

ECOLOGICAL-SENSORY MINDFULNESS

Abstract

It is without a doubt true that nature is the foundation of all ecosystems and that all living things inherit the intelligence of nature, but every human being has the primary desire to survive, along with the need to improve livelihoods, the desire to gratify wants, and eventually the desire to control their environment—all without adhering to the moral principles of sustainable living, where development is done in the interests of both humans and nature. The necessity for natural protection is sometimes perceived as antagonistic to the goal for progress, if not diametrically opposed. Since Plato first described how humans have an impact on nature, trade-offs between the two have served as the foundation for a discussion that has troubled people in one way or another. Of course, as the rate of human intrusion into "natural" environment has accelerated in recent decades, the arguments have become much more clearly defined. Growing scarcities that are sharply differentiated by world location, class, gender, and ethnicity have been produced by capitalism's accelerating development in conjunction with economic growth and the industrialization of the nations. Due to the scarcity of natural resources and the overloading of the environment's capacity to safely dispose of toxic waste, various aspects of nature, including the spread of invasive exotic species (plants, fungi, and animals), global climate change with its unpredictable effects, and habitat fragmentation, are deteriorating rapidly.

Keywords: Disconnect between Human and Nature, Ecological – Sensory Intelligence, Ecological-Sensory Mindfulness.

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I. DISCONNECT BETWEEN HUMAN AND NATURE

The issue of developing methods for forecasting ecosystem reactions to behavior in the new world of global change has undoubtedly been met by the research community. To secure sustained planetary and individual well-being, the ordered world requires attentive ecological-sensory global citizenship, human relation engagement in elliptical natural wholeness, and a serious scientific rethink of connected and disconnected intelligences. The dominating eco-psychological zeitgeist is hence the development of Natural Systems Thinking Processes and connected intelligences to reconnect, renew, and reinvigorate synergistic links between planetary and personal well-being. Most of humanity's intelligent solutions ended up being non-intelligent. Due to emotional attachment and rationale for delaying pain, denizens consistently showed the paradoxical rationality of delaying smaller present pains at the expense of larger unintended future difficulties. The most potent, resource-depleting, and environmentally destructive culture in human history is modern civilization. Therefore, it is essential for both the long-term welfare of humans as well as the welfare of the planet that we comprehend and rethink our relationship with the natural world. The necessity to investigate ecological self experience and how this experience affects mental health and environmental behavior is suggested by the nature connectivity research. The following characteristics of our civilization have a very direct impact on how people and nature interact:

1. Our culture places a strong emphasis on the disconnection between objects, unfocused thoughts, and decreased awareness of oneself and one's surroundings. The natural environment typically is considered as something that is different and distinct from human beings in the individualistic society, where the individual's aspirations are held up as an ideal way of being.
2. Consumption is highly valued in our culture. The natural environment is frequently viewed as a commodity made up of many elements that can be utilized to better our daily life. By distorting perception, cognition, and behavior, the three facets of human existence—impermanence, suffering, and non-self—have been hidden from view.
3. Our civilization develops ways of existence and residential settings that separate us from the natural world. Through the use of artificial lighting, climate control, and urban development, the natural world is kept at a distance. The complete range of unpleasant feelings regarding the existence of the natural world have been affected by the three unwholesome foundations of human activities, which are greed (craving, desire, or attachment), hatred (aversion or ill will), and delusion (ignorance or confusion).

II. ECOLOGICAL – SENSORY INTELLIGENCE (ESI)

Psychology as a field of study is constantly committed to raising human consciousness and educating people about the healthy connections between human conduct and nature, such as loving-kindness, friendliness, and compassion, which entails genuinely caring about another person's well-being. One field that focuses on perceiving connections between people and the natural world is ecopsychology. Natural resources are consumed quicker than they are being replenished since the main dangers to human existence and well-being are now predominantly produced by humans. As a result, humanity must live within the

capacity of the Earth before the ecosystem worsens. Ecopsychology, according to Theodore Roszak (1995), is the scientific study of how psychological and ecological factors interact in order to comprehend and alter perception, values, and lifestyle in order to heal the human mind and restore the environment.

Ecological-psychological consciousness is the experience of existence (Newman, 2012). Ecological psychology treats organisms in mutual relations to their environment which surrounds and supports the organism's way of life, perception, action, changes and development (Gibson & Pick, 2010). The evolutionary origin of general intelligence 'g' and cultural intelligence approach suggest evidences of intelligence in both human and non-human living beings (Burkart et al 2014; Flynn, 2016). The general intelligence underlying all species is an adaptation in the ecology. An adaptation is the estimates of the 'g' which exhibits predictive validity of the concept g. The general intelligence seems evolutionarily implausible because the mind is populated by a large number of adaptive specializations that are functionally organised to solve evolutionary typical and recurrent problems of survival and reproduction (Cosmides et al 2013; Wang, 1996). Ecological-sensory intelligence (ESI) is a link between general intelligence of human and non-human living beings bridging mutuality of the environment with organisms. It is relational which continually evolves interactively with other beings and entities in the natural world to converge perceptions, thoughts and feelings for mutual nurturance. It involves both emotion and reason which go hand in hand rather disrupting each other (Lakoff & Johnson, 1999). Several studies illuminates that ecological-sensory consciousness is entwined, not only with thinking, but with feeling and action (Mayer & Frantz, 2004; Nisbet, Zelenski & Murphy, 2009; Hedlund-de Witt & Boersema, 2014; Kowal & Mangal, 2021).

ESI is a function of an embodied integration of disposition, habits, feelings and assumptions that orient way one perceives, understands and lives in the world. It is critically reflected in the basic premises of thoughts, feelings and actions fostering personal, social and ecological values such as connection, generosity, partnership and celebration by the individuals (Morrell & O'Connor, 2002). It can be marked by vital environmental awareness of relationships, processes, and practices leading to nurturance and sustainability of both human and non-human living beings. Kowal & Mangal (2021) defined ecological-sensory intelligence as "*the uniting quanta of general intelligence among all living beings*". The results of the study reveal that there was no significant difference found between general intelligence IQ and ESI ($F=2.15$; $p>.075$) which suggests that both intelligences have some commonalities in them (Kowal & Mangal, 2021). In order to explain how humans relate to other living systems as a living, communicative, and creative totality within a constrained earthly framework, Bateson (1973) introduced the notion of "ecology of mind" (Martusewicz et al., 2011). According to Bateson, human embodiment in larger natural systems not only had a physical component, but it also served as the catalyst for the development of human intelligence. According to Martusewicz et al. (2011), human intelligence is an integrated component of a broader ecological mind, a complex dynamic system of communication and transformation where information is created and exchanged as various elements interact with one another.

III. ECOLOGICAL-SENSORY MINDFULNESS

Ecological-sensory mindfulness enables people to deliberately explore and forge a stronger bond with the natural world, strengthening humanity's connection to the naturally orderly world. It is the technique of paying close attention to the specifics of one's current experience of nature. Ancient India saw the deliberate and organized beginning of this activity in the shape of many religious foundations. People started to investigate the intricacies of perceptual experience using techniques that a modern scientist may identify as empirical, experimental, and dependable despite being wholly introspective amid the forests and plains of ancient civilizations along the banks of rivers. Buddhist theoretical psychology, in particular, presents a model of human ecological-sensory consciousness based on a process view of non-centralized, interdependent systems for processing sensory data and creating identity. This paradigm appears remarkably postmodern. Buddhist school of psychology believes that human existence revolves around a node of conscious awareness, which has recently been defined as ecological-sensory intelligence as "the uniting quanta of gene expression." Buddhist applied psychology is rooted in the practice of meditation, ranging from mindfulness to various stages of concentration to deeply transformative insights using compassion and love-kindness that can intelligently restructure the organization of mind and body.

The process of adaptation is delicate, especially during the formative years of childhood when children experience the natural world and its interactions as a universe of macro-construction. In this universe, the continuously emerging information from the senses and other internal processes is channeled into structure and organized into schemas that support a comprehensive understanding of existence. An instant of contact between a sense organ, a sense object, and the awareness of that object is the most fundamental detectable unit of experience, according to Buddhist understanding of ecological-sensory mindfulness. Together, these three results in cognition, an instance of sensory discernment and an event of "knowing" that serve as the foundation for all other aspects of human existence. Ecological-sensory mindfulness thus resembles emergent, conditioned phenomena and appears as the agent, tool, and action of consciousness at the same time in a series of fleeting events (Bodhi, 2000).

Buddhist psychology views perception as the process by which an individual regresses and interprets the experience of the moment, providing associative and evaluative information about the natural world. Every moment when organs, things, and consciousness come into contact with one another is automatically processed in the context of prior knowledge. As a result, nature perception is not simply the passive registration of the external world through the senses. In actuality, categorization is a creative process that builds on prior knowledge and applies categories that have been inherited from a variety of collective natural environmental sources. Buddhist terminology uses the term "feeling" to describe the affective quality connected to each and every sense-based cognition. The processing of anything known in any of the six ways of knowing (seeing, hearing, smelling, tasting, touching, or thinking) includes the natural and automatic inclusion of the feeling tone of nature. In Buddhist psychology, the intention refers to the perspective adopted toward what is occurring during experience. It is the variable that determines whether an experience is pleasurable or unpleasant as it arises from the circumstances of an earlier event as manifested in nature. Ecological-sensory awareness, which incorporates the attitude toward what is happening in

experience, includes intention as a key changing component. It is a more active and imaginative function that significantly affects how the mind organizes and perceives the experience of the moment. His or her past behaviors and the ensuing dispositions they produced have been continuously updated and collected over the course of a lifetime to mold moments based on intents, perceptions, and feelings.

When Buddha eventually saw how the body and mind cause their own suffering, he was able to change himself in such a way that his own suffering was completely eliminated. Ecological-sensory awareness meditation served as the foundation for the Buddha's proposed healing procedure. On its own, it will positively impact the cure, and when combined with it, substantial advancement toward wellbeing is possible. It puts the natural world into appropriate perspective in relation to the conventional world, which is a subjective construct. Its repetition aids in reversing the propensity to learn ahead of time and hasten to the stage of macro-construction. A variety of opportunities for learning and development open up from this starting point of increased awareness of the mind's present-moment activity through ecological-sensory mindfulness, enabling total transformation to recognize the interdependence that exists between all life forms and connecting the human to its life support system.

Applications for ecological-sensory mindfulness techniques are numerous.

1. To develop a more focused state of being and intensify a meditation routine (Van Gordon, Shonin, & Richardson, 2018)
2. To foster concern, a desire to conserve the natural world, and a sense of responsibility (Amel, Manning, & Scott, 2009; Geiger, Otto, & Schrader, 2018).
3. To assist people in coping with stress, depression, and climate change (Wamsler et al., 2018; Nisbet, Zelenski, & Grandpierre, 2019; Schuling, van Herpen, de Nooij, de Groot, & Speckens, 2018).
4. To improve one's own wellbeing (Albrecht, 2016; Geiger et al., 2018; Kirwin, Harper, Young & Itvan, 2019; Wamsler et al., 2018).
5. To enable a more imaginative, thoughtful, and holistic method of thinking and solving environmental problems. (Eaton et al., 2017; Wamsler et al., 2018)
6. To help with equitable issues.
7. To spur social activism (Wamsler et al., 2018)

Although several techniques have recently been developed that link mindfulness with nature, researchers and instructors have been fusing mindfulness with nature for centuries (Kaza, 2010). Numerous ecological-sensory mindfulness exercises have been created for both kids and adults, including: Being still like a frog: The majority of mindfulness-based programs for both children and adults include mindful-walking (Stahl & Goldstein, 2010). Mindfulness exercises for kids (Snel, 2013) in relation to child-centric mindfulness; 60 exercises to connect with nature - whether that be in the countryside, a park, an allotment, the garden, or on a balcony (The Mindfulness Project, 2019). Students engage in the practice of ecological-sensory mindful walking in the natural world while taking it slowly and paying close attention to their surroundings with their bodies, minds, and senses. One might focus on the earth, trees, leaves, atmosphere, flora, clouds, and/or temperature in a park or woodland, for instance. The walker can tune into the ground by asking questions such as, "Does the ground feel soft, hard, sticky, or uneven as I take each step?" and "How does my foot feel as

it touches the earth?" Other questions include, "Am I resting my heel on the ground first as I step, or my toes?" and "How does my connection with the earth feel through my whole body?" Teachers may point out to pupils that our bodies and thoughts are intertwined with the natural environment, and that we inhale plant, animal, and plant exhalations as well as our own (Van Gordon et al., 2018).

When undergraduate students are taught ecological-sensory awareness, it is discovered that students get closer to and reclaim their identity with the natural environment, frequently reflecting and acknowledging their loss of connection to it. The majority of the time, it was found that this affiliation did not inspire pupils to innately care for their surroundings. Additionally, it was discovered that the key to promoting pro-environmental behaviour and action was to give students some straightforward examples of how they could benefit their local environment (Skills to Act) and specifically ask them to perform an environmental act of kindness (such as picking up trash in a nearby park) and document this act in an assignment. All of the students demonstrated various acts of environmental benevolence after being introduced to the idea, and the majority of the cohort brainstormed ideas for potential future pro-environmental behaviour and steps they could individually take. When teaching ecological-sensory mindfulness, requiring students to perform an environmental good deed has proven to be a significant component in translating the connection and identification that kids were feeling into caring for and conserving our natural world.

IV. CONCLUSION

Numerous viewpoints and definitions can be used to understand the ecological-sensory mindfulness. These firstly define it as mindfulness as a type of meditation, individually tailored the threads of paying attention to surroundings, realizing the present moment, and embracing oneself with compassion, kindness, and love by turning inward to maximize the inner energy for channeling thoughts, feelings, and behavior in a righteous manner. Second, mindfulness involves paying attention to the flow of energy and compassionately channeling it to feel inner happiness and re-energize the entire bodily system in the present. This allows one to know or realize the synergetic relation between the (conscious/unconscious) energy one holds on and cosmic energy surrounds that person. Thirdly, mindfulness involves developing compassion for oneself and others in order to reflect love and kindness. It is a process that involves linking thoughts, feelings, and actions with the flow of energy that encompasses the self and higher self.

The foundation of the ecological-sensory awareness notion is in the intricate genetic interconnection that each living thing possesses individually. According to research (Jislin-Goldberg et al. 2012), the practice of frequently engaging consciously with a certain kind of scenario (ecological-sensory) over time results in more stable qualities that then provide a grounded sort of ecological-sensory mindfulness engagement in a given moment. According to research conducted by Tsafou et al. 2016, this effect of trait mindfulness on behavior was conveyed via state mindfulness while engaging in the activity. The studies that found a non-significant relationship between state and trait mindfulness at the start of a mindfulness intervention, the association with ecological sensitivity strengthened mindfulness over the time interval, with growth in state mindfulness predicting trait mindfulness post intervention (Kiken et al. 2015), explain the debate on ecological-sensory mindfulness as a state

(unfolding in the moment) or trait (individual difference quality) construct. The ecopsychologist's claim that connection to nature is a key predictor of ecological behavior and subjective well-being is supported by the connectedness to nature scale (CNS), which was developed by Mayer & Frantz (2004). It measures the individual trait level of a person's affective, experiential connection to the natural world.

According to Newman (2012), ecological-sensory awareness is the consciousness that symbolizes "the experience of existence." Strong feelings of embeddedness, kinship, or belonging to nature are associated with a tendency to resist consumerism, get involved in environmental causes, and feel happier as a result of their connection to the natural world or being ecologically aware (Mayer & Frantz, 2004; Nisbet, Zelenski, & Murphy, 2009). The belief that an experiential feeling of connection and identification with the more-than-human world was essential to a deeply ecologically sensitive mindful consciousness (Naess, 1993) is based on the idea that the universe is a communion of subjects, not a collection of things (Berry, 1999). This expanded sense of ecological-sensory mindfulness encompasses a wide range of life's potentials. According to ecopsychologists, culture develops as a self-aware mirror of nature's own steadily developing mindfulness and mind-likeness and is a result of the compacted ecological intelligence embedded in species (Roszak, 1992). It is important to recognize ecological-sensory mindfulness health and emerging approaches that grapple with multispecies, global interactions linking ecosystems and health because many health studies around climate change, in particular, adopt a dominant approach that views "environment as harm" (Buse et al. 2018).

In the advent of individual society, many people today are cognitively, emotionally, spiritually, and experientially distanced from nature (Ives et al., 2017; Macy, 2007a; Plotkin, 2008, 2013; Roszak et al., 1992, 1995; Shepard, 1982; Soga & Gaston, 2016; Vakoch & Castrillon, 2014; Vaughn-Lee, 2013) which has caused degradation of behavior, suffering and mental health problems in the individuals. Human psychological development entails a progression from a limited ego-based identity to a sense of self defined by social interactions with others, and ultimately to an identification with all of nature (Naess, 1989; Hathaway, Cole, & Poland, 2019). According to Naess (1989), this stage of human development known as self-realization is actually handled by an ecological-sensory mindfulness technique. Being aware increases a person's connection to nature by increasing the ecological sensory effect of their experiences in nature (Wilson, 1984). The nature connectedness literature and the interactive body of environmental behavior literature demonstrate in their pro-environmental behavior model that a variety of factors other than purely natural ones, such as ecological worldviews, self-transcendence values, ecological self-idiosyncrasies, personal and social norms, can affect pro-environmental behavior (Ertz, Karakas & Sarigollu, 2016; Kollmuss & Agyeman, 2010; Schmitt, Mackay, 2018). According to certain ecopsychologists, the ecological self is a psychological characteristic that is constant over time and space (Andrews, 2018; Capaldi et al., 2014; Nisbet et al., 2009). A short-term nature-based intervention can result in a sustained increase in nature connectivity, even if some claim that it is a variable rather than a stable quality. According to Richardson & Sheffield (2017), mindfulness practice can improve well-being and encourage sustainable behavior toward the ecological-sensory world. Even the felt sense of connection to nature can vary greatly in quality from moment to moment, much like mindfulness practice (Andrews, 2018). The ecological-sensory mindfulness experience is oversimplified by a connection to nature.

According to Ives et al. (2017) and Zylstra et al. (2018), there is a need for multidisciplinary, cross-fertilization of methods and approaches to incorporate human-nature connection (HNC) in an eco-psychology holistic research. Ecological-sensory mindfulness is a multi-disciplinary approach that has been cross-pollinated to understand the complexity of many human-nature connections (HNC). The Buddhist essential concept of interdependence and connectivity with environment is ecological-sensory awareness (Hanley, Derringer, & Hanley, 2017), spending time in nature increases mindfulness (Hanmann & Ivtzan, 2017), and practicing mindfulness meditation may increase nature connectedness (Aspy & Proeve, 2017; Nisbet, Zelenski & Grandpierre, 2019). Mindfulness is defined as being attentive to and aware of what is happening in the present moment (Brown & Ryan, 2003). Nature connectedness is thought to have a reciprocal, bi-directional relationship (Schutte & Malouff, 2018). Due to their emphasis on embodied modes of knowing, spiritual ecology or deep ecology, which supports the development of mindfulness and ecological practice, is where the origins of ecological-sensory mindfulness can be found (Gradle, 2007a). Ecological-sensory mindfulness was first referred to as embodied mindfulness, which means to participate and engage with the world and one another, sameness across species (Kowal & Mangal, 2021). General intelligence and ecological sensory intelligence have similarities. Finally, ecological-sensory mindfulness is introduced as a fluid experience of existence that evolves over time with the ever-nurturing ecological-sensory intelligence entwined in both human and natural environments, with a focus on each party's overall wellbeing. This is not just an intellectual conceptualization, however.

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