

MINDFULNESS PRACTICE EXPERIENCES OF INDIVIDUALS WITH A HIGH CONNECTEDNESS WITH NATURE

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ABSTRACT

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The environmental and climate crises unfolding around the globe have made understanding what motivates people to be more ecologically aware and practice conservation more important than ever. This qualitative study explored the experience of the mindfulness development practices among people (N=10) demonstrating a high connectedness with nature. It used a phenomenological method of data collection through in-depth interviews. The findings of this study reveal three main themes concerning experiences of mindfulness practice among the informants. The first theme is the informant's pathway of mindfulness practice. The second theme is concerned with how each informant came to understand the meaning of mindfulness. This factor can be further divided into six sub-themes: (1) do, learn and see it myself; (2) practice with coaching; (3) "I" and my thoughts are not the same thing; (4) practice letting go bit by bit; (5) mindfulness is vital; and (6) improved quality of life through mindfulness (e.g., mentality, relationships, and work performance). The last main theme addresses three attributes of connectedness with nature that have been improved via continual mindfulness practice, including: (1) awareness that connection with nature and mindfulness practice are one; (2) awareness that inner and outer worlds are connected as one; and (3) being careful not to do anything that can harm nature. People who are concerned about conservation of natural resources are advised to study and develop methods of mindfulness practice that are suitable for public distribution for the future care and healing of nature.

Keywords: Mindfulness; mindfulness practice; connectedness with nature; phenomenological study

1. INTRODUCTION

The very environmental crisis that is threatening humankind at the very moment, ultimately, is nothing but the fruit of a spiritual crisis. Since our minds feel depleted and empty, we try hard to exploit nature in the hope of fulfilling our lives. Nature is a mere "object" whose value emerges only when it is transformed to any commodity that can satisfy our insatiable wants. We unabashedly destroy nature on a vast scale. As we considered ourselves separate entities from nature, we only think to overcome and control nature, leaving us ignorant of the reverberations that inadvertently inflict pain on us.

This statement by Venerated Bhikkhu Paisal Visalo was extracted from a eulogy in the book *The World We Have* (Hanh, 2013), and reflects the fact that current environmental crises are created and influenced by human behaviors and reactions towards nature. These crises seem to result from human alienation from nature, leading to a ruthless abuse of nature, although the root of these actions lies in human inner privation and lack of inner development. This concept also aligns with a conclusion from Frantz et al. (2005) about human reactions towards nature. They propose that development of the modern world, emphasizing self-aggrandizement and being the center of attention, is highly dangerous to the environment. As a result, to encourage a consciousness of environmental conservation, one needs to cultivate a correct self-perception and personality. In other words, people must be encouraged to acknowledge that they are not the center, expanding their perceptions to cover nature and nurture a sense of connectedness with it. Therefore, the genuine care of nature needs to start with the care of our human minds, an area where psychology can play a role in developing the mind so as to reunite it with nature harmoniously and non-violently. Simply put, taking care of ourselves, particularly our inner lives, is the same as taking better care of nature.

Psychologists have developed a science of balanced living between human beings and nature, called “ecopsychology” (Roszak et al., 1995; Pierce, 2003; Smith, 2010). This combines the sciences of ecology and psychology in order to develop people’s inner lives and modify their lifestyles to become healthier and more balanced from both ecological and psychological perspectives. Ecopsychologists focus on connectedness with nature, a steady state of consciousness consisting of cognition, affection and interrelated experiences between oneself and the rest of nature. The numerous studies focusing on connectedness with nature use different terminology, such as “connectedness to nature”, “connection to nature”, “nature connection” and “nature relatedness”. However, in this research, we follow Zylstra et al. (2014) and use the term “connectedness with nature”. They use this term because humans are a part of nature and ‘with’ is the appropriate preposition to reflect that oneness. In addition, ‘with’ is better than ‘to’ at reflecting a mutuality between nature and humans.

Furthermore, Capaldi et al. (2015) reviewed literature about the merits of connectedness with nature, finding a large number of related studies showing that getting in touch with nature can enhance positive feelings and heal patients diagnosed with mood disorders. Moreover, a meta-analysis of 32 experimental studies with more than 2,000 subjects reveals that connectedness with nature, either at low or moderate levels, can enhance positive moods and lessen negative feelings. Connectedness with nature has also been found to raise autonomy. For example, outdoor education and experiential learning programs have found that the experiences of being in a forest and living in the wild can boost personal well-being, including personal growth, self-esteem, self-regulation, and social competency.

Through the lens of Buddhism, individuals seeking a connection with nature require self-directed practice until they become enlightened through their own efforts. This process has been explained by Venerated Bhikkhu Paisal Visalo (Hanh, 2013) who said, “Be noted that seeing nature profoundly cannot happen merely through thinking but direct experiencing through contemplation and conscious mindfulness in living.” The path of nature conservation synchronizes with the path of contemplation and conscious mindfulness. Thich Nhat Hanh clarified that we need to be conscious of inner and outer natures, and this ability requires mind purification or mindfulness practice in everyday life until one becomes aware of The Law of Dependent Origination (Paticca-samuppada) through one’s own experiences. The principle of mindfulness practice holds that:

The training is to closely observe, experience, understand what is going on and how it is going on, what is an outcome. It is being there or ready to be aware, contemplate, comprehend, and only follow to observe every moment without mental or emotional reactions - without evaluating, without criticizing, without judging negatively or positively, for instance, without adding any personal feelings, preferences, conviction whether it is right or wrong, like or dislike, for instance. Just see and understand things as they are. (Phra Phrom Khunāphōn, 2006)

Meanwhile, western ecopsychologists have also written a number of articles acknowledging the importance of mindfulness training and practice. They consider mindfulness a practical technique that develops awareness, enhances compassion and empathy, and opens the mind to be in tune with the environment (Ericson et al., 2014). Many studies explore mindfulness and connectedness with nature, especially a study by Unsworth et al. (2016) that investigated the effects of mindfulness practice on self-nature interconnectedness.

This research was divided into two phases. Phase 1 was concerned with the study of the relationship between mindfulness and self-nature interconnectedness among 25 subjects who had experienced Buddhist mindfulness training. The result showed a positive relationship between mindfulness and self-nature interconnectedness at $r = .52$ ($p = .01$). A comparative study in Phase 2 investigated whether mindfulness training given when living close to nature affects self-nature interconnectedness. The researcher randomized 39 students attending a mindfulness camp and another 32 students attending a camp without mindfulness

practice. The findings showed that the students attending mindfulness training in nature had higher connectedness with nature than those receiving no such training. This confirms the relationship between mindfulness training and connectedness with nature, and shows how the former influences the latter. However, when investigating the knowledge acquisition process in detail, especially in Phase 2, the research team noted that the mindfulness training led by less experienced individuals might not be as effective. Moreover, the researchers also raised the question of whether the short duration of mindfulness practice training in nature in Phase 2 (only 15 minutes in the morning on days 2 and 3) would be adequate for students to develop their mindfulness. The current study seeks detailed answers regarding this issue from individuals who have direct experience both in connectedness with nature and in continual mindfulness practice. Questions to be answered include: what are the experiences in mindfulness practice and training of individuals with high connectedness with nature, and how do they perceive their connectedness with nature in relation to their state of mindfulness?

2. METHODOLOGY

1. This study is phenomenological research, a type of qualitative study which allows profound comprehension of an informant's experience.
2. The informants are individuals with activities or interests related to connectedness and intimacy with nature who have had regular mindfulness practice. All of the informants have achieved a high score on the Connectedness to Nature Scale.
3. The researchers were responsible for data collection, including contacting, screening, and interviewing the informants, as well as for data analysis.
 - Stage 1: Gate keepers were identified to recommend individuals who met the criteria of connectedness to nature and continual mindfulness practice.
 - Stage 2: Potential informants were contacted via the gate keeper. After the structure of the study was explained, the contacted individuals were asked whether they were willing to participate as informants.
 - Stage 3: During the screening process, the researchers asked the informants to rate themselves on a Connectedness to Nature Scale. This task took about 15 minutes.
 - Stage 4: The informants were asked for their consent to participate in this study.
4. Ethics in Human Research: the researcher submitted the research proposal to the Chiang Mai University Research Ethics Committee of Ethics; approval was granted on 14 November 2017 (CUMREC No. 60/037).
5. Research Instrument
 - 5.1 The Connectedness to Nature Scale by Mayer and Frantz (2004) was used in the screening phase to determine which individuals met the inclusive criteria for informants. A Thai version of the Connectedness to Nature Scale, translated by Chaichantipyuth (2011), was used in this research. The translated instrument was approved for adaptation to a Thai context. After development, three different psychological experts were asked to examine the content validity of additional items created by Chaichantipyuth (2011). Then, corrected item-total correlation coefficients were calculated based on responses from 191 college students. The coefficient of each item was required to be greater than critical r ($r = .19$, $df = 189$, $p < .05$), and there were 24 eligible items (coefficient ranged between .24 - .67). An assessment of reliability showed that the Cronbach' Coefficient Alpha was .89. A cutoff score of the 75th percentile was set to identify high-level connections with nature samples.
 - 5.2 A list of questions was developed by the researchers for interviews based on the research questions and objectives. The questions were designed for a semi-structured interview; they were flexible enough to allow the informants to narrate their stories and experiences fairly freely but still comprehensive enough to cover connectedness with nature and mindfulness practice. Sample interview questions included: Please describe your mindfulness practice background. What does mindfulness practice mean to you? What does 'connected with nature' mean to you? and After practicing mindfulness, what have your connectedness with nature experience(s) been like?
 - 5.3 The researchers themselves were considered an important type of research instrument. The researcher who conducted the interviews is a counseling graduate and has over 20 years of teaching experience. Therefore, her professional listening skills, including summarization, reflection and clarification, are highly tuned. In addition, she has 10-years of mindfulness training. This allows the researcher to recognize her own personal thoughts and sentiments, and be able to refrain from

distorting the data derived from interviews. In addition to the initial data analysis, a second set of researchers were invited to analyze and check the consistency of the results.

Data Analysis

The data analysis of this study followed a qualitative procedure of phenomenological research as follows (Smith, 2003):

1. The interview data were transcribed verbatim into written scripts. Audio records of the in-depth interviews were then reviewed to check transcript accuracy.
2. The researchers read the interview scripts and observation notes taken during the interviews several times. They wanted to ensure complete comprehension of the data. Another reading was done to code any significant messages or sentences related to the subjects' experiences, thoughts, and feelings. The related codes were grouped into relevant themes and categories.
3. The acquired themes and categories were systematically linked to each topic. This enabled researchers to draw conclusions about the informants' experiences with the different phenomenon.
4. The researchers double-checked the data and findings by perusing, analyzing, and discussing them in detail. This was followed by a peer debriefing comprised of two experts, a mindfulness practitioner and a qualitative research specialist. The aim of this process was to ensure that the findings were as true to the informants' experiences as possible and to minimize researcher bias, errors, and data distortion (Creswell, 2007).
5. The findings were submitted to the informants to check reliability and validity. (Creswell, 2007)
6. The researchers summarized the findings and reported them in a narrative form.

3. FINDINGS

Presentation of the findings of this study begins with background data about the informants (Table 1). This includes meanings and beliefs among informants towards connectedness with nature. This information is followed by findings related to the two research questions:

- (1) What experiences do individuals with a high connectedness to nature have with mindfulness practice?
- (2) How do they think their connectedness with nature relates to their state of mindfulness?

Table 1: Informants' Background Data

Informant	Alias*	Gender	Age	Occupation	Domicile	Connectedness to Nature**
ID1	Utai	M	53	Freelancer and community manager	Chiang Mai	Living daily life in harmony with nature; self-reliant from growing organic vegetables for household consumption, dyeing cloth with natural colors, and building a house from clay
ID2	Noi	F	56	Public servant	Bangkok	Loves alternative photography as it connects one's inner nature with the surrounding nature in that moment
ID3	Ton	M	27	Public servant	Bangkok	Interested in nature and attending courses on nature and Eco-Quest
ID4	Pla	F	47	Freelancer	Bangkok	Passionate about travel to appreciate nature
ID5	Aoi	F	29	Public servant	Saraburi, Bangkok	Ardent trekker who sets aside as much time as possible to spend near big trees and urban parks
ID6	Tono	M	32	gardener	Nakhon Ratchasima	Loves gardening, chose a rural livelihood, interested in nature and communication with trees
ID7	Ek	M	46	Private development organization	Bangkok	Former instructor for courses focusing on solving environmental problems by starting with oneself, takes students to stay in nature, organized the course <i>Buddhism and Nature Conservation</i> , currently also collaborating with nature conservation organizations

Table 1: Informants' Background Data (Continued)

Informant	Alias*	Gender	Age	Occupation	Domicile	Connectedness to Nature**
ID8	Chom	F	45	Public servant	Bangkok	Hobbies include trekking in the wild, mountain climbing, bird watching, and regularly attending nature conservation activities.
ID9	Ant	F	48	Public servant	Bangkok	A former member of the Nature Appreciation Club; trekking in the wild, bird watching, and being part of an alternative photography group
ID10	Por	M	64	Pensioner	Surat Thani-Chiang Mai	Freelance lecturer; often takes part in the Upstream and Nature Conservation Walking Campaign

*All participants have been assigned pseudonyms to ensure confidentiality.

** All the informants achieved high scores on the Connectedness to Nature Scale.

Meaning and beliefs towards connections with nature

Informants defined 'connected with nature' as "oneness". There is no separation and we are all connected with nature through love and kindness. However, this meaning changes as they age. Two informants noted that once they better understood life, the meaning of being connected with nature shifted:

Well, we would feel connected as a part of nature. Also, we would feel that we are tiny when compared to nature. Meaning it would be varied by age range ... for example during my childhood, I had thought about the world and life since I was young. It is like an imagination regarding the next life and the gigantic world. But after I learned about contemplative study, I feel that the whole things are actually connected as one piece. Not only a tree is considered as nature, but so the building or city are. Its definition keeps changing.

I comprehend that nature has similarity to mother. When we were young, we sometimes got scared by our own mother because she reprimanded and punished us especially when we did something wrong. Later, we found the truth that oh ... (our) mother is actually kind to us. Even when we were punished, that act of mother was meaningful because she loves us and she is kind to us. The meaning behind the harsh language and intimidating phrases spoken that we felt, was actually how she lets us know that we should refrain from what we were doing. It is a new kind of feeling which allows me to reflect nature as the mother. Every time nature tells me something, it indicates that I am doing something wrong.

Informants acknowledge the connectedness with nature through heartfelt understanding, without conveying into words.

I am aware of that connectedness with nature without thinking whether it is connected or not. When a question arises, I can simply answer how it is. But in the past, I did think about how it is connected. However, right now, I can answer that it exists in (our) life. And we no longer have to think about it ... well, back then, we would think that the connection with nature is great because we were taught so. But now the meaning is derived from my awareness, not from being taught by someone.

When we step into a forest, we then experience the sense of meaning in life. The meaning which does not exist within us but rather around us. Being (there) with the meaning of connectedness. These feelings can be expressed through words ... but the heartfelt meaning of the connection with nature, which lies within us, cannot be separated. We are not apart, we are all one part. This kind of feeling cannot be put into words. But it is a feeling which reflects to us the meaning of existence.

Additionally, informants also believe that connectedness with nature is a process of communicating or becoming attuned with nature.

I feel that nature is not a lifeless object. For example, trees which cannot move (themselves) could still acknowledge our thoughts. We can communicate with them. They might know that we have our love toward them.

When I was in the forest, I would connect, feel much connected. It is like, like, (I am) meditating. (It is) like connecting with (my) inner self. It feels very calm deep inside. And (I) would feel like (pause) um, it is hard to say. It (is like) being in the forest, (I) can release myself.

Question 1

In response to the question asking about experiences that individuals with high connectedness to nature have had during mindfulness practice, two themes emerged: pathways of mindfulness practice and fathoming the meaning of mindfulness; the latter consists of six subthemes.

1.1 Pathways to mindfulness practice

According to the research findings, two main pathways lead to mindfulness practice among the participants: 1) encountering suffering and 2) witnessing a role model in real life. Suffering causes participants to begin studying and practicing mindfulness. Meanwhile, some participants were inspired to cultivate their practice through listening and learning from their gurus.

1.1.1 Encountering suffering

The suffering participants sought pathways to ease their distress. Some of the participants therefore mentioned suffering as an inspiration that could attract an individual to practice mindfulness; one became a serious dharma and mindfulness trainee after losing his own son.

... at that time, I was searching for a mindfulness practice center because of the death of my son. ... then I found one intensive course, allowing me to fight with hindrance. In our daily life, we would wake ourselves up with a cup of coffee, keep moving around when bored, no confrontation with hindrance ... I faced it ... at the end, we all need to pass this challenge in order to realize that we all have that potential to overcome this ...

Another participant was introduced by a friend to a mindfulness course after experiencing suffering and depression:

... that course has brought me self-awareness. ... it allows me to detach from suffering. So, I have confidence and have been practicing regularly since then ...

And confronting suffering directly guided one participant to a practice of mindfulness:

There was an incident which I was blamed by a friend about something, I was so furious but can't express it out ..." attracting the intention to practice more often in daily life. "... like I have got the answer from Luangpor Pramote [Buddhist monk] ... also be able to see that, our thought, if we don't defile it, it will just come and go.

1.1.2 Witnessing a role model in real life

Faith and inspiration arose from ideal coaches, or from reading/listening to the teachings. This resulted in the practice of life perspective expansion among participants.

... I can see (my) thought when practicing with "Auntie" [Shusri Rongrojanarak: mindfulness teacher]. Since then, the contemplative path has begun and carried on. ... if there's anything happening I will talk to Auntie, so she can assist.

... (I) discovered the thought while participating in "Auntie's course", ... understanding that when I see a thousand, ten thousand thoughts, I suddenly know that the thought, I'm formulating, causes suffering.

Luangpoo [Thich Nhat Hanh: Vietnamese Buddhist monk] said bowing down, touching the earth, we will be able to surrender, something like that. That impression ... it's like I can see that these kinds of people have become who they are, it must be a result of mindfulness practice and that attracts me ...

Impressions based upon participants becoming close to teachers after witnessing their practice while being ordained were essential sources of faith and led to practice:

... Ajarn Samroeng [Buddhist monk] ... is a constant mindfulness practitioner. He introduced and comprehended me with a simple definition on what the basic mindfulness practice is ... it begins with faith, then a wisdom in deliberating my own practice, finally, I have devoted myself to be his disciple and been dedicating to the practice.

1.2 Fathoming the Meaning of Mindfulness

Data analysis revealed the second theme - how the informants understood the meaning of mindfulness. This included six sub-themes: (1) do, learn and see it myself; (2) practice with coaching; (3) "I" and my thoughts are not the same thing; (4) practice letting go bit by bit; (5) mindfulness is vital; and, (6) mindfulness improves the quality of life in many aspects, including mind, relationships, and work life.

1.2.1 Do, learn and see it myself

Each informant was able to develop mindfulness based on profound learning about their own minds. Understanding the nature of mind is an exclusively personal experience for the learners themselves to discern.

... we learn through practice, an outcome of mindfulness ... like one morning, while walking, (I) see, see, see the root which causes all these behaviors ... once seeing it, the feeling of relief appeared. The relief is what I saw. There were many times that (I) saw, saw some of my own behaviors, the body had a sense of relief. It is as same as Lord Buddha's or others' quote saying; do, learn and see it yourself.

I know not through thinking but through self-awareness; that leads me to see the truth. I cannot let go through thinking. We just have to keep doing my job (moving), and self-awareness internally does its own work. Self-awareness helps me understand what I have attached to, what makes my life stuck respectively. Eventually, I have more understanding about myself, my thoughts, habit patterns that cause me suffering, and attached to. I see the truth.

1.2.2 Practice with coaching

Mindfulness practice needs coaching from mentors who have walked on this path, guiding and showing the way so that the practitioner can walk correctly and directly. These mentors can be monks or lay people. For example, "Auntie" Shusri Rongrojanarak (mindfulness teacher) and Luangpor Kamkean (Buddhist monk) teach moving meditation.

Luangpor Kamkean kindly taught me to practice mindfulness by stating a short intro before practicing to let me set my rhythm. He guided me by asking where my hands were then. My hand? He paused briefly before answering, hands are body. Mind is aware of the body without the need to think. Oh ... hearing only that, the light switched on in me.

It requires a teacher, an expert ... Auntie is such a philosopher, unsure what it is called. But it is like, comprehending us that if we keep everything, if we never ever think to discard but attach to desires, we would just be stuck there though we can do walking meditation and the movement well. Discarding (desires) is a circle, what needs to be discarded, shout be discarded. Her teaching is just as simple as that.

1.2.3 "I" and my thoughts are not the same thing

One thing that all the informants who practice mindfulness unanimously agree on is that we tend to sink into our whirlpool of thoughts, unaware whether those thoughts are separate from our present state. These very thoughts that keep taking us away from the present are the source of our mental suffering. Mindfulness training, then, is a tool that allows the practitioners to detach themselves from thoughts, first gradually and then more markedly, step by step. Hence, a person is supposed to practice until mindfulness turns strong enough to "see" thoughts that are constantly at work.

Seeing the thinking. That is, plenty of awareness ... to the point that it can see what I am thinking, that "I" and thoughts are not the same thing.

1.2.4 Practice letting go bit by bit

Regular mindfulness practice enables one to not only see the thinking but also to know oneself, the nature of thoughts, and the nature of craving, aversion, and ignorance. Mindfulness practice helps the informants to be conscious of the three mental defilements. The participants then experience their sufferings fading away by degrees from their minds.

Even anticipation and any thoughts crop up without our awareness. The more we practice, the more we will see and let go. It is the practice of letting go bit by bit in life so that we can live more consciously.

Seeing this kind of thing leads to an acknowledgement of how it happens, how it fades away ... the moment we see it, we see a rage-mixed state. Once we see it, there is a meaning we get to learn from, its taste to experience and the state which filled with harsh and hot, it becomes sensible...when we feel that it is harsh and hot, and no longer desire, then it disappears. Just like when we reach our hand to touch a hot object, once we feel the heat we do not want anything, but let it go. It is because we know it is hot, so we let it go. This is a normal nature. I think the nature of physical body is similar to the nature of mind; it will let go if consuming something hot.

1.2.5 Mindfulness is vital

Those who have practiced mindfulness for a while keenly understand that practice is supposed to be continuous, that life understanding and liberation from suffering are not serendipity but dependent on persistent practice. This understanding will take root firmly in the mind and hold up mindfulness practice as a vital matter in life.

I feel it is a vital task in life, my life goal. If I have to rank, mindfulness practice will rank number one.

Mindfulness in daily life is developed as an integrative part of living. That said, one cannot slack, as practice will gradually develop a “subtle” awareness.

1.2.6 Mindfulness improves the quality of life

When informants practiced mindfulness with the right understanding and persistence, the outcomes changed their lives in many ways, including:

1.2.6.1 Mindfulness improves the quality of mind, reflected in less intense anger, liberation from fear and anger, and lighter suffering.

After attending this course, my life has changed, absolutely changed. Hardly getting angry, seeing angry thoughts. My mind is lighter, more detached, more aware of myself in daily life in whatever I am doing.

1.2.6.2 Mindfulness improves the quality of relationships because more developed mental attributes affect informants’ relationships with others. This close connection is demonstrated by the example of Pla, whose expressions of loving kindness to others stemmed from loving kindness towards herself.

Well, it is somewhat miraculous, miraculous in the sense that this energy can relieve our misery, make us be so kind to ourselves that we can expand our kindness to empathize with others. It comes out naturally, without being forced.

1.2.6.3 Mindfulness develops quality of work. When the minds of people that have undergone mindfulness practice grow in quality, the level of their work also gets better. This includes such aspects as greater understanding towards co-workers, more harmonious collaborations, and greater acceptance of others as they are.

From my long practice, my mindfulness will work for me during a crisis. I need not think what I should do with this child. I just understand already and hold his hand. If he hits my hand away, I will just let go and hug him from behind. If he shakes me off, I will console him. It just comes out naturally, no need to think what to do, how to do. I don’t even see what I am feeling. I just stay there with him, not sure what percentage of me is there with him. Just stay.

Question 2

The second question asks how the informants perceive their connectedness with nature in relation to their state of mindfulness. The data reveals that when the informants practice mindfulness continuously, they can develop connectedness with nature in three ways.

2.1. Awareness that connectedness with nature and mindfulness practice are one

The informants who practice mindfulness continuously are aware that connectedness with nature and mindfulness practice are one. This is the same realization as a participant understanding the connection between living and practicing dhamma.

Actually, being with nature, having a livelihood in nature is the same as practicing dhamma. Be with it, take care of it, and accept it for what it will return to us according to its nature.

Mindfulness practice creates connectedness with the nature around us, as well as an ability to appreciate nature and see oneself as part of it by realizing that nature remains stable, but our reactions to it change after learning mindfulness practice.

2.2. Awareness that inner and outer worlds are connected as one

The perception of nature by the informants changed after mindfulness. Their perception of the connectedness between nature and their mind increased after practicing mindfulness. They became more aware of things deep inside in their minds, aware of inner and outer natures that are connected as one. Seeing does not just involve becoming aware of a phenomenon arising in one’s mind but is also an understanding that things around us are as meaningful as things inside us.

When saying that inner and outer worlds are connected, it doesn't mean one's existence is one thing and surrounding things are another. Those things around us are also our lives. One's existence is those surrounding things ... the change between nature and myself has transformed, well, nature is still the same ... it is reciprocity ... the more we are seeing this means the higher consciousness we gain ... it doesn't mean that those surrounding things just emerge, but maybe because our eyes didn't function properly ... and because our eyes are capable to capture this more and more, but the more you see doesn't mean that they never existed.

2.3. More careful not to do anything that can harm nature

The informants' awareness has been enhanced, and makes them realize that their own actions can endanger nature. After a continuous practice of mindfulness, they become more respectful of nature's value and have more gratitude, therefore they are careful not to harm nature.

... we are more careful not to do anything that can harm nature. In the past, we only thought of fun, leisure, and joy, but later our respect and care have become greater. The feeling of gratefulness to be there is greater.

The informants also realized that prompt awareness of phenomena in the mind reflects a need to take care of the environment at the same time as we are not tempted to do anything harmful to the environment. Our reactions to the surrounding environment will become gentler and more caring, realizing that taking good care of the environment is, in turn, to take care of our own minds.

Take care of the world? If a person understands himself thoroughly in every aspect and can accept himself in every aspect, nothing much needs to be done. He will take care of the environment and he will take care of people around when he loves himself unconditionally to the point that there is no self.

4. DISCUSSION

The first research question seeks to identify experiences in mindfulness practice of individuals who have a high connectedness with nature. The results show that informants first use their logical thinking to learn about and understand the mind. Then, as their comprehension is improved through the direct experience of gradual practice, they understand it as “do, learn and see it themselves”.

This phenomenon is in accordance with the explanation by Somdet Phra Buddhakosajarn (2017) who explains in his book *Buddhadhamma, Extended Edition* that Buddhism focuses on practical and experiential things acquired from actual practice. Not only does Buddhism underscore the importance of mental learning via direct experience, but a psychologist, Rogers (1961), also mentioned the greatest power of direct experience: only repeated experience can get people nearer to the truth.

Informants are able to develop mindfulness practice by themselves, and this method is more profound and direct than learning by hearsay or reading. Mindfulness practice, however, requires continuity: “perseverance, you are to do it yourselves. I can just show (the path)” (Somdet Phra Buddhakosajarn, 2017).

Additionally, the research findings suggest that constancy and the progress shown among informants continuously practicing mindfulness are as a result of having coaches who have previously walked on the path of mindfulness, who provide support to ensure successful practices. As stated by Dajien Huineng, the Sixth Patriarch of Chinese Chan Buddhism, every one of us already has in ourselves the wisdom of enlightenment but we cannot see it so we need guidance from others (Huineng, 2004).

Several informants shared similar experiences of mindfulness practice such as the ability to detach themselves from their thoughts, a direct result of continuous practice. Human beings are not aware that they fall under the influence of their thoughts until they study and learn from seeing the truth rising when their minds are firm. Venerated Bhikku Pramote Pramojjo said that a mindfulness practitioner has a mind that is aware, firm, and not led astray by thoughts, staying conscious of its state at each moment. As an observer, he has seen this phenomenon rise, stay, and pass away. This learning can happen when the mind is firm and guarded, not focusing too intensely, and then the mind will know the truth (Santinan, 2009).

As the informants kept practicing until they became objective observers, they learned the truth and became aware of phenomena that systematically cropped up in their minds. From contact with the senses, doors and feelings of like/dislike arise simultaneously. After an agreeable feeling, one wants to repeat that contact and feel it again. If the feeling is negative, one avoids that contact or wants to rid of it or destroy it. If feelings arising in such a process are potent, mental reactions are further induced and prolonged until they are pushed outwards as speeches and actions in that person's life (Somdet Phra Buddhakosajarn, 2017) This is in

accordance with Dinona's (2009) statement that mindfulness practice clarifies one's thoughts and emotions, enabling one to see the patterns and relationships between one's own thoughts, emotions, and behavior even more vividly.

With minds that were firmly persistent and had all supportive factors, the informants started to see the truth in their minds for what it was. The true nature manifests itself for those with objective minds to see as described by Venerated Bhikku Pramote Pramojjo.

When a practitioner sustains his mindfulness, it will immediately manifest the state of impermanence: the intensity of passion that fluctuates. It stays briefly. When it wanes as we do not add new fodder to it, it passes away, manifesting its suffering. Whether it arises, exists, and ceases to be, it happens under the law of causality, not as we want it to be. More to that, it is only the perceived thing, not 'us'. All this evince the 'non-self' of all passions. (Santinan, 2009).

The experience mentioned above occurs to regular practitioners of mindfulness and progresses in a cycle. When practicing continuously, the truth manifests itself in the mind, leading the informants to realize the greater importance of the practice. The more they realize, the more they persevere, as reflected in the words of an informant who described being able to finally "love to do" by myself. The more continuous the practice, the greater the quality of the mind. This eventually contributes to results including improved relationship quality and better work performance.

Findings from this study suggest that there are several factors contributing to the merits of mindfulness practice manifesting in the minds of practitioners, comparable to tending a fruit orchard. Whether trees there can grow lushly or not depends on other supporting factors. When all the conditions needed to support their growth are met, including water, fertilizer, proper soil conditions, and a favorable climate, trees grow and produce a beautiful yield, bringing joy to the gardener. When seeing the benefits of labor and attention, the gardener become more passionate about tending the orchard, and this cycle continues. The joy in the heart of the gardener at the time of sowing seeds might not be as great as when the fruits arrive. Likewise, the beginning of any task requires support from noble friends. This analogy holds true even in mindfulness practice, in which great effort and patience are required for practitioners to see the fruit of the truth manifesting in their own minds.

These findings are consistent with those of a previous study, in which the researchers explored the effects of mindfulness training on the happiness of some students at Chiang Mai University. (Peijssel et al., 2015). The subjects completed the Happiness in Life Scale prior to attending a 6-week mindfulness practice course and finished a post-test after the end of the course with a follow-up scheduled in six weeks. The findings revealed that the experimental group attending mindfulness practice had higher mean happiness scores than the control group receiving no such practice, but the scores of the experimental group did not differ from those of the control group during the follow-up. This can be explained by the discontinuation of mindfulness practice among students in the experimental group after completion of the course. Without reinforcement from practice, mindfulness became weaker. Hence, it is essential that mindfulness practice continues and receives support from noble friends at the beginning of the practice (Peijssel et al., 2015).

The second research question asks how individuals with high connectedness with nature perceive the relationship between nature and their state of mindfulness. The results reveal three characteristics of phenomena experienced by the informants: 1) Awareness that connection with nature and mindfulness practice are one; (2) Awareness that inner and outer worlds are connected as one; and, (3) Being more careful not to do anything that can harm nature. After a brief period of continuous practice, the informants comprehended that they are only one part of nature, and that their inner and outer natures are connected. After understanding that harming nature means harming oneself, one is more careful not damage nature.

These findings are consistent with a study on wisdom (Pañña) by Daensilp (2007). It found that Pañña in connectionism consists of gratitude to all interdependent beings, realization of actions that affect everything, and awareness of connectedness between oneself and everything else.

Pañña in connectionism means the understanding that life is interdependence both among human beings and between human beings and their environment. Gratitude arising in the mind, being grateful to all supportive factors in life, enables a person to realize how his own actions affect everything around him and to be mindful that his actions, thoughts, and behavior are factors connecting to everything (Daensilp, 2007).

The informants realized that we cannot manipulate nature to meet our desires. This recognition is found not only in Buddhism but has also been studied and discovered by Western scholars. For example, the research article "There is no 'I' in nature: the influence of self-awareness on connectedness to nature," described an empirical experiment exploring how a perception that "self" is the center of attention and anything else is

meaningless can be related to a non-caring attitude towards the environment and disconnectedness with nature (Frantz et al., 2005). The researcher concluded that development of the modern world emphasizes self-centeredness and egotism, and this can be fatal to the environment. To develop people's consciousness about the need to care for the environment means encouraging them to accurately perceive their identities and personalities. In other words, people need to be encouraged to perceive that they are not the center but instead have to expand themselves to embrace the environment, letting it into their perceptions and nurturing a sense of connectedness with nature (Frantz et al., 2005). This conclusion is similar to the findings of Stephan Harding, who is trying to impart the spirit of the earth via the science of Gaia:

No way can we be the masters or controllers of this earth, and we will understand that for Gaia all lives represent spirituality which is invaluable and idiosyncratic. We are too arrogant to think that we are the solely life form with mind on the entire surface of ancient Gaia. When we gradually develop the sense of perception to living beings in countless different forms that are not humans but of exactly equal importance. We will realize that our existence is grateful to the sophisticated wisdom of this planet, which has been able to manage the world without our involvement throughout the past 3,500 million years (Harding, 2013).

The informants realized the oneness between themselves and nature, feeling a connectedness between inner and outer natures. If an inner nature is healthy and normal due to an understanding of one's own mind as it actually is, a person will also be able understand an outer nature as it is and will not be shaken by changes, uncertainties, and non-possession. Therefore, the path of mindfulness practice and connectedness with nature are the same. This is consistent with the findings of Unsworth et al. (2016) about how mindfulness practice in nature affected self-nature interconnectedness among 25 subjects who practiced Buddhist mindfulness. Data was collected during a 3-day dharma practice course in nature. The findings show the positive relationship between individuals and nature with a correlation coefficient at $r = .52$ ($p < .01$). In addition, mindfulness practice may increase awareness of connectedness to nature. It may be affected by greater self-world connection (Amel et al., 2009). Our findings are also supported by the research of Barbaro and Pickett (2016) which showed that more mindful individuals self-report more engagement in daily pro-environmental behaviors.

The informants appreciated the merits of nature, never intending to harm or destroy it, because doing harm to or destroying nature meant hurting themselves. Answers from the interviews also revealed that they understand this connectedness and were convinced that individuals who are aware of their inner nature would never harm or hurt nature around them.

We cannot bring about peace in the world if we are not in peace with the earth, with nature. Humans and nature are not two separate things. Both human lives and lives of non-humans are part of one unifying connection of life. I realize this oneness by walking on the earth's surface (Kumar, 2013).

Recommendations for applications

The development of the modern world, which has focused on being self-centered, the center of all attention, is tremendously dangerous for the environment. Therefore, humans should be helped to understand that life is reciprocal; that is, they should develop a connectedness with nature and an awareness that harming nature is self-harm. However, a connection with nature cannot be achieved just through thought or knowledge. This research found that once the informants, with regular mindfulness practice, connected with nature or their surrounding environment, they perceived the oneness between nature and themselves. This occurred because the practice of mindfulness offers an insight of trinity (the true nature of all things), not just thought or knowledge. The trinity insight enable practitioners to comprehend the truth of nature, and therefore finally understand that they are one with it. Nevertheless, regular practice is required to reach this level of insight, and the benefits of such practice can easily be lost through lack of continuity or practice. Therefore, it requires great effort and continuous practice until one becomes proficient and clearly see the truth of nature. In addition, having experienced and qualified supporters who can guide one on the right, direct path of mindfulness practice is essential.

Consequently, for sustainable development, those concerned with natural resource conservation should encourage more individuals in society to practice mindfulness. Promotion of these efforts will be possible if those involved are attentive to the methods and substance of mindfulness practice as presented in this research.

Recommendations for Future Research

The current research focuses on experiences of mindfulness practitioners with a high level of connectedness with nature, rather than on causes and effects. However, future research may be designed as experimental or longitudinal studies to determine whether mindfulness practice can enhance the level of

connectedness with nature among those with no prior experience. In addition, future research is recommended to explore empirically possible causative factors that enable a person to continuously practice mindfulness. These might include such factors as personal attributes or dispositions that suit particular types of mindfulness training, and/or strategies to introduce mindfulness practice to adolescents who may not have such as strong a religious anchor as the older generations. Studies such as these can determine how youths can be persuaded to see the importance of mindfulness practice and make stronger connections with the love required to take care of the natural environment. On the other hand, to conduct similar qualitative research, but having another researcher with no mindfulness practice experience to analyze the data, would provide another perspective.

5. CONCLUSION

The experience of mindfulness development training and practice among ten informants who achieved high scores on the Connectedness to Nature Scale revealed three main themes. The first theme concerns the informant's pathway of mindfulness practice. The second theme is concerned with how each informant came to understand the meaning of mindfulness, and can be further divided into five sub-themes: (1) do, learn and see it myself; (2) practice with coaching; (3) "I" and my thoughts are not the same thing; (4) practice letting go bit by bit; (5) mindfulness is vital; and, (6) the improved quality of life through mindfulness (i.e. mentality, relationships, and work performance). The last main theme addresses three attributes of connectedness with nature that have been improved via continual mindfulness practice: (1) awareness that connections with nature and mindfulness practice are one; (2) awareness that inner and outer worlds are connected as one; and (3) being more careful not to do anything that can harm nature. People who are concerned with natural resource conservation are advised to consider the development of the human mind and the importance of studying and developing methods of mindfulness practice that are suitable for the public to promote environmental conservation and the healing of nature.

Ethical approval: The researcher submitted the research proposal to Chiang Mai University Research Ethics Committee of Ethics. Approval was granted on 14 November 2017 (CUMREC No. 60/037).

Informed consent: Informed consent was obtained from all individual participants included in the study.

REFERENCES

- Amel, E. L., Manning, C. M. and Scott, B. A. (2009). Mindfulness and sustainable behavior: pondering attention and awareness as means for increasing green behavior. *Ecopsychology* 1: 14-25.
- Barbaro, N. and Pickett, S. M. (2016). Mindfully green: examining the effect of connectedness to nature on the relationship between mindfulness and engagement in pro-environmental behavior. *Personality and Individual Differences* 93: 137-142.
- Capaldi, C. A., Passmore, H. A., Nisbet, E. K., Zelenski, J. M. and Dopko, R. L. (2015). Flourishing in nature: a review of the benefits of connecting with nature and its application as a wellbeing intervention. *International Journal of Wellbeing* 5(4): 1-16.
- Chaichantipyuth, P. (2011). *The Effect of Buddhist-Ecotherapy Group on Connectedness to Nature and Paññā in Interconnected of University Students*. Master's Thesis in Psychology. Faculty of Psychology: Chulalongkorn University, Thailand. [in Thai]
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design; Choosing among Five Approaches*. 2nd ed. California: Sage.
- Daensilp, P. (2007). *Effects of Yonisomanasikāra Group Counseling on Paññā in Interconnectedness and Change*. Doctor of Philosophy Dissertation in Psychology. Faculty of Psychology: Chulalongkorn University, Thailand. [in Thai]
- Dinona, F. (2009). *Clinical Handbook of Mindfulness*. New York: Springer.
- Ericson, T., Kjørstad, B. G. and Barstad, A. (2014). Mindfulness and sustainability. *Ecological Economics* 104: 73-79.
- Frantz, C., Mayer, F. S., Norton, C. and Rock, M. (2005). There is no "I" in nature: the influence of self-awareness on connectedness to nature. *Journal of Environmental Psychology* 25(4): 427-436.
- Hanh, T. N. (2013). *The World We Have*, translated by P. S. Lāsūsō. Nakhon Ratchasima: Thai Plum Village. (Original work published 2004) [in Thai]
- Harding, S. (2013). *Animate Earth: Science, Intuition and Gaia*, translated by K. Dīprawat. Bangkok: Sūan Ngōn Mī Mā. (Original work published 2006) [in Thai]

- Huineng, D. (2004). *The Sutra of Weiling*, translated by B. Bhikkhu. Bangkok: Sukkhabajai. (Original work published 1985) [in Thai]
- Kumar, S. (2013). *Earth Pilgrim*, translated by A. Phlœnphruksā. Bangkok: Sūan Ngœn Mī Mā. (Original work published 2009) [in Thai]
- Mayer, S. F. and Frantz, C. M. (2004). The connectedness to nature scale: a measure of individuals' feeling in community with nature. *Journal of Environmental Psychology* 24(4): 503-515.
- Peijsel, C., Teerapong, T. and Kreausukon, P. (2015). The effects of mindfulness practice on happiness. *Journal of Social Sciences & Humanities* 41(1): 167-180.
- Phra Phrom Khunāphōn. (2006). *Buddhadhamma, Revised and Expanded Edition*. 11th ed. Bangkok: Sahathanmik. [in Thai]
- Pierce, G. (2003). Ecotherapy. In *Health Counseling Application and Theory*, edited by J. Donnelly, Canada: Wadsworth/Thomson Learning.
- Rogers, C. R. (1961). *On Becoming a Person: A Therapist's View of Psychotherapy*. Boston: Houghton Mifflin.
- Roszak, T., Gomes, M. E. and Kanner, A. D. (1995). *Ecopsychology*. Berkeley: Counterpoint.
- Santinan. (2009). *The First Year of Mind Observation*. 3rd ed. Bangkok: Howfar. [in Thai]
- Smith, D. B. (2010). *Is There an Ecological Unconscious?* [Online URL: <https://www.nytimes.com/2010/01/31/magazine/31ecopsych-t.html>] accessed on May 25, 2019.
- Smith, J. A. (2003). *Qualitative Psychology: A Practical Guide to Research Methods*. London: Sage.
- Somdet Phra Buddhakosajarn. (2017). *Buddhadhamma, Extended Edition*, 49th ed. Bangkok: Sahathanmik. [in Thai]
- Unsworth, S., Palicki, S. and Lustig, J. (2016). The impact of mindful meditation in nature on self-nature interconnectedness. *Mindfulness* 7(5): 1052-1060.
- Zylstra, M. J., Knight, R. T., Esler, K. J. and Lesley, L. L. (2014). Connectedness as a core conservation concern: an interdisciplinary review of theory and a call for practice. *Springer Science Reviews* 2(1-2): 119-143.