the participant's artwork and mood. The researcher believes that most participants will enjoy the process of creating in an outdoor environment.

### **Student Researcher's Bias**

The researcher has a deep love for both nature and art making, finding both to be deeply healing. Having worked as a mountaineering guide, the researcher feels most at home when surrounded by the great outdoors. Through this work, the researcher has seen firsthand the therapeutic value of nature, as countless individuals have found peace, gratitude, love, and self-acceptance on treks in the wilderness. Additionally, as an art educator, the researcher has facilitated and observed the transformative power of artmaking, and the ways in which it can help individuals restore their health and well-being.

The researcher desires to acknowledge her ethnic, socioeconomic background, and privilege. Because of these things she has had easier and safer access to the outdoors, impacting her decisions, perception, and connection to nature. The researcher aims to “decolonize nature” (Demos, 2016). She hopes this study is one step toward dismantling racism, socioeconomic status, judgment, and body shaming, in order to create a more inclusive, diverse outdoor culture (Allan, 2008; Kjaran & Kristinsdóttir, 2015). Eco-art can be used as visual politics, giving power to the suppressed or voiceless (hooks, 1995). This study seeks to facilitate the intersection of aesthetics, ecological awareness, climate justice, and radical love for all living systems.

### **Research Expansion**

This research cannot be generalized to all adults around the world due to the limited sample population. Thus, replication of this study in different contexts would be significantly beneficial for the Art Therapy field and Nature and Forest Therapy field. Groups of individuals working on one eco-art piece would expand research and will help others understand the larger picture of

creating art in nature. Nature-based art as a means of making sense of experience has great potential to be explored with specific populations and settings (like children's hospitals, forensic, schools, etc.). Further research is needed to investigate the somatic and eco-art processes informing the emotional and healing experience (Grosz, 1994). It would be interesting to understand humanity's relationship with the land, through nature art making. One might consider applying William Bauer's literature on land identity, how humans are affected by the loss of land, to eco-arts therapy. Further expansion opportunities include working with first responders, Forest Rangers, Park Rangers, Fire Fighters, who experience burnout and need help finding meaning in their work or career. Additional areas lacking literature that need to be investigated further include the use of raw earthen material in relation to the curative properties of multi-sensory stimulation, along with where specific earthen art materials fall on the therapeutic art medium continuum. Further study needs to be conducted on the body relationship in conjunction with connectedness to nature (Caldwell, 2018).

## Chapter IV: Findings

### Data Collection

The call for participants was made through various channels, including two Facebook groups called "Nature and Forest Therapy" and "International Art Therapy," as well as the researcher's social media pages and by word of mouth among the public. It is important to mention that although people who are not art therapists can join the Facebook groups and take part in the research study, there may be some participants who identify as art therapists or nature, forest therapist.

Over 100 people inquired about the research study and 28 Individuals took action to participate in this research study. One individual did not send in their consent form, so all submitted documents from this individual were voided in the research. 10 people sent in both their consent form and pre-art questionnaire but never turned in any art documentation or post-art questionnaire. 17 individuals completed and sent in the consent form, pre-art questionnaire, and created art documenting of experience. Of those 17 individuals, 15 completed the post-art questionnaire. For the sake of this study, the researcher has only used data from the 15 individuals who submitted a consent form, pre-art questionnaire, artwork, and post-art questionnaire.

The baseline for each participant was established using a pre-questionnaire. This questionnaire contained a list of statements (see Appendix D for the complete list) that asked participants about the frequency of their artmaking, whether they create artwork in natural settings, whether they use natural materials when making art, and whether they spend time in nature. Participants were asked to circle one of the options - never, rarely, occasionally, moderate amount, or a great deal - in response to these statements on the pre-questionnaire.



In addition to circling their responses to the frequency-related statements, participants were also asked to indicate their level of agreement with the following statements: whether they identify as artists, feel comfortable creating art, enjoy making art, feel comfortable in nature, feel a connection to nature, and enjoy spending time in nature. Participants were instructed to circle one of the options - strongly agree, somewhat agree, neutral, somewhat disagree, or strongly disagree - in response to these statements. As part of the pre-questionnaire, participants were also given the space to provide their own definitions of 'nature,' as well as to write any additional comments or questions they may have had related to the study.

By analyzing the responses to the questions in the pre-questionnaire, the researcher was able to extract valuable information related to the participants' mood, confidence, identity, past experiences, level of comfort, openness to new experiences, personal definitions, and other relevant factors. This information is useful for understanding their eco-art making experience, as well as their overall participation in the research study. All these aspects are interconnected and can provide valuable insights.

The post-art questionnaire was designed to explore the participant's subjective experience, emphasizing their unique perspectives. It recognizes that the participant is the expert of their own experience. Open-ended questions were used to identify how artmaking impacted their mood, sensory perception, physical sensations, emotional and spiritual experience. The questionnaire also aimed to determine whether the artmaking led to any new existential understandings or metaphors, and how it influenced the participants' confidence, therapeutic experience, and use of natural art materials (see Appendix F for the complete list of questions).

In addition to completing the questionnaires, participants were asked to create eco-artwork and document their art. This artwork serves as valuable data for the study, providing a tangible

representation of the participants' personal experience. Through their artwork, the participants' creative process, progress, individual style, and environment can be revealed, offering insights into their life and experiences.

By including the participants' artwork as research data, the study takes a humanistic approach that values the participants' agency and personhood. This approach ensures that the participants are not objectified for the sake of research, and that their life and art are respected and valued. Overall, the eco-art contributes to a deeper appreciation of the participants' encounters with nature.

The study's art was assessed by a group of art therapy colleagues who served as inter-raters. They were informed about the participant's eco-art prompt and shown the artwork without any information about the artists. The inter-raters analyzed various aspects of the artwork, such as the depicted environment, the elements present, and the contrast. They also identified the art medium, and tools used, shared words that resonated with the art, and noted the emotions it evoked in them. To conclude, the inter-raters provided a one-word summary of their experience witnessing all the participants' eco-art.

This panel of inter-raters comprised experts in the field who could offer valuable insights and understanding of the collected art data. As outsiders, they were able to view the art differently, with the goal of gaining new perspectives and insights. By categorizing and grouping the artwork to identify themes, clear patterns and insights among the participants emerged during the data collection process.

### **Demographics**

Fifteen participants completed all the requirements for the study. Among the participants, there were 2 males and 13 females. The age range was diverse, with 7 people falling into the 20-

29 age range, 3 people in the 30-39 age range, 2 people in the 40-49 age range, and 1 person in the 50-59 age range. Additionally, 2 people were in the 60-69 age range, while there were no individuals over the age of 70. It is possible that the absence of older participants in the study could be due to the call for participants being primarily advertised on online platforms, which may have limited the reach to older populations who may not be as active online. Despite this limitation, the small sample size of the study provided a diverse range of participants that could yield valuable insights into the topic being studied.



*Figure 2 World Map of Participant's Locations*

The study had a diverse group of participants from various regions around the world, including California and Indiana in the United States, the Philippines, Pakistan, Scotland, Portugal, and Italy. Additionally, participants came from various regions within Canada, including Saskatchewan, Nova Scotia, and Ontario (see Figure 2). This geographic diversity of the participants offers valuable insights into how the topic being studied is understood and

experienced across different cultures and regions. However, it is important to note that the sample size is small and may not be representative of the broader population.

Despite the study's geographic diversity, several participants were unable to fulfill all the study requirements and were located in various regions worldwide, including British Columbia in Canada, Brunei in Southeast Asia, New Zealand, Oregon and Texas in the USA, Latvia, and Malta and France in Europe. While their inability to complete all the requirements may have impacted the sample size and geographic diversity of the study, the completion rate among the majority of participants still provides valuable insights into eco-art therapy.

### **Descriptive Data**

In the pre-art questionnaire (see Appendix D), participants' engagement with art and nature was assessed through ten multiple choice questions. The pre-art questionnaire revealed that most participants had a strong inclination towards artmaking, with 10 out of 15 participants indicating they make art a great deal or a moderate amount. However, only 1 participant makes artwork in nature a great deal, while 4 participants make artwork in nature occasionally or rarely, and 3 reported never. The use of natural materials for artmaking is not a common practice among participants, with only 2 participants reporting that they use natural materials a great deal. Despite this, most participants frequently go into nature, with 13 out of 15 indicating they go into nature a great deal or a moderate amount, indicating a strong affinity for nature. Furthermore, most participants (13 out of 15) identify themselves as artists and feel comfortable making art, with 14 out of 15 expressing some level of agreement. All participants enjoy making art, as evidenced by their unanimous agreement on this statement. Additionally, most participants feel comfortable being in nature and feel connected to nature, with 14 out of 15 agreeing to some extent. Overall, the pre art questionnaire suggests that while the participants have a strong

interest in making art, there is less of a focus on making artwork in nature and using natural materials.

In the post-art questionnaire (see Appendix F), participants were asked about their experiences during and after the art-making session in nature. The majority (8) felt safe and comfortable in the environment, with 6 somewhat agreeing and only one person somewhat disagreeing. Participants found the art-nature experience beneficial, with 11 strongly agreeing and 4 somewhat agreeing. A sense of peace and relaxation after creating in nature was reported by 10 participants who strongly agreed and 3 who somewhat agreed, while 2 participants remained neutral.

Regarding satisfaction with their art piece, 7 participants strongly agreed, 5 somewhat agreed, and 2 were neutral, with one person somewhat disagreeing. Most participants (9) found that using natural materials was creatively freeing rather than limiting, with 4 somewhat agreeing, although one person was neutral, and another somewhat disagreed. Participants had varied feelings of control using natural materials: 6 strongly agreed, 3 somewhat agreed, and 4 remained neutral, while only one person somewhat disagreed.

A strong connection to nature was felt by 11 participants after the session, with 4 somewhat agreeing. The majority (11) expressed interest in making art in nature again, with 2 somewhat agreeing and 2 participants remaining neutral. Lastly, participants were willing to recommend the experience to others, with 11 strongly agreeing and 4 somewhat agreeing. No one disagreed or remained neutral on this question.

### **Participant's Definition of Nature**

By asking the participants to provide their own definition of nature in the pre-art questionnaire, the researcher was able to identify several key trends and themes that reflect the

participants' understanding and appreciation of the natural world. The interconnectedness of living organisms and natural elements was a prominent trend, with many participants highlighting the complex relationships and unity that exist within nature. Participant 1, for example, describes nature as "an interconnecting system that links all matter in a relationship of constant flux." Furthermore, the distinction between natural environments and human-made or altered elements was frequently emphasized, as illustrated by Participant 2, who states that "nature is my natural environment, my being, and all things that flow without the need for artificial human intervention." This distinction reinforces the importance of preserving natural environments and understanding the potential consequences of human influence.

The themes arising from the participants' responses reveal a deeply personal connection to nature and its role in shaping identity, inspiration, and self-reflection. Many participants described nature as a sanctuary that offers a sense of calm, freedom, and escape from the stresses of modern life, technology, and human-made environments. Participant 8 poetically conveyed this sentiment by saying, "the mountain and the forest are rooted in me, the sea is my breath of fresh air from the density of life." Additionally, the diversity and richness of natural environments were acknowledged and celebrated, as Participant 7 notes that "nature is everything that has not been made by humans" and can refer to various environments, including forests, deserts, and oceans. The complex human-nature relationship is also touched upon, with Participant 5 asserting that "Nature is like the Macrocosm and Man the Microcosm," suggesting a deep connection between humans and nature. Participant 17 provides a unique perspective on nature by defining it as "liberty, freedom, off-line, challenging, wild," further emphasizing the emotional aspects of human relationship with the natural world. In summary, these definitions illustrated the diverse ways in which individuals perceive and relate to nature, highlighting the

significance of interconnectedness, personal connection, and the distinction between natural and human-made environments in shaping understanding of the world.

### **Feelings After Eco-Art Making**

In the post-art questionnaire, participants were asked to describe how they felt and any differences they may have noticed after the eco-art experience compared to the beginning of the eco-art experience. Most participants reported feeling positive changes in their emotional and mental states after engaging in the nature-art experience. Common themes that emerged from the responses include increased focus, calmness, presence, and a sense of grounding. For example, Participant 1 stated they felt "more focused, more calm, more present," while Participant 3 mentioned feeling "more grounded in my body and more present with my surroundings." Several participants also expressed that the experience allowed them to take a break from their daily stressors and anxieties, as evidenced by Participant 5's response: "This work gave me a break from the fast-paced and anxious life...This activity helped me calm down and take a step back to reflect upon all that is still hopeful and life-giving, amid these frightening times."



*Figure 3 Participant 8 Video Screen Shot, second 46, footprint, nature and trash*

In addition to the common themes, there were some outliers and unique experiences. Participant 4 did not notice any long-lasting effects, stating, "I do not notice any differences this far from the original creation date." Participant 8 shared a more complex experience, mentioning that the healing powers of the forest seemed to enhance their wounds, disheartened by the trash (see Figure 3). Participant 13 felt physically tired but also more creatively confident after the activity, and Participant 15 described their personal journey with the ocean and how it related to their art-making process.

### **Time Spent on Art**

When looking at the reported amount of time spent to create the art on the post-art questionnaire, the time varied significantly among the participants, ranging from as short as 5 minutes to as long as one month. Some participants, such as Participant 1, spent about 5 minutes on the actual art creation but noted that the total time, including gathering materials, was closer to 30 minutes. Others like Participant 5, who mentioned working in breaks and taking a month to complete their piece and had a more extended and sporadic creative process.

A few participants spent around 30 minutes to an hour on their artwork, such as Participant 9, who shared it took them "finding an idea was the longest part." Some participants engaged in more time-intensive processes, like Participant 12, who spent approximately 3 hours from the start of their walk to the end of the artwork, and Participant 17, who took 10 days to finish their piece. The widely varied time among participants, reflects the diverse creative processes and the individualized nature of this eco-art-making study.

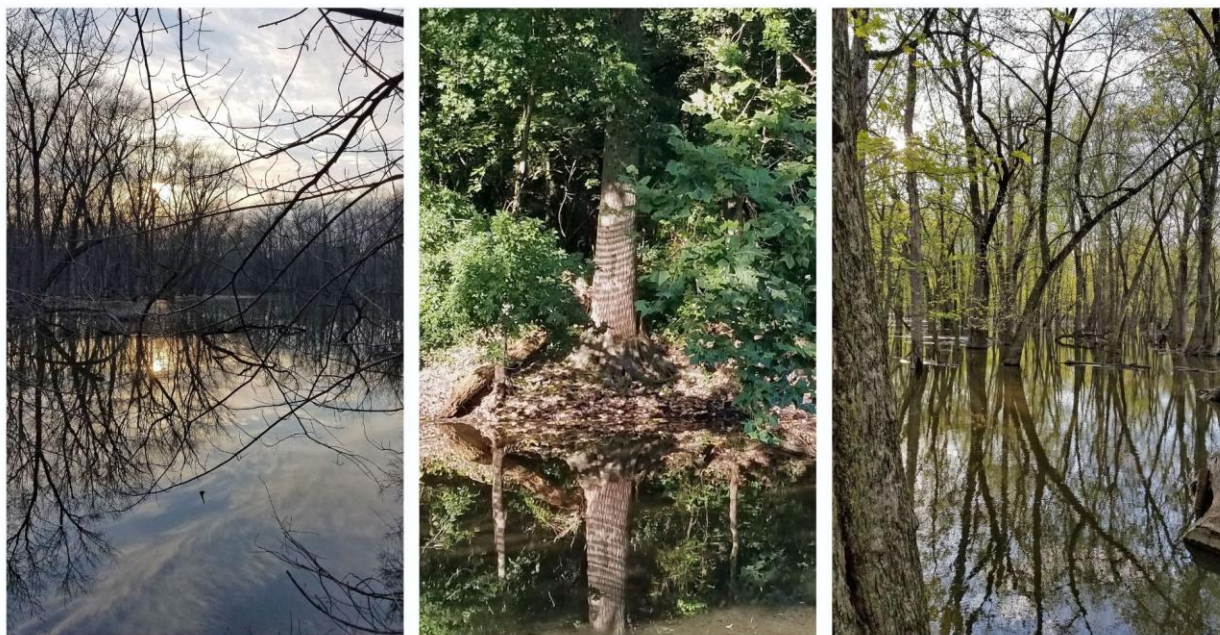
### **Attunement**

Participants were asked what sounds they heard while creating. Most reported hearing a mix of natural and man-made sounds. Common natural sounds included wind, water, birds, and



waves. For instance, six participants mentioned hearing wind, while Participant 3 heard "bees, my cat purring, water lapping the shore." Man-made sounds such as people talking or walking, traffic, and distant background noise were also mentioned by several participants. Participant 4, for example, reported hearing a "generator" alongside natural sounds like birds and wind.

Certain participants experienced a more immersive soundscape, like Participant 15, who described hearing "leftover thoughts of lost souls of fishermen and loved ones" while walking the shores and feeling drained afterward. The diversity of sounds reported by participants showcases the varied environments represented, highlighting the individualized nature of the study and the unique sensory experiences that can arise in eco-art therapy.



*Figure 4 Participant 11 Reflection Photographs*

Additionally, participants were asked in the post-art questionnaire if anything caught their attention that would typically go unnoticed. Several participants reported becoming aware of details they would otherwise overlook. Participant 2 described their renewed attraction to nature, stating "first love never dies." Participant 5 poetically noted the forceful energy of sunlight

breaking through the night sky, while Participant 7 found beauty in individual sand grains, rocks, and shells. Participants 10 and 12 paid closer attention to their surroundings, discovering small mushrooms, tree seeds, animal tracks, and tidal patterns. Participant 11 observed a unique reverse reflection of water on a tree due to sunlight, a phenomenon that only occurs under specific conditions (see Figure 4). Four participants did not report any new observations. However, for those who noticed, the experience seemed to foster a deeper connection with nature.

### **Mind, Body, Spirit Experience**

The emotional experiences of the participants while making art in nature were diverse, with many reporting feelings of calmness, tranquility, and connection to the natural environment. For example, Participant 1 described their experience as "tranquil presence," while Participant 2 felt "calmness, freedom, and vitality." Others, like Participant 5, found the process to be "meditative" and "cathartic."

Some participants experienced challenges, such as feeling stressed or frustrated initially (Participant 7 and 9) but then enjoyed the process once they settled into the activity. In contrast, Participant 8 expressed feelings of disgust and sadness upon encountering pollution in the forest, leading to reflections on nature conservation and personal responsibility. A few participants, like Participant 12 and 16, described feeling a sense of collaboration with nature and appreciation for the impermanent nature of their art. Participant 12 poignantly shared, "It felt collaborative - finding what nature offered, and giving my art back to nature when I was finished." Participant 13 noted that the experience promoted mental peace and emotional relaxation.

Like the participants' emotional experience, participants' physical experiences while making art in nature was varied, with some finding the process relaxing and others finding the

engagement more challenging. For example, Participant 1 described their experience as "quite relaxing," while Participant 4 had a full-body experience, mentioning the heat, sweat, and deep breathing. Tactile and sensory elements were also mentioned, with Participant 9 noting their hands and feet getting wet and sandy at the beach, and Participant 12 enjoying exploring different textures of collected items. A combination of physical activity and relaxation was observed in some participants' experiences. For instance, Participant 13 found the experience to be physically tiring but "in a good way", while Participant 16 felt relaxed and focused on the sensations of their surroundings.

Participants' spiritual experiences while making art in nature also was assorted, with some feeling a deep connection to their surroundings or a sense of relaxation and reconnection with their inner selves. Participant 1 described their experience as akin to Taoist wu-wei, "a sort of 'doing nothing.' It was like being within my body, but not within my egoic self. It was like a flow that moved my hands, an effortless attention that penetrated the hidden presence of each moment." Participant 5 felt a sense of triumph and repelling negative energies, while Participant 8 shared their experience of feeling grounded and connected in the woods: "Being alone in the midst of the woods, observing and listening to the trees, I heard them talking to each other, observed the non-verbal albeit mystic communication with the fellow nature-partners."

In addition, a handful of participants experienced a profound spiritual connection, as Participant 2 mentioned, "I felt God's presence," while Participant 16 felt a deep communion with a tree: "I felt deeply connected to the tree, as if we were communing. As I placed the materials around the tree, we were in conversation, and I listened to the tree guidance." Similarly, Participant 10 expressed feeling deeply connected to their indigenous identity, to the land, river, and plants (see Figure 5).



*Figure 5 Participant 10 Eco-Art; Patterns from sycamore seeds*

### **Unearthed Metaphors**

Many participants found that their artwork or creative process unearthed metaphors during their nature art experiences. Participant 1 encountered "the beauty of change, the beauty of falling apart and coming back together." Participant 5's painting evoked the metaphor of strength and resilience of Mother Nature amidst human chaos, emphasizing innocence, kindness, and harmonious co-existence. For some participants, their art represented a connection between different worlds or perspectives. Participant 10 found symbolism in "creating sky symbols (sun) on the earth" and described themselves as "a connector between worlds" (see Figure 5).

Participant 12 answered the metaphor question by describing their artwork, suggesting "harmony

between past, present, and future”, and illustrated the concept of resilience and adaptation using pinecones (see Figure 6). Participant 13 highlighted the metaphor of fostering new relationships between elements that had a history before their interaction in the artwork, “creating something more beautiful, changing the trajectory of the story”.



*Figure 6 Participant 12 Beach Mandala*

In other cases, participants' artwork reflected deeper philosophies or personal experiences. Participant 16 drew connections to the Japanese concept of Wabi-sabi, embracing imperfection and impermanence in life while also exploring the contrast between nature and human intervention. This process, for them, mirrored the grief process in some capacity. Overall,

the participants' art and creative processes revealed a wide array of metaphors, highlighting personal growth, connections to the natural world, and reflections on human experiences.

### **Participant's Existential Understandings**

Creating art in nature allowed many participants to gain greater understanding and appreciation for various aspects of their lives. Participant 1 was reminded that they are an "ecological phenomenon, tied into everything else by a sense of action and movement."

Participant 2 found that spending time in nature and creating art at the beach sparked a longing for the simplicity and organic aspects of life, which they had lost touch with after living in the city for almost nine years. Participant 3 felt the experience served as a reminder to slow down and reconnect with their body and natural surroundings.

Several participants discovered personal growth and empowerment through their creative process in nature. Participant 5 found that the process of painting leaves served as a reminder that "everything renews, heals, and regrows." Participant 8 reflected on the interconnectedness and impact of individual actions, stating, "My footprint impacts yours, and yours impact mine. Decide carefully about the step. We are mirrors." Participant 13 felt a deeper sense of agency and responsibility for the property they live on and were inspired by the transformation they could create with limited time and resources.

Others found solace and confidence through their artist making practice in nature. Participant 12's experience helped them slow down and deepen their understanding of life transitions, emphasizing the importance of trusting the process and embracing the present moment. Participant 15 developed greater respect for their own mind and art, feeling more confident and supported by the sea as a living entity. Participant 16 gained a deeper awareness of their connection to the more-than-human world, recognizing the importance of the relationship.

### **Fate of the Artwork**

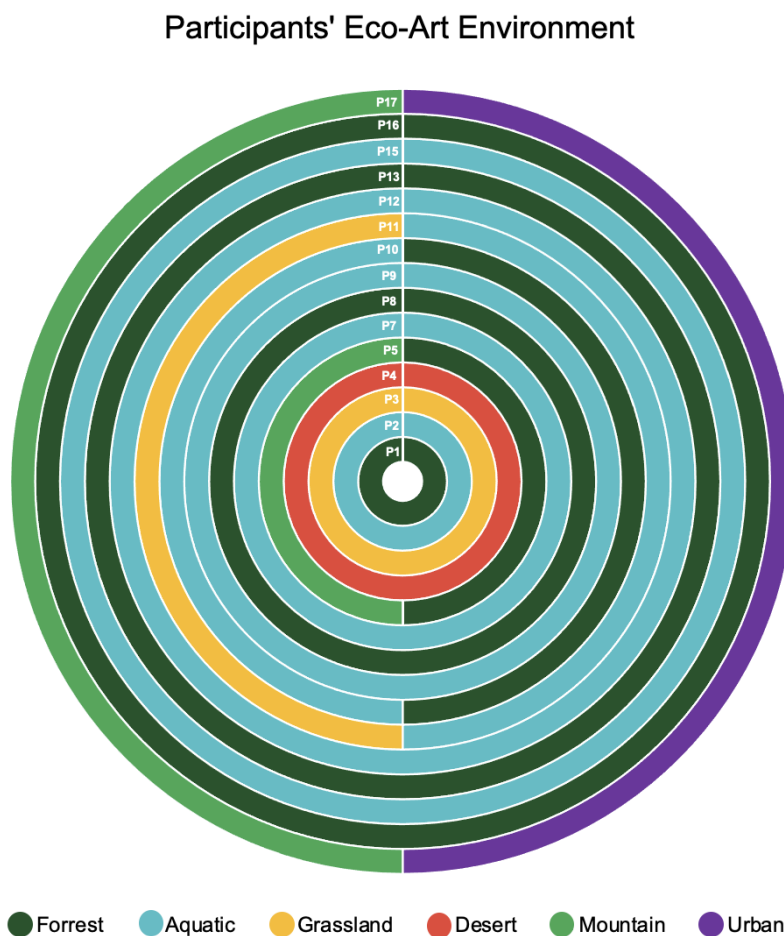
Nine participants chose to leave their artwork in nature after completing it, allowing it to either be discovered by others, destroyed by natural elements, or to simply exist in harmony with the environment. A few participants took their artwork with them or integrated the experience into their ongoing creative processes. Participant 2 left the art (a dance performance) at the beach, although kept the video they recorded on their device, while Participant 5 returned to their studio with foliage to continue working. Participant 15 sent some pieces back to the ocean and kept others for a potential exhibition. Participant 16, who left their art in nature, expressed their hope that their creation might inspire others, saying, "I love the impact we can have on others through art, and I believe that creating art pieces in nature is a great way to stimulate conversation and pique curiosity. Maybe my art piece will encourage others to create a response or become more mindful as they explore."

### **Artwork Categorized**

The researcher employed 8 trained art therapy inter-raters to observe and analyze the participant's artwork. Having multiple observers is essential to ensure a comprehensive understanding of the artwork, as perceptions can vary greatly among individuals. However, it should be noted that the inter-raters' discernment may not always align with the artist's intention. The researcher considered sharing the participant's narratives, metaphors, and meanings with the inter-raters, but ultimately decided against it. This additional narrative data may have clouded the inter-rater's judgment and was not necessary for their analysis.

The inter-raters played an important role in allocating themes to common visual elements and providing objective evaluations of the artwork. They reported on various aspects of the art, such as the environment, elements, contrast, and art medium/tools used. Furthermore, the inter-

raters shared a word which they found most resonated with the artwork and the emotions it evoked within them.



*Figure 7 Eco-Art Environment; 15 rings, each ring represents a participant. The ring is colored based on the environment (see key) the participant's eco-art falls into.*

Based on the data collected from the trained art therapy inter-raters, the participants' artwork exhibited a variety of environmental themes (see Figure 7). The majority of the artwork was classified into two main categories: forest environments (40%, 6 participants) and aquatic environments (47%, 7 participants). Other notable categories included grasslands (2 participants), desert (1 participant, specifically participant 7), and mountain environments (2 participants). A total of four participants' artwork qualified for two categories, suggesting that the



artists captured natural elements from multiple environments. A unique observation was that participant 17's artwork, was placed in both the urban and mountain environment categories (see Vignette 1), indicating the overlap and potential inability to separate nature and urbanization. Participant 4's art was the only work that was created in a desert environment (see Figure 8).



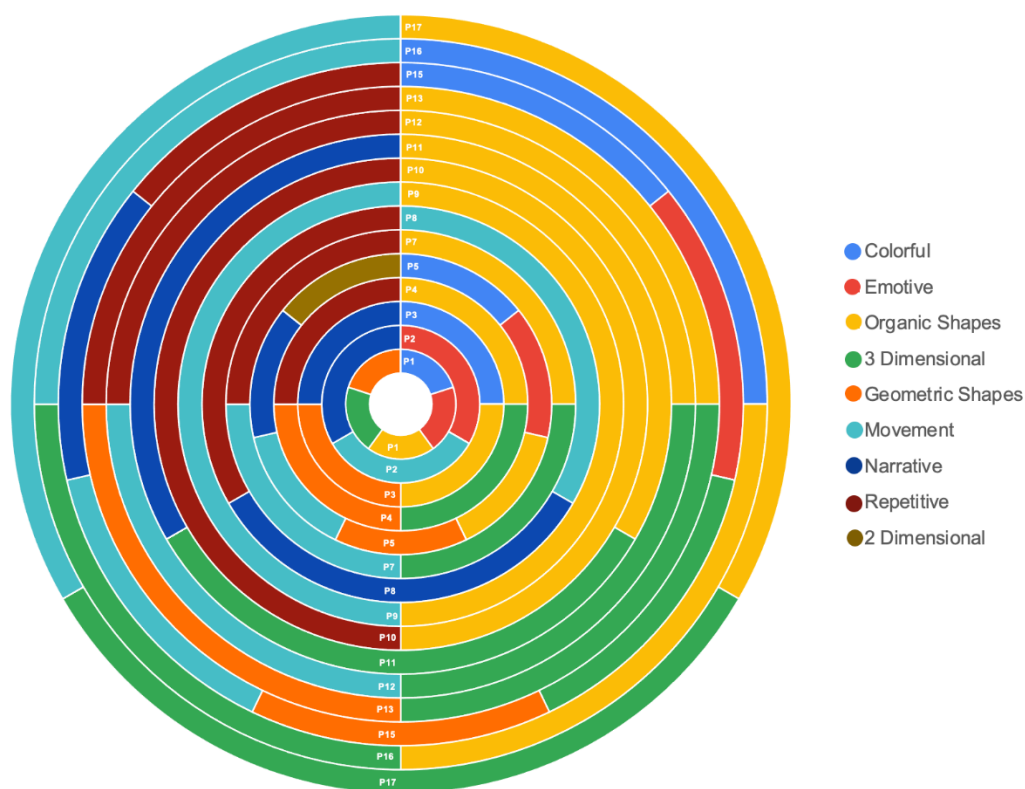
*Figure 8 Participant 4 Desert Eco-art*

The analysis of the natural elements found in the participants' artwork revealed that all art pieces created for this study featured the theme of 'earth.' In addition, a significant portion of the art, 60% or 9 participants, showcased the presence of vegetation, such as flowers and plants. Water was depicted in 5 participants' eco-art, while air or sky elements were present in the work of 6 participants. Another interesting observation was that participant 12 was the only one to include all the natural element categories in their artwork. Furthermore, 5 participants managed to incorporate 3 different elements in their creations.

The contrast of composition in the participants' artwork showed that a majority, 73%, were balanced in terms of light and dark compositions. However, there were a few notable outliers. Participant 10's art was distinguished as being mostly dark, while participant 3's work was fully light. Additionally, 8 participants' art pieces were characterized as having mostly light compositions. These findings indicate that while most participants tended to create balanced artwork in terms of contrast, a few individuals leaned towards either a lighter or darker composition, potentially reflecting their unique emotional states or location during the nature forest therapy sessions.

When analyzing the participants' artwork based on descriptive words, the inter-raters categorized the pieces into nine categories: colorful, emotive, organic shapes (circular/smooth), geometric shapes (sharp angles, straight lines), three-dimensional, two-dimensional, narrative or storyline, movement, and repetition (see Figure 9). The wide range of artistic expression, highlighting the diversity in the creative approaches and styles encouraged by the nature forest therapy sessions. The most observed component in the eco-art pieces was organic shapes, which were present in the work of 12 participants. Other prevalent categories included three-dimensional and movement, both found in the artwork of 9 participants. In addition, 6 participants' art incorporated geometric shapes and narratives, while 5 participants' creations were considered colorful, and 4 were categorized as emotive. Repetitive elements were observed in the artwork of 7 participants, while only one participant (participant 5) presented a predominantly two-dimensional piece. Notably, participants 5 and 15 displayed the most versatility in their artwork, as their creations spanned across 7 different categories.

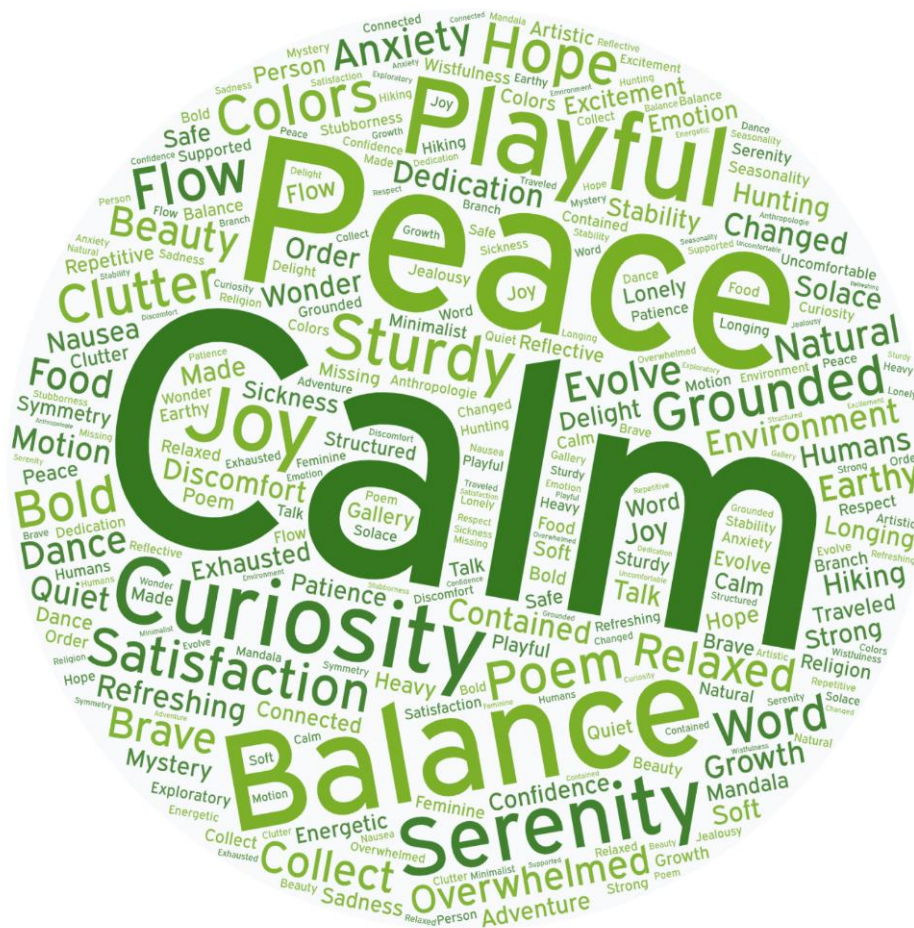
### Eco-Art Descriptive Categories



*Figure 9 Eco-Art Descriptive Categories; 15 rings, each ring represents a participant. The ring is colored based on the descriptive category (see key) the participant's eco-art falls into.*

When examining the art medium or tools used by the participants, various combinations of natural materials, human body interaction, and man-made materials were observed. Many participants, (9 in total) exclusively used natural materials in their artwork. One participant (participant 8) combined the use of natural materials with human body interaction, while another participant (participant 2) relied solely on human body interaction for their creation - a dance on the beach. Interestingly, participant 5 opted for a different approach, using no clear natural materials, and instead using man-made materials in their artwork. Participant 5 took photos over a long period of time that influenced their painting. Lastly, 3 participants chose to use a

combination of both natural and man-made materials for their creations. These findings reveal that the art nature sessions provided participants with the flexibility to explore a variety of art mediums and tools, allowing them freedom to express their unique experiences and emotions.



*Figure 10 Inter-rater Word Collage*

The eight inter-raters were tasked with encapsulating the emotions stirred within themselves by the eco-art pieces, resulting in a tapestry of 120 words. The most echoed sentiments among this collection were feelings of calm, peace, and balance, accompanied by a sense of curiosity, serenity, playfulness, and joy. This emotional spectrum was woven together in a word collage (see Figure 10), shedding light on the ways artistic creation can resonate and evoke emotion within passersby or a witness of the natural art.

The inter-raters dedicated their time to appreciate each unique and individual artwork. Each piece serves as a personal portrait of its creator, reflecting their experiences and emotions. After examining the artwork from various locations around the world, the inter-raters shared that they felt transported elsewhere, emphasizing the power of art to evoke emotions and connect people across geographical boundaries. To sum up their whole experience, the inter-raters used the words, refreshing, explorative, diverse, wonder, meditative, and awe. Their immersive witnessing experience highlights the transformative potential of art therapy and nature forest therapy, which can have a positive impact on one's emotional and mental well-being.

### **Reflecting on the Art**

Many participants took this research call as an invitation to experience something new, recharge their creativity, and open their senses to new possibilities. Some immersed themselves in nature, creating art pieces that captured their experiences or encapsulated feelings evoked by their surroundings. Others focused on the collection and reflection process, using natural materials to build metaphor and create meaning over time. The outcomes were diverse in medium, location, and documentation.

Although each participant's creation was unique, some similarities emerged, such as using found objects, engaging with their surroundings, and being inspired by the patterns and elements of nature. Several participants focused on themes of impermanence, transformation, and the connection between the natural environment and their own emotions.

Impermanence is a recurring theme in the eco-art, as seen in the works of Participants 3 and 12. Participant 3 created a message, "growing into discomfort," on a walking path having foraged materials that will blow away, just like the ever-changing nature of life (see Figure 11).

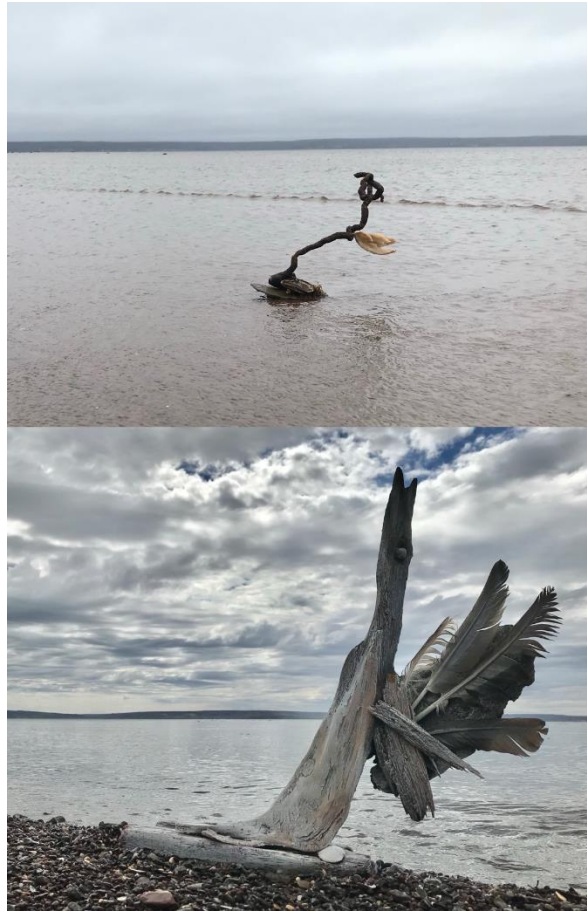
Similarly, Participant 12 intentionally crafted a mandala below the high tide line at the beach to embrace the temporary nature of the artwork.



*Figure 11 Participant 3 Eco-Art Titled: Opportunities*

Transformation was another central theme, demonstrated by the creations of Participants 15 and 16. Participant 15 crafted bird sculptures from driftwood and released them back into the ocean, signifying a transformation from a static art piece to a dynamic interaction with nature (see Figure 12). Participant 15 experienced "a great sense of relief" when releasing the bird sculptures back into the ocean. Participant 16 placed collected materials over broken tree parts to honor and encourage new growth, representing the transformative power of healing and renewal. Participant 16 reflected, "I feel calmer, with a clearer mind. I also feel more content, like I just took a deep sigh of relief." Participant 13 built a rock mandala around the base of an

avocado tree, reflecting the transformative power of nature through the circular, cyclical design, and the process of clearing the area and arranging the rocks.



*Figure 12 Participant 15 Driftwood Bird Sculptures*

In addition to the themes of impermanence and transformation, many explored the dynamic emotional connections between humans and the natural world. Participants 8 and 2 both video recorded engagements with their environment, with Participant 8's video of stepping on leaves highlighting the impact of human behavior on nature and the importance of mindfulness and emphasizing the emotional connection between humans and nature and humans' responsibility towards the environment. Similarly, Participant 2's movement piece with friends at the beach was "a dialogue" inspired by elements along the shore. Both participants' artwork points to human impact, being in and connected to nature.

Participant 9 was inspired by a childhood memory while creating a miniature beach scene, illustrating the link between nature and past emotional memories. Participant 5 delved into the meditative aspect of art by recreating a centuries-old miniature painting with natural pigments, emphasizing the color-making process and the calming effects of nature-inspired art. Participant 7 crafted a turtle using beach-found rocks and shells, showcasing the desire to create art that connects with and complements the natural environment, evoking positive emotions. Similarly, Participant 1 created an arrangement of found objects and reflected, "I facilitated a process whereby the beings found a community amongst themselves."



*Figure 13 Participant 1 Eco-Art*

Other participants found inspiration in cultural heritage and personal identity. Participant 10 used patterns from sycamore seeds to create art inspired by their First Nation ancestors, demonstrating the emotional connection between nature, culture, and identity. Participant 11



combined photography of water reflections and haiku poetry to express their observations of the world, illustrating the impact of nature through visual and written forms. Lastly, Participant 17 created a marble sculpture through a dialogue with the stone, showcasing the emotional connection between the artist and nature, as well as the transformative process of turning raw material into a finished piece of art.

### **Vignette 1 - Participant 17**

Based on the provided information from the pre-art questionnaire, Participant 17 resides in Italy and is in the 40-49 age category. She identifies as female and reported being an art therapist. She shared that she creates art in nature, uses natural materials for artmaking, and engaging with nature moderately. Participant 17 strongly agreed that she feels comfortable making art and being in nature, enjoys creating art and being in nature, and feels a strong connection to nature. However, she only somewhat agreed with identifying as an artist.

Participant 17 created a marble sculpture featuring organic forms (see Figure 14). She spent 10 days completing the sculpture, and during the process, she primarily heard natural sounds, including silence and raindrops, apart from the sound of hammering. While sculpting, she engaged in a dialogue with the stone: "I find, I search the stone, I study it, I touch. I follow its request - it is a dialog between the stone and me."

In the post-art questionnaire, Participant 17 shared that her physical experience of making art in nature was closely linked to feelings of freedom, as it unleashed her energy and allowed her to discover her inner strength. Regarding her emotional state after the nature-art experience, she said, "it's always liberating to work in nature. After I feel stronger." She noted that her spiritual experience aligned with her physical and mental experiences, as all three—mind, body, and spirit—come together when creating art in nature.

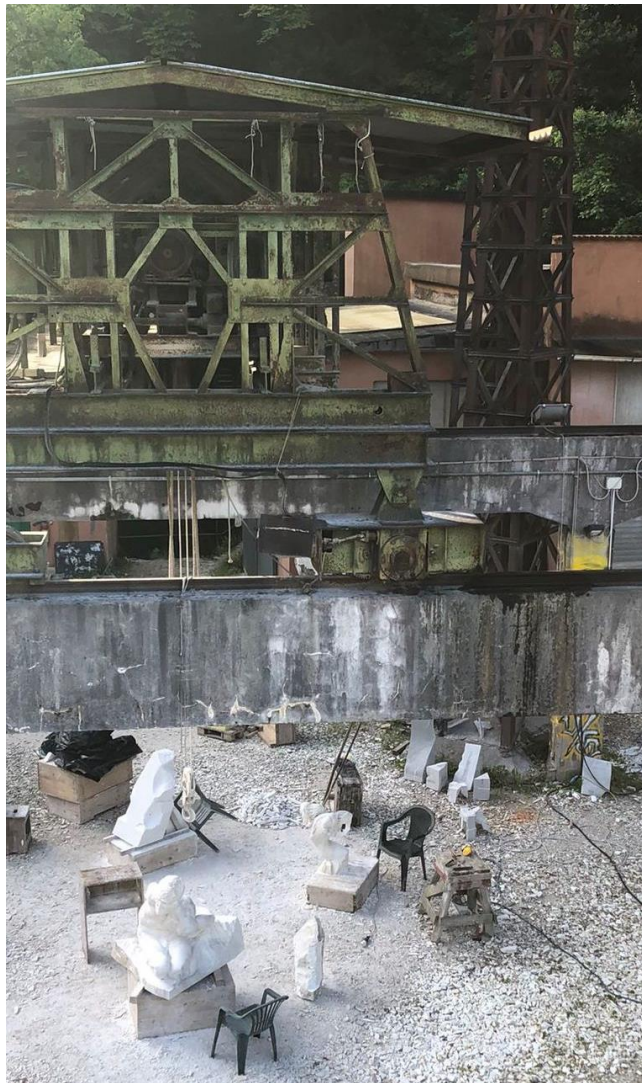


*Figure 14 Participant 17 Marble Sculpture*

The art-making process helped Participant 17 distance herself from daily life demands and facilitated a shift in perspective, enabling her to grow and adopt new viewpoints. She expressed that everything was "amplified" after creating in nature, stimulating a greater understanding of life, and she reported feeling peace of mind and relaxation. Participant 17 felt safe and comfortable in the natural environment and strongly agreed that the art-nature experience was beneficial for her. However, she described feeling neutral about her satisfaction with the art piece, which may be attributed to self-criticism or perfectionism, but does not invalidate the positive benefits experienced during the creation process. Highlighting the importance of the art process, rather than the outcome.

Regarding materials, Participant 17 somewhat agreed that using natural materials was creatively freeing rather than limiting, and strongly agreed that she felt in control while using

them. She also somewhat agreed that creating art in nature made her feel more connected to nature. Furthermore, she strongly agreed that she would like to make art in nature again and would recommend it to others. Although she took her final sculpture home, the cut-off marble generated during the creation process was left at the nature studio.



*Figure 15 Aerial View of Sculpture Studio.*

After completing all the research requirements and data forms, Participant 17 wrote to the researcher and provided additional information. She mentioned that the photos were taken at her studio, where she was also accompanied by the owner of the studio, a spiritual man. She shared that working with the marble and being in the presence of this man helped to heal her soul from a

painful relationship. Participant 17 reiterated the significance of the mind and body working together, especially when creating art in nature or sculpting. She emphasized that this alignment between the mind and body is crucial for the creative process. Participant 17's questionnaire responses and supplementary documentation were expressed poetically, reflecting her genuine appreciation for the healing power of the creative process and the natural world.

In addition to the self-report surveys, the researcher employed the use of inter-raters to witness and describe Participant 17's artwork. The majority of inter-raters perceived Participant 17's artwork to be situated in mountainous surroundings, while a few noted an urban influence (see Figure 15). This sparked a discussion about how the presence of buildings and studios impacts being in nature. The inter-raters generally agreed that the most frequently used element in Participant 17's artwork was earth and rock, with marble being a prominent material (see Figure 16). Additionally, the art piece was characterized as being mainly balanced and light contrast. The place where the inter-raters differed was when discussing the art medium/tool(s) used. Some inter-raters believed that Participant 17 exclusively used natural materials in their artwork, while others claimed that no natural materials were used at all. Meanwhile, a few other inter-raters believed that both man-made and natural materials were used in Participant 17's artwork. This discrepancy in inter-raters highlights the subjective nature of what constitutes a "natural" material.



*Figure 16 Mountains and Stone*

When questioned about the emotions evoked by Participant 17's art piece, the inter-raters used the following words to describe it: heavy, sturdy, grounded, calm, safe, balanced, and playful. These adjectives suggest a sense of stability and security. The artwork seems to convey a sense of being firmly rooted in the earth while also possessing a playfulness. This may be due to the organic, fluid shape carved and marble stone material.

### **Vignette 2 - Participant 2**

Participant 2 identifies as a female in the 20-29 age group, and lives in an urban area of the Philippines. Participant 2 defines nature as a natural environment and encompasses all things that exist without the need for artificial human intervention. She explained, "Nature is my natural environment, my being and all things that flow without the need for artificial human intervention." Participant 2 acknowledges that humans are part of nature but recognizes that

advancements in technology and the overexploitation of resources have disconnected many people from their true nature.

Before participating in the nature-art experience, she reported engaging in artmaking frequently and having a moderate amount of experience creating artwork in nature. The participant occasionally used natural materials in her art and ventured into nature with moderate frequency. She strongly identified as an artist and expressed strong comfort and enjoyment in both making art and being in nature. Additionally, she reported feeling a strong connection to nature.

After completing the nature-art experience, Participant 2 found the activity to be beneficial, reporting a strong sense of peace and relaxation. She felt somewhat safe and comfortable in the environment and was somewhat agreed to being satisfied with her art piece. Participant 2 found using natural materials to be creatively freeing and strongly agreed that she felt connected to nature. She remained neutral about her sense of control while using natural materials, probably because she did not use physical materials, rather her body and space. Participant 2 expressed a strong desire to create art in nature again and would highly recommend the experience to others.

The nature-art experience seemed to have a sincere impact on Participant 2, both emotionally and physically. At the beginning of the experience, the participant felt low in energy and was hesitant due to their long journey and the uncertain weather. However, as she engaged with nature and expressive dance, she found herself enveloped in a sense of calmness, freedom, and vitality. The participant explains, "After a day of spending time in nature, I felt a different kind of space expand within me and around me. It's as if my world grew bigger."



*Figure 17 Participant 2 Screen shots of eco-art video*

Participant 2's creative process involved a movement piece inspired by the beach environment. Participant 2 and her friends soaked in the beach the entire day and created the piece in the afternoon. Participant 2 collaborated with a friend, interpreting the sensations they experienced from the natural elements around them through movement (see Figure 17); "the sand waves created by the current, the movement of the water at low tide, the action of some people, the feeling of the wind on our skin." Participant 2 describes the process as a dialogue: "We asked each other what we saw and sensed and then interpreted those sensations through movement." This collaborative, sensory-based approach allowed the participant to fully immerse themselves in the experience, heightening their senses and opening themselves up to what nature had to offer.

Through the eco-art experience Participant 2 was able to reconnect with the simplicity of life and their past experiences. She expressed a longing to spend more time enjoying nature, as living in the city for nine years had left them yearning for a return to the organic and simple aspects of living. Participant 2 states, "I felt drawn to witnessing the most natural processes of life through nature. I felt that things have seemed so complicated in my living space that I am not fully familiar anymore with the organic and simple aspects of living." This sentiment brings to light the power of eco-art, to rekindle an appreciation for the natural world, and its capacity to rejuvenate an individual.

Participant 2's experience also had spiritual dimensions. She reported feeling God's presence in the beauty of creation and drew a metaphor comparing their relationship with nature to that of a first love that never dies. She reflected on their past, having grown up in the province surrounded by nature, and felt a deep connection to it after being away for such a long time. Through their art, she was able to engage with nature in a meaningful way, which in turn fostered the ability to personify nature, bringing voice and attention: "It was the summation of the elements of the beach... it was a dance of the beach."

After the art-making process, Participant 2 shared her experience with her partner and discussed the process. Her friend documented the movement piece through video, which was later edited by another friend. She kept the video on her device as a memento of the experience, and the dance was performed in a public setting for all to witness. This sharing of her art with others highlights the communal aspect of the nature-art experience and its potential to foster connections and conversations about human relations with the natural world.

In addition to the self-report surveys, the researcher employed the use of inter-raters to witness and describe Participant 2's artwork. When analyzing, the inter-raters identified an



aquatic environment as the primary setting. The elements observed within the piece included earth, water, and air, with a balanced and mostly light contrast. Descriptive words such as emotive, movement, and storyline were employed to characterize the artwork, highlighting the presence of a human body interacting with nature.

Upon witnessing the art, the inter-raters expressed various emotions and impressions. They used words like flow, playful (mentioned by two inter-raters), joy (stated by three inter-raters), dedication, and noted that it was natural for humans to dance. These adjectives suggest that the artwork evokes a sense of freedom, happiness, and harmony between the human body and the natural world. The dynamic movement captured in the piece allows viewers to experience the joy and playfulness of human interaction with nature, emphasizing the importance of such connections.

### **Vignette 3 - Participant 5**

Participant 5 is a female, art educator in the 30-39 age group from Pakistan. She defines nature as a reflection of humanity and a deeply interconnected relationship. In the pre-art questionnaire, she indicated that she creates art frequently and occasionally makes artwork in nature. She uses natural materials while making art a great deal and goes into nature moderately. She strongly agreed with being an artist and feeling comfortable making art, as well as enjoying the process of making art. She had a neutral stance on feeling comfortable in nature but strongly agreed that she feels connected to and enjoys being in nature.

In the post-art questionnaire, Participant 5 somewhat agreed that she felt safe and comfortable in the environment where she created her art piece. However, she strongly agreed that the art-nature experience was beneficial for her, leading to feelings of peace of mind and relaxation. She somewhat agreed that she was satisfied with her art piece and felt in control

while using natural materials. Additionally, she strongly agreed that using natural materials was creatively freeing rather than limiting and that she felt connected to nature. She somewhat agreed that she would like to create art in nature again and strongly agreed that she would recommend this experience to others.

Participant 5 shared that the nature-art experience allowed her to take a break from the fast-paced and anxious life associated with the ongoing Covid pandemic. The activity helped her to calm down and reflect on the positive aspects of life amid such trying times. She described her experience as "meditative," "calming," "relaxing," and "cathartic."



*Figure 18 Participant 5 Nature-art research influencing painting*

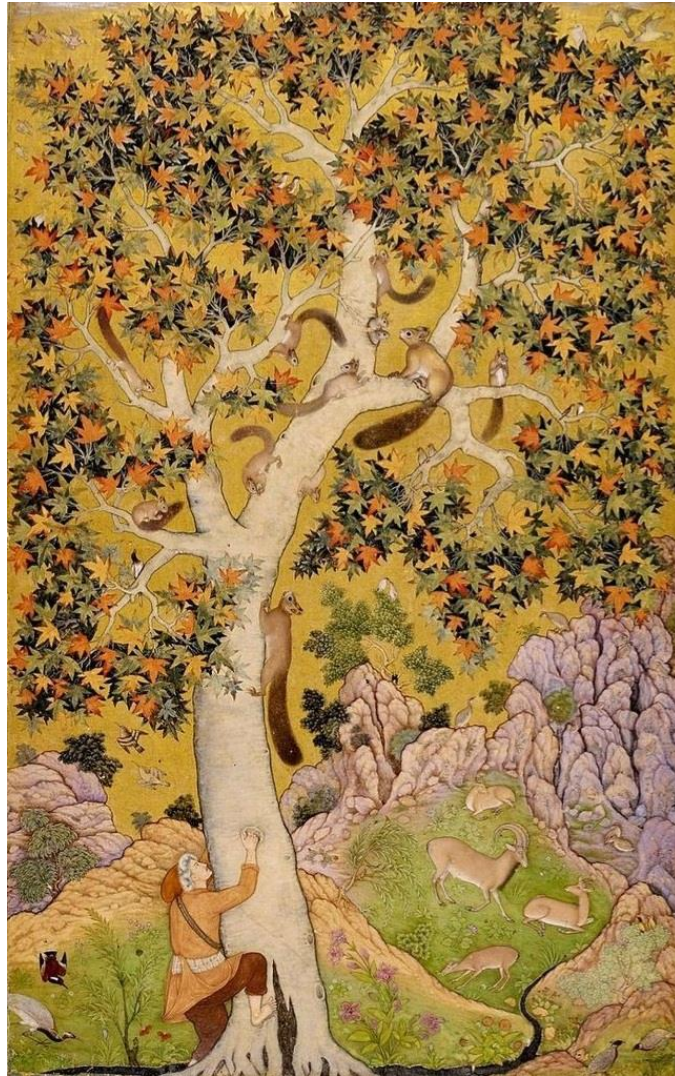
During the nature-art session, Participant 5 recreated a centuries-old miniature painting using a combination of natural pigments and Winsor & Newton transparent watercolors. She was drawn to the practice of color-making and found the repetitive process of painting leaves to be meditative. The entire process took about a month to complete, as she worked intermittently, traveling in between. She mentioned that had she been working at her studio, it would have taken a week. Participant 5 collected photos of her time spent in nature, as research to be used to

influence her painting (see Figure 18). While creating her art piece, she heard a mix of natural and man-made sounds, including “a lot of my sleeping toddler's deep breathing, and raging clouds, rattling windows and heavy rain ending in gentle pitter-pattering.”

Participant 5's physical experience involved various tasks such as grinding zinc white, cooking gum arabic, preparing Wasli paper, and making squirrel tail-hair brushes. Her painting practice required controlled breathing and working under bright light. She “particularly enjoyed beginning work towards the end of night under artificial light and continuing through the spreading brightness of dawn.” Participant 5 noted, “the calming, cathartic process made me feel quite triumphant with the completion of even every small leaf that I painted...the engagement with the work helped repel all negative energies from all around...” The art piece itself symbolized life, with the flourishing tree providing shelter and security (see Figure 19). Participant 5 saw it as a reminder of the resilience of nature amid man-made chaos and the potential for renewal, healing, and regrowth. “The whole process was very suggestive, with several positive connotations. This painting is full of life...the tree flourishing tall, providing home to birds and animals, providing shelter and security. Mother nature standing tall through these times of man-made chaos, chemical warfare, and drone strikes...as though reminding and beckoning towards itself, towards innocence, kindness, harmonious co-existence.”

After completing the art piece, Participant 5 took pleasure in admiring the finished work before returning to her studio to begin new projects, focusing on therapeutic foliage. She also noted that the experience made her more aware of the forceful energy of sunlight as it breaks through the night sky and conquers the darkness. The nature-art experience provided her with a greater understanding of life and the potential for healing and renewal that lies within every new

day: “with every day having more leaves to paint, more pardakht...it reminded me that tomorrow is another day, and that everything renews, heals, regrows.”



*Figure 19 Participant 5 Traditional Practice of Pardakht or Miniature painting*

In addition to the self-report questionnaires, the researcher employed the use of inter-raters to witness and describe Participant 5’s artwork. In examining Participant 5’s artwork, the inter-raters observed the environment as a combination of forest and mountain settings. The primary elements present in the art piece were earth, vegetation, and air, with a balanced and mostly light contrast. The artwork was described using words such as colorful, emotive, organic shapes, geometric shapes, movement, and storyline, emphasizing its two-dimensional nature.

Interestingly, the inter-raters did not recognize the use of natural materials in the creation of the pigment paint, leading some inter-raters to identify only man-made materials in the artwork.

The inter-raters' responses after witnessing Participant 5's art revealed a range of emotions and perceptions. They used words such as earthy, curiosity (mentioned by three inter-raters), excitement, wonder, hunting, and longing to describe their impressions of the piece. These adjectives suggest that the artwork evokes a sense of exploration and connection to the natural world while also incorporating elements of mystery and adventure. The combination of organic shapes and colors in the piece may contribute to these feelings, inviting viewers to engage more deeply with the work and its underlying narrative.

From the very beginning of the study, participant 5 expressed enthusiasm for the study and its potential to explore the relationship between art, nature, and the human experience. She suggested extending the research to Pakistan and envisioned a possible collaboration with the researcher or traveling exhibit. Additionally, she proposed an innovative idea for a global collaboration, where a group of participants would be randomly paired and create art pieces that would be exchanged and worked on by each other, fostering a sense of interconnectivity and artistic expression on a global scale.

### **Analysis**

Participants reported predominantly positive experiences during the art-making process in nature. They felt a sense of safety and comfort, and experienced relaxation and peace of mind. This might be due to the calming influence of natural surroundings, which can reduce stress and promote feelings of tranquility. These findings indicate that nature art therapy has the potential to improve well-being and provide a positive environment for creative expression. This therapeutic

approach may benefit a wide range of individuals, including those coping with stress, anxiety, or emotional difficulties.

Both prior to and following the art-making session, participants demonstrated a strong connection to nature. The post-art questionnaire revealed that the eco-art experience further deepened this connection, fostering more profound relationships with the natural environment. This might be because engaging with nature through art facilitates a deeper understanding of the environment, and a heightened appreciation for the more than human world, leading to a stronger emotional bond, and potentially more environmentally responsible behaviors and attitudes.

Participants generally expressed satisfaction with their art pieces and found the use of natural materials to be creatively liberating. These results suggest that the experience inspired participants to explore new artistic methods, potentially unlocking new creative pathways and techniques. This might be due to the unique sensory experiences and textures provided by natural materials, which can encourage experimentation. By working with unconventional materials, participants might develop unique artistic skills and draw inspiration from the natural world, thus enriching their creative practices.

Mixed feelings about having control of the natural materials were observed among participants. While many enjoyed using these materials, some participants reported feeling less in control. This suggests that adapting to new materials and techniques might require some adjustment for certain individuals.

Through the nature art experience, participants interacted with their surroundings and gained valuable insights into their lives and the world. Many discovered metaphors and symbolism in their artwork, addressing themes such as change, harmony, and the Wabi-sabi philosophy: beauty in imperfection. This might be because creating art in nature encourages

introspection and reflection, allowing individuals to discover deeper meaning in their work and life. This creative process aided participants in understanding the significance of simplicity, mindfulness, and being present, further reinforcing the therapeutic benefits of nature art therapy.

The exercise also heightened participants' awareness of and attention to their environment's details. They observed aspects of nature that they may have otherwise missed, like distinct ripples in the sand, animal tracks, or the interplay of sunlight and landscape. This deeper connection with nature allowed them to appreciate the intricacy and beauty of their surroundings. This might be because the focused attention required for creating art in nature can enhance observational skills, promoting a more mindful engagement with the environment.

Regarding the disposition of their artwork, most participants opted to leave their creations in nature, allowing for the possibility of discovery by others or integration back into the environment. This might be because participants recognized the impermanence of their creations and saw the value in sharing their art and the feelings it evoked with others or return it to its source.

The eco-art making provided participants with a meaningful and transformative experience, fostering self-discovery, reflection, and an enhanced connection to the natural world. This is due to the combined benefits of artistic expression and immersion in nature, both of which can facilitate personal growth and emotional healing. By immersing themselves in the creative process and intentionally engaging with nature, participants were able to explore their thoughts and emotions while cultivating a deeper appreciation for the complexity of the world around them.

A majority of participants expressed interest in revisiting the experience, desiring to create art in nature again and recommending the activity to others. This enthusiasm underscores the

potential value of nature art therapy as a therapeutic intervention. The positive reception implies that nature art therapy could become a widely embraced and accessible therapeutic modality for various populations seeking mental and emotional well-being.

### **Summary of Results**

The data from the pre- and post-art questionnaires, combined with the eco-art, revealed that nature-artmaking promotes personal growth, emotional well-being, and environmental awareness. Participants demonstrated a strong affinity for nature and artmaking. The eco-art experience proved to have numerous benefits, including tranquility, relaxation, and an enhanced connection to the natural world. Generally, participants found the incorporation of natural elements creatively liberating and expressed eagerness to partake in eco-art in the future, as well as recommending the activity to others.

The nature-based art study provided participants with a holistic experience, encompassing emotional, physical, and spiritual aspects. Emotionally, the activities evoked a range of responses, including calmness, meditation, and reflection on environmental issues. Physically, participants experienced a diverse range of sensations, with many engaging in relaxing or moderate activities and enjoying the sensory aspects of interacting with nature. Spiritually, the experience helped participants feel grounded and connected, with some experiencing more profound connections to their surroundings.

The participants' artworks explored themes of impermanence, transformation, and the emotional connection between humans and nature, but also touched on community and finding or creating a sense of purpose with the natural materials. Through their creations, the artists fostered a sense of unity and connection with the natural world, highlighting the importance of feeling a sense of belonging within a larger ecosystem. Furthermore, by engaging in therapeutic



eco-art, participants found purpose in honoring the environment and giving meaning to experience by artistic expression. The diverse artworks showcased the potential of artistic expression to facilitate not only emotional connections and personal growth but also to inspire a sense of belonging and purpose in relationship with other humans and the more-than-human-world.

The nature-art activity provided an opportunity for participants to examine their relationship with nature and the interconnectedness to the more than human world. Participants reported positive emotional and mental changes following the experience, with themes of increased focus, calmness, presence, and grounding emerging. The nature art experience allowed participants to uncover metaphors and personal insights, reflecting themes of growth, connection, and human experiences. This emphasizes the potential of eco-art therapy, as the therapeutic eco-art experience cultivated self-discovery, deeper connections with the environment, and inspired individuals to engage in more mindful and reflective interactions with the natural world.

In conclusion, this study's findings emphasize the significance of nature-based art therapy, as it nurtures personal growth, emotional well-being, bodyfulness, mindfulness, and environmental awareness, while also broadening the horizons of artistic expression and connection with humans and nature.

## Chapter V: Discussion

### Making Connection

Nature is a source of healing and solace, with its innate ability to provide a comforting and nurturing environment for those in need. The concept of being held in nature can be understood as a metaphor for the more-than-human world's capacity to support and sustain humans during times of emotional turmoil or personal growth. For example, participant 10 captured a photograph of a leaf floating on water, holding a snail shell and sycamore seeds, illustrating how nature effortlessly and gently supports and carries various elements within its realm. This metaphor can be extended to reflect how nature serves as a holding space for therapeutic experiences, offering a safe and nurturing environment where individuals can find healing and restoration.

Art and nature share a powerful connection, with exposure to both having a profound impact on humanities physical and mental health. Prolonged or direct exposure to nature and artmaking is medicine, as people are bathed in the restorative and remedial influences. Nature encourages creative exploration and growth, fostering a willingness to engage with the world and other humans. Eco-art making initiates the healing, mending, and connecting process for individuals.

Comfort levels in nature and while making art, play a crucial role in fostering creativity and openness to the art-making process. Feeling comfortable in nature can positively impact an individual's connection to their surroundings, creating a sense of belonging and enhancing their willingness to explore artistic expression within that context. A sense of ease in nature also helps individuals to be more receptive to engaging with the environment and can contribute to a more enriching and authentic creative experience.

The use of natural materials presents both benefits and limitations for artists. Some participants found working with natural materials to be liberating, as it allowed them to explore new textures, colors, and forms, connecting their artwork to the art medium continuum. Others may have encountered limitations in using these materials, such as the challenge of working with unfamiliar or unconventional resources. However, these constraints can also foster creative problem-solving and encourage artists to push the boundaries of their artistic practices.

Feeling in control of art materials is essential for participant satisfaction in their art pieces and overall experience. A sense of control can lead to increased confidence, allowing participants to immerse themselves in the creative process more fully, like exploring new artistic techniques. Furthermore, this control can contribute to a greater sense of accomplishment and satisfaction with the final artwork, enhancing the overall eco-art therapy experience. Fostering comfort in nature and with art materials, as well as understanding the benefits and limitations of using natural materials, can significantly impact an individual's connection to nature, creativity, and satisfaction with their artwork and eco-art therapy experience.

The process of making art can be as significant, if not more so, than the outcome of the artwork itself. For some individuals, like participant 17, the experience of creating art in a safe and comfortable environment can lead to positive benefits, even if they feel neutral about the final product. This highlights the importance of focusing on the art-making process rather than the outcome, as the journey of creation may hold greater value in terms of personal growth and emotional well-being. In participant 17's case, feeling neutral about her art piece could be attributed to self-criticism or perfectionism, leading her to concentrate more on the perceived flaws or areas for improvement. However, this does not negate the positive impact that the creative process had on her.

There can be a disconnect between enjoying the art-making process and claiming the identity of an artist, as some individuals may associate the title of "artist" with the satisfaction or approval of the art outcome. This mindset might prevent them from acknowledging their artistic identity, even when they find fulfillment and enjoyment in the process of creating art.

Emphasizing the significance of the creative journey, rather than solely focusing on the end product, can help shift the perspective and encourage individuals to embrace their artistic side. By doing so, it may lead to a broader understanding and appreciation of the diverse experiences and creative expressions that contribute to what it means to be an artist.

Nature and community are inherently intertwined, as the natural world fosters connections between humans, their surroundings, and fellow beings. The participants in this study, from locations around the globe, demonstrated the power of nature to bring people together and create a sense of unity. For example, participant 1 experienced community within the materials used in their artwork, created in the USA, while participant 2 found a sense of belonging while dancing on the beach in the Philippines. Similarly, participant 8 felt a connection to the historical community while walking on a path in Portugal, observing others' footsteps and traces of their presence in the form of trash. Participant 17, sculpting in Italy, felt a sense of togetherness while creating in a natural studio, and participant 3 left an eco-art message on a path in Canada, intending for others to stumble upon it and feel connected.

These examples illustrate the unique capacity of nature and art to bring people together, transcending geographical, cultural, and linguistic barriers. Through shared experiences in the natural world, individuals can form deep connections with their environment and with one another, fostering a sense of belonging and unity. Art and nature have the power to create communities, wherein people come together to engage in creative activities, explore their

surroundings, and share their experiences. This communal aspect of art and nature not only enriches individuals' lives but also cultivates an appreciation for the beauty, complexity, and interconnectedness of the world around them, ultimately fostering a more compassionate, understanding, and harmonious society.

Art therapy and nature forest therapy came together in this study to create a holistic healing experience that engaged the body, mind, and soul. By immersing participants in the creative process and connecting them with nature, individuals tapped into their inherent connection to the Earth, cultivated mindfulness, and developed a heightened awareness of their mental, physical, and emotional states. This eco-art experience fostered self-soothing, grounding, and sensory development. By combining these therapeutic elements, individuals explored new avenues for healing and personal growth while developing a deeper understanding of their place in the world.

### **Strengths**

One of the strengths of this research study lies in its comprehensive approach to gathering data from participants. By using both pre-art and post-art questionnaires, the study was able to capture participants' perspectives and experiences before and after engaging in the art-making session in nature. This allowed for a more meaningful understanding of how the nature art therapy experience impacted participants' feelings, connections to nature, and creative processes.

Another strength of the study is the inclusion of the artwork created by participants during the nature art therapy session. By examining the actual art pieces, the researcher and inter-raters were able to gain valuable insights into the participants' creative expressions, choice of materials, and techniques employed in their work. This direct observation of participants' artistic outcomes complements the self-reported data from the questionnaires, offering a more holistic understanding of the nature art therapy experience. Furthermore, analyzing the artwork

helped identify patterns and themes that emerged within the group, providing additional evidence for the benefits and effectiveness of nature art therapy as a therapeutic intervention.

### **Limitations**

One limitation of the research study is the narrow age range of the participants. Only three participants in the study were 50 years old or older, while the remaining 14 participants were between the ages of 20 and 49. This limited age distribution may have resulted from the physical movement required for the study, even though accommodations were provided for those with different abilities (see Appendix I, Plan #2 for accommodations). The researcher also recognized that the study's recruitment was primarily through social media, which may have attracted a younger demographic. The lack of older participants could potentially affect the generalizability of the findings, as the study may not capture the experiences and perspectives of a more diverse age group.

Another limitation of the study is the impact of the COVID-19 pandemic on participant engagement and willingness to participate. The time of year, time change, and weather conditions in each country may have played a role in participation rates, while the challenges of conducting international research during a global pandemic may have further influenced the study's outcomes. It is important to acknowledge the resilience of the participants in adapting to the unique circumstances of the pandemic, but the external factors, such as the pandemic and the recruitment process, could have implications for the representativeness of the sample and the overall validity of the study's conclusions. Future research should consider these limitations and explore ways to expand the participant pool and minimize potential biases that could arise from conducting research during exceptional circumstances, like the COVID-19 pandemic.

## **Validity and Reliability**

The reliability and validity of this research study are supported by the art-based approach to data collection and the use of multiple sources of information. The study's design, which includes pre-art and post-art questionnaires with open-ended questions, and multiple-choice questions allows for a consistent and easily quantifiable way to assess and compare responses, contributing to both the reliability and validity of the data. By examining both the subjective experiences of participants through their responses to questionnaires and the objective evidence from the artwork they created, the study gains a comprehensive and well-rounded perspective on the impact of nature art therapy.

This research study's validity is further enhanced by its focus on exploring the impact of nature art therapy through various means, such as participants' experiences, connections to nature, found metaphors, satisfaction with art, and feelings when using natural materials in nature. The in-depth research questions strengthen the study's internal validity. Additionally, the use of multiple-choice questions in the questionnaires helps reduce potential biases in participants' responses, ensuring that the findings are trustworthy, reflecting the true effects of the nature art therapy experience.

## **Biases and Gaps**

The validity and reliability of the study may be impacted by several biases and gaps. One significant limitation is self-selection bias. The participants who have chosen to take part in the study may already have a strong affinity for art and nature, leading to a skewed representation. The small sample size of 15 participants also limits the generalizability of the results. Furthermore, social desirability bias is a potential issue. Participants may have answered questions in a way that they perceive to be socially desirable, potentially overstating their affinity

for art and nature or the positive aspects of the experience. Additionally, post-experience bias could be at play, as participants may have felt more positively about the experience due to the novelty of the situation, leading to an overly optimistic assessment.

Another concern is the lack of demographic diversity, such as age, education level, which could influence their responses to the questionnaire. Moreover, due to lack of research in eco-art therapy, the data collected in this study lacks a control group, making it challenging to establish a causal relationship between nature art therapy and the noticed effects. In future studies, a control group (e.g., participants engaging in traditional art therapy or another non-nature-based activity) could be included to better understand the unique effects of nature art therapy. Ambiguity, leading questions, and binary responses in the questionnaire could also introduce inconsistencies and biases in the responses.

To address these gaps and biases, future research could include a more diverse sample of participants, such as those with varying levels of interest in art and nature, to reduce the impact of self-selection bias. Using alternative data collection methods, such as interviews, could help anonymize responses and reduce social desirability bias. Additionally, researchers could focus on improving the question phrasing to avoid ambiguous, leading questions, and binary responses. By addressing these gaps and biases, future research would help strengthen the validity and reliability of the findings, leading to a more robust understanding of the impact of nature art therapy.

### **Implications for Clinical Application**

The implications of this research for clinical application suggest that eco-art therapy could be a valuable tool for addressing various mental health concerns and relationship challenges. This approach can be applied to family therapy, couples therapy, work with dyads, children, and



other populations. Engaging in eco-art therapy allows people to explore their relationships with nature and one another, fostering personal growth, emotional well-being, and environmental awareness. It also could help strengthen interpersonal bonds and promote healthier communication patterns in relationships.

The process of making art in nature can close the loop of experience, allowing individuals to reflect on and project their experiences within a liminal space and stage. By incorporating nature elements into art therapy, clinicians can provide their clients with a more holistic and immersive healing experience. This integration of art and nature elements can lead to a deeper connection and understanding of oneself and others, facilitating transformative experiences that support mindfulness, bodyfulness, and mental health.

As a result, eco-art therapy has the potential to address a wide range of issues, from physical health concerns to social challenges, and provide a supportive, nurturing, and engaging therapeutic experience for individuals across various populations and locations. Clinicians who embrace this approach can enhance their therapeutic offerings and help clients tap into the healing power of both art and nature. By doing so, they can empower clients to develop new perspectives, coping strategies, and insights that can positively impact their lives.

Eco-art therapy also has the potential to enhance clients' connection to the environment, promoting an increased sense of responsibility and stewardship towards the natural world. As clients engage in eco-art therapy, they may become more mindful of the interdependence between humans and nature and develop a deeper appreciation for the environment's role in their overall well-being. This heightened awareness can foster a more sustainable and eco-conscious lifestyle, which in turn can contribute to the global efforts towards environmental conservation and protection.

Moreover, the immersive experience of creating art in nature can also serve as a powerful antidote to the modern-day challenges of urban living, digital overload, and social isolation. By encouraging clients to step outside their daily routines and engage with the natural world, eco-art therapy can help alleviate stress, enhance mental clarity, and promote a sense of balance and inner peace. This holistic approach addresses not only the clients' emotional and psychological needs but also their need for meaningful connection to the world around them.

In this way, eco-art therapy has the potential to be a transformative journey for individuals, guiding them towards greater self-awareness, stronger relationships, and a more harmonious connection with the environment. By integrating the healing power of art and nature, clinicians can offer their clients a truly unique and metamorphic therapeutic experience that fosters lasting change and personal growth.

### **Recommendations for Practice**

Practitioners are encouraged to recognize the value and deeply understand both art therapy and nature forest therapy separately, and then acknowledge the heightened benefits of merging the two therapies, resulting in eco-art therapy. To effectively implement eco-art therapy, there is a need for official training and certification programs. Practitioners are invited to become trained in this approach once it is available, ensuring that they can provide safe, effective, and well-informed guidance for their clients. Clinicians are also highly encouraged to be trained in wilderness first aid if they plan to take clients into nature. Clinicians may also consider implementing nature elements into traditional therapy, as this can enhance the therapeutic experience.

One crucial aspect for practitioners to consider is where natural materials fall on the art medium continuum. Offering guidance and support during the art-making process, as well as

introducing various techniques for working with natural materials, may help individuals feel more at ease and confident in their creative endeavors and connection to the natural elements. Understanding the importance of comfort levels and the impact of using natural materials in nature art therapy can help create a more fulfilling, safe, and therapeutic experience for a diverse range of individuals.

It is also recommended that practitioners be mindful of their own agendas and allow for silence in nature with their clients. Being in touch with the natural world themselves is incredibly important. Practitioners are encouraged to explore forest bathing and allowing for spontaneous creation, whether it is physical art or internal. This approach promotes a more authentic and meaningful connection between the client, the practitioner, and the natural environment.

Practitioners are also invited to consider the potential applications of eco-art therapy in various settings, such as hospitals and schools. In a hospital setting, eco-art therapy may offer patients an opportunity to engage in a creative, therapeutic process outside of the facility, that supports their emotional experience and recovery. Eco-art can make living more fun, provide a space for light-heartedness, and help give meaning and space to reflect on existential topics. Eco-art may provide a soothing and calming environment, which can aid in reducing stress and anxiety levels. Of course, safety precautions would have to be seriously considered prior to eco-art with individuals in a hospital setting. In a school setting, eco-art therapy can be integrated into the curriculum to foster emotional regulation, playfulness, self-expression, and environmental awareness among students. This approach may also help improve overall mental health, leading to better academic performance and social-emotional development.

## **Recommendations for Further Research**

Recommendations for further research on the impacts of art therapy and nature forest therapy can expand on the current study in various ways. Firstly, conducting a longitudinal study would allow for a deeper understanding of eco-art's benefits over time. By evaluating the outcomes periodically, researchers can observe long-term effects and how they evolve. Additionally, a future study could focus on the use of natural materials exclusively, exploring the correlation between the art medium continuum and the therapeutic benefits derived from engaging with nature's resources.

Another potential research avenue would be to replicate the initial study with the same participants, checking back in with them and having them create art in nature again. This would provide valuable insight into whether the outcomes and the therapeutic value of the eco-art process have changed since the first study. Moreover, researchers can consider expanding the study to different populations, such as specific locations, races, or groups with disabilities or diseases. This will help to evaluate the universality of the therapeutic benefits of eco-art therapy.

To obtain a comprehensive understanding of the stress reduction and physiological changes associated with eco-art therapy, future studies could measure participants' stress scores and cortisol levels while they create art in nature. This biometric data can provide a more concrete assessment of the therapy's effectiveness. Furthermore, research that includes a more diverse group of participants, especially those with limited exposure to art or nature, can shed light on the broader applicability of nature art therapy. To ensure comprehensive and global insights, studies conducted on every continent in a longitudinal manner would be beneficial. Lastly, future research could benefit from additional funding and collaboration, such as partnering with national parks or including co-researchers to assist with data collection, participant interaction,

and interpretation of findings. By narrowing the focus to specific aspects of eco-art therapy, researchers can delve deeper into the therapeutic benefits and their underlying mechanisms.

## **Conclusion**

In conclusion, this research powerfully demonstrates the remarkable impact of eco-art therapy on personal growth, emotional well-being, and environmental awareness. Participants experienced transformative connections with nature, engaged their imaginations, and harnessed the innate power of creation. The study's findings emphasize that eco-art therapy is not only a successful, research-based therapeutic approach but also a catalyst for change, inspiring mindful interactions with the natural world.

Upon reflection after the research process, it became apparent that the participants in the study exhibited a remarkable degree of intention and emotional investment in their artistic creations and nature forest therapy experiences. The participants generously shared their innermost thoughts with raw honesty and authenticity, providing the researcher with unique insights into their individual human experiences. The profound connection between nature and art was evident, and the intimacy of the experience was palpable. The researcher was both humbled and held great respect for the participants who willingly shared their experiences, opening the doors to reveal their inner world and allowing a glimpse into their personal journey.

The benefits of eco-art therapy are abundant, as it nurtures bodyfulness, mindfulness, and empathic engagement with the environment. This multifaceted therapeutic method fosters self-discovery, deeper connections, and a profound appreciation for the natural world. This evidence-based therapy should be recognized and embraced as an effective means to enhance mental health and environmental consciousness. It is a call to action for further research, collaboration,

and advocacy, driving the integration of eco-art therapy into mainstream therapeutic practices and ensuring its transformative benefits reach as many individuals as possible.

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**Appendix A: Informed Consent Form**





## **Informed Consent**

**Project Title:** Evoking the Art of Nature

**Student Investigator:** [Name]

**Contact Information for Student Investigator:** [Email]

**Principal Investigator:** [Name]

**Contact Information for Principal Investigator:** [Email]

### **Research Purpose and Background**

The purpose of this study is to connect individuals to nature, engage in therapeutic art making, encourage the practice of presence, evoke existential thought, and make meaning of experiences. The nature-based art therapy field is young and lacks extensive investigation, thus this study will attempt to provide information that could be used in future work concerning the effects of art in nature. This research study is fulfilling Clifford and Page's (2020) call for expanding research, adding dimensions to the American Nature Forest Therapy (ANFT) practice.

### **Procedures**

In voluntarily consenting to participate in this research study, I understand the following:

1. I will be asked to fill out a demographic and pre-art interview questionnaire and then email the pre-art forms to the study's private email address.
2. I will be asked to participate and interact with nature (anywhere in the world) and create art individually with natural objects.
3. I will be asked to take photographs of my nature art creation and/or create an artistic response to my nature experience (ex. poem, story, song, etc.).

4. I will be asked to fill out a Post-Art Questionnaire
5. I will be asked to send my photos of artwork and/or artistic response and post-art questionnaire to the study's private email address.
6. I will be asked to leave the researcher with my contact information if I choose to participate in follow up questions.

### **Risks**

In engaging in making art in nature, I may experience an increase in stress and/or anxiety due to being in nature or an unfamiliar location. I recognize that being in nature and engaging with natural materials comes with health and safety risks, such as unforeseen natural disasters, harmful habitats or conditions potentially causing injury. I recognize that I am asked to leave my home and/or create art using natural materials during the COVID-19 pandemic. I recognize that I am not forced to participate, and the student researcher is not at fault if I catch COVID-19 through touching unknown objects, going outside, and/or participating in the research. The student researcher is not liable for any injury or harm that happens to me during my participation in research. The nature-based art directive is believed to help promote physical health and mental health. The researcher and licensed mental health professional will be available during the study to help me process any discomfort that may arise. The debriefing statement will be given to me for additional aftercare support. Referrals for services will be provided for me if I request it.

### **Benefits**

The possible benefits of participating in this study are listed below:

1. Experience healing components of being in nature: immune system function, cardiovascular system, the respiratory system, depression and anxiety, mental relaxation, increased happiness, more positive, regulated mood, and more restful sleep.
2. Begin, restore and/or strengthen your relationship to nature and art.
3. Allocated space and time to slow down, heal, reflect, and become grounded.
4. Practice being in your body, a body-based mindfulness exercise.
5. Explore newfound metaphors or meaning in your life through the therapeutic creation process.
6. Learn about Art Therapy and Nature, Forest Therapy.

### **Confidentiality**

I recognize that I will submit all the forms and attachments online via a secure platform. There is a specific email for this study only for data collection. The email address is multi-step password protected, and all the data is in the locked file. Once the study is complete, all data on the email platform will be erased and the email address will be permanently shut down. I recognize that my personal data collected in the demographic form is kept confidential and will only be shared with written consent from myself. My name will not be shared, and the researcher is going to code all my data, for example: Gender (number) location or W1\_SanDiego or Participant (number) or P1.

### **Accommodations**

Some participants may be unable or unwilling to go outside due to health concerns or COVID19. It is acceptable for individuals to interact with nature through a window, rather than

being immersed in nature. No individual will be forced to participate or go into an outside natural environment. Individuals may request access to the questionnaires and forms in large text font size, to accommodate different vision abilities. Participants may have the questionnaires and forms translated into their native language in order to better comprehend questions, participant rights and/or the study's intentions, but must indicate that parts or all of the study was translated for better understanding in the post-art questionnaire. If an individual does not have access to a camera, participants are welcomed to compose alternative art documentation of their experience in nature. For further accommodation requests and questions please reach out to the student researcher at [email].

**Alternatives**

I am free to decline to participate in this research study at any time.

**Costs/Compensation**

There will be no cost to me as a result of participating in this research study. There will be no monetary compensation for my participation in this research study.

**Questions**

Any questions about participation in this study will be answered by the researcher, emailing her at [email]. Any questions or concerns about this study should be addressed to the principal investigator at [email] or [phone number].

**Please initial all applicable boxes:**

\_\_\_\_\_ I am 18 years old or older and a normally functioning adult.

\_\_\_\_\_ I give consent for my images and/or artistic responses, and written data to be used for the purposes of this research study, the study's write up, and any future academic and scholarly work.

\_\_\_\_\_ I give consent for all my data to be used I for clinical best practices, publication, and presentation in the future.

\_\_\_\_\_ I give consent for my artwork and/or artistic responses to be digitally posted by the researcher in an online art exhibition.

\_\_\_\_\_ I understand that my photographic images of the natural artwork or artistic response to creating in nature will remain the property of the researcher.

\_\_\_\_\_ I understand that this study may be published, but any information from this study that can be identified with me will remain confidential and the data will be pooled to maintain anonymity.

\_\_\_\_\_ I would like to be contacted about future opportunities outside the scope of this study to further advance the findings or to co-present.

**Mailing Address:**

**Email:**

**Phone:**

**I HAVE MADE A DECISION WHETHER OR NOT TO PARTICIPATE. MY SIGNATURE INDICATES THAT I HAVE READ THE INFORMATION PROVIDED AND THAT I HAVE DECIDED TO PARTICIPATE.**

**Participant's Print Name:**

**Participant's Signature:**

**Date:**

## **Appendix B: Call for Participants**



**Evoking the Art of Nature**  
**Call for Participants**

**Interested in creating  
art in nature using  
natural materials?**

Email [evokingtheartofnature@gmail.com](mailto:evokingtheartofnature@gmail.com)  
Must be 18 years or older



**Evoking the Art of Nature**   
**Call for Participants**

**Interested in creating  
art in nature using  
natural materials?**

Email [evokingtheartofnature@gmail.com](mailto:evokingtheartofnature@gmail.com)  
Must be 18 years or older



**Appendix C: Cover Letter for Research**

# Evoking the Art of Nature

Dear Participant,

I invite you to participate in a research study entitled: Evoking the Art of Nature. I am currently enrolled in the Master of Arts in Marriage and Family Therapy and Art Therapy program at Notre Dame de Namur University in Belmont, CA, and am in the process of writing my master's thesis. The purpose of the research is to explore what creating art with natural materials in green spaces evokes in adults around the world.

The enclosed questionnaire has been designed to collect information on demographic information, how often, connected, and comfortable one may feel to nature and art making.

Your participation in this research project is completely voluntary. You may decline altogether or leave blank any questions you don't wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain anonymous. Data from this research will be kept under lock and key.

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 5 minutes to complete. Please return the questionnaire as soon as possible to email address: [email]. Once your consent form and pre-art questionnaire have been emailed and received, the student researcher will inform you of the next steps.

If you have any questions about this project, feel free to contact [researcher's name] at [email]. Information on the rights of human subjects in research is available through the

NDNU's Institutional Review Board at Notre Dame de Namur University 1500 Ralston Avenue,  
Belmont, CA, 94002; website: [www.ndnu.edu/academics/research](http://www.ndnu.edu/academics/research); *[Name of IRB Chair], IRB  
Chair, [email]*.

Thank you for your assistance in this important endeavor.

Sincerely,

[Researcher's Name]

**Appendix D: Demographic and Pre-art Questionnaire**

# Evoking the Art of Nature

## Pre-art Questionnaire

**Name:**

**Gender:** Male    Female    Other \_\_\_\_\_

**Age Group:** Teen    20-29    30-39    40-49    50-59    60-69    70+

**Current Location:**

**Please circle your frequency of each statement:**

**I make art.**

Never            Rarely            Occasionally            Moderate Amount            Great Deal

**I make artwork in nature.**

Never            Rarely            Occasionally            Moderate Amount            Great Deal

**I use natural materials while making art.**

Never            Rarely            Occasionally            Moderate Amount            Great Deal

**I go into nature.**

Never            Rarely            Occasionally            Moderate Amount            Great Deal

**Please circle your level of support of each statement:**

**I am an artist.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I feel comfortable making art.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I enjoy making art.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I feel comfortable being in nature.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I feel connected to nature.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I enjoy being in nature.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**Please briefly respond to the below question:**

**How do you define nature?**

**Additional Comments or Questions:**

Please email this form back to [email].

## **Appendix E: Participant Procedures**

# Evoking the Art of Nature

## STEPS

1. Email stating your interest. The student researcher will respond with info & forms.
2. Fill out the Consent Form, Demographic & Pre-Art Questionnaire. Email forms back.
3. Go out into nature (anywhere in the world) and create art with natural objects.
4. Take photos of your art creation and/or create an artistic response to your nature experience to share with researcher.
5. Fills out the Post-Art Questionnaire.
6. Email photos of artwork and/or artistic response and Post-Art Questionnaire.

**[evokingtheartofnature@gmail.com](mailto:evokingtheartofnature@gmail.com)**



**Appendix F: Post-art Questionnaire**

# Evoking the Art of Nature

## **Post-art Questionnaire**

**Name:**

**Date of Nature Art Experience:**

**Location of Nature Art Experience:**

**Please answer the questions below to the best of your ability:**

**When you think about how you are feeling now, compared to at the beginning of the nature-art experience, do you notice any differences? What are they?**

**What did you create? Did anything inspired you to make your art piece? Please explain your process:**

**How long did it take you to create your artwork?**

**What sounds did you hear while creating? Natural or man-made sounds?**

**Please describe your emotional experience while making art in nature:**

**Please describe your physical experience of making art in nature:**

**Please describe your spiritual experience of making art in nature:**

**Did your artwork or creative process unearth any metaphors? Please describe:**

**Did creating art in nature stimulate greater understanding of anything in your life?**

**Did anything catch your attention (that you would normally not notice, or you have seen many times)?**

**After you took a photo or responded to the nature experience, what did you do with your art piece?**

**Please circle your level of support of each statement:**

**I felt safe and comfortable in the environment.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**The art-nature experience was beneficial for me.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I felt peace of mind and relaxed after creating in nature.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I am satisfied with my art piece.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**Using natural materials, was creatively freeing rather than limiting.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I felt in control using natural materials.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I feel connected to nature.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I want to make art in nature again.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**I will recommend this to others.**

Strongly Agree    Somewhat Agree    Neutral    Somewhat Disagree    Strongly Disagree

**Were any or all forms translated into your native language for better understanding of this study?**

YES    NO

**Would you be open to discuss your experience further with the researcher?**

YES    NO

**If YES, please share your email or any form of contact information below:**

**Additional Comments or Questions:**

**Thank you for participating!**

**Please email this form back along with your artistic documentation to [email].**

**Appendix G: Debriefing Statement**

## Evoking the Art of Nature

Dear Participant,

Thank you for your participation in this research with adults creating art in nature from around the world. The written, multiple-choice questionnaires were used to look at eco-arts effect on the mind, body, spirit, natural materials for the arts therapy continuum and if making art in nature adds meaning to one's life. The goal of the questionnaires was to learn what creating art in nature evokes within an individual. It was hypothesized that nature and art induce a sense of peace, connectedness, stimulates existential thought, and helps adult's recall experiences. If you would like to learn more about nature therapy, art therapy, and eco-arts, please see the resources list attached. If you feel that you need assistance with mental health or experiences as a result of this study, please contact a local counselor, or the researcher to get referral services. Your participation was important in helping researchers understand the therapeutic intersection of art and nature. Thank you for taking part in closing the gap in literature and broadening the field of art therapy and nature therapy.

Results will be available from the investigator, [name], by [date]. You may contact [name] at [email] to receive an email copy of the final report. Most results will be grouped together; therefore, individual results may not be available. Your participation will remain confidential, even if the report is published.

If you have any additional questions regarding this research, please contact [name] at [email].

Thank you again,

[Name]

## **Appendix H: Resources**

# Evoking the Art of Nature

## Resources

### USA Mental Health:

National Alliance for Mental Illness (NAMI): <https://nami.org/home>

National Suicide Prevention Lifeline: <https://suicidepreventionlifeline.org/>

Helpline: 1-800-273-TALK (8255)

Substance Abuse and Mental Health (SAMHSA): <https://www.samhsa.gov/>

National Helpline: [1-800-662-HELP \(4357\)](https://www.samhsa.gov/1-800-662-HELP)

### UK Mental Health:

Helplines and Crisis Contacts: <https://www.centreformentalhealth.org.uk/helplines-and-crisis-contacts>

Helplines by Region: [https://helplines.org/helplines/?fwp\\_topics=mental-health](https://helplines.org/helplines/?fwp_topics=mental-health)

### France Mental Health:

SOS Amitie: <https://www.sos-amitie.com/>

International Hotlines and Mental Health Website: <https://www.psycom.net/get-help-mental-health>

### Art Therapy, Nature Forest Therapy, and Eco-Arts Websites:

American Art Therapy Association: <https://arttherapy.org/>

Association of Nature and Forest Therapy: <https://www.natureandforesttherapy.org/>

Eco Arts Space: <https://ecoartspace.org/>

Women Eco Artists Dialog: <https://www.weadartists.org/>



Ecopoiesis: Eco-Human Theory and Practice: <https://en.ecopoiesis.ru/>

### **Global Art Therapy Resources:**

Art Therapy Alliance:

<http://www.arttherapyalliance.org/GlobalArtTherapyResources.html>

International Expressive Arts Therapy Association: <https://www.ieata.org/>

<https://summit.expressivemedia.org/>

International Nature and Forest Therapy Alliance (INFTA):

<https://infta.net/home/research/references/>

### **Books:**

Art Is a Way of Knowing: A Guide to Self-Knowledge and Spiritual Fulfillment through Creativity, by Pat B. Allen

Bodyfulness: Somatic Practices for Presence, Empowerment, and Waking Up in This Life, by Christine Caldwell

‘Green Studio’’: Nature and The Arts in Therapy, by Alexander Kopytin, and Madeline Rugh

Healing Trees: A Pocket Guide to Forest Bathing, by Ben Page

Nature-Based Expressive Arts Therapy, by Sally Atkins, and Melia Snyder

Neurobiologically Informed Trauma Therapy with Children and Adolescents, by Linda Chapman

The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma, by Bessel van der Kolk, M.D.

Your Guide to Forest Bathing: Experience the Healing Power of Nature, by M. Amos Clifford

**Eco-Artists:**

Andy Goldsworthy: <https://goldsworthy.cc.gla.ac.uk/>

Chris Drury: <https://chrisdrury.co.uk/>

Karen Vaughan: <https://www.instagram.com/fortheLoveofSoil/>

<https://www.fortheLoveofSoil.org/about>

Mary O'Brien: <http://www.watershedsculpture.com/>

Richard Long: <http://www.richardlong.org/sculptures.html>

In an **emergency**, dial **911** or your local **emergency** number immediately.

If you have additional questions or desire mental health referral services, please contact the researcher at [email].

## **Appendix I: Contingency Plans**

## Contingency Plans

### Plan #1

Should social distancing or shelter-in-place measures be in place during the duration of this study or the participant is unable or unwilling to go outside due to health concerns or COVID-19. No individual will be forced to participate in this study or go outside.

- Participants are advised to follow local rules and regulations.
- Participants are advised to limit gatherings and stay at least 6 feet apart outside in order to limit exposure and stop the spread of COVID-19. This is subject to change depending on the participant's location.
- The student research will only interact with participants virtually.
- The student researcher will be using online methods of recruiting participants.  
Participants are able to access all forms online and send in questionnaires, forms, and artistic data to a confidential email platform.
- It is acceptable for individuals to interact with nature through a window, rather than being immersed in nature.
- It is acceptable to create an artistic response (to an individual's interaction with nature through a window) without natural materials.
- It is acceptable for individuals to use natural materials inside a building.
- All continued inquiry will be online, via email, phone, and video conferencing.

### Plan #2

Should an individual have a physical disability or visual impairment, causing difficulty participating in this nature-based art study.

- Once an individual shows interest in participating in this study, the individual must reach out to the student researcher indicating their accommodation request. Vision Ability

Accommodations:

- Upon request, the student researcher can share the questionnaires and consent form in large text sizes or change the font style.
- Upon request, the student researcher can give the individual contacts to local supports to help the individual gain outside access.

Physical Ability Accommodations:

- Upon request, the student researcher can help participants who have difficulty accessing a natural environment (due to their physical ability) acquire natural found objects to use as art materials.
- The participant will have to share contact information in order to receive a packet of natural objects (like leaves, sticks, pebbles, etc.) sent by the student researcher.
  - It is acceptable for individuals to interact with nature through a window, rather than being immersed in nature.
  - It is acceptable to create an artistic response (to an individual's interaction with nature through a window) without natural materials.
  - Upon request, the student researcher can give the individual contacts to local supports to help the individual gain outside access.

## **Appendix J: Safety Recommendations**

# Nature Safety Recommendations

## 10 Essentials to bring:

**Food - Water - Navigation - Light - Sun protection  
First Aid - Knife - Fire - Clothes - Shelter**

Bring a friend. Tell someone where you are going & when to expect you back.

Check the weather forecast. Do you need rain gear? Extra Jacket?

Bring a map. Technology does not always work in nature.

Consider switching out cotton to a quick-water-wicking fabric or wool.

Appropriate footwear, sturdy with traction is always a good choice.

Don't wear earbuds, you will miss a huge part of being in the outdoors and may miss audible warning signs of danger. Stay aware.

Similarly, it is best practice not to play music, enjoy the birds and quiet.

Going for a hike? Trekking poles (walking sticks) maybe helpful.

## **Carry In - Carry Out. Leave No Trace!**

This will benefit the Earth, Animals, your Neighbors, and You.

Allergic to anything? Bring your medication. Bumble Bee ready!

Stay on trail. It will keep you safe from nature and nature safe from you.

Do not panic. Look for trail markers, listen for cars, remember the sun rises in the east & sets in the west. If you get lost call for help & stay in one place.

Don't forget to hydrate!

**Be smart. Be prepared. Have fun.**