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# Ecotherapy through a discursive lens: nature-based activities, mental health, and local constructions of human-nature relationship

Teguh Wijaya Mulya , Harijanto Tjahjono, C. W. Prijonggo and Nadia Sutanto

Faculty of Psychology, University of Surabaya, Surabaya, East Java, Indonesia

## ABSTRACT

Contemporary studies on nature-based activities have evidenced mental health benefits of being in/with nature. Previous quantitative studies generally verified the effectiveness of ecotherapy, and qualitative studies identified the healing mechanisms. However, existing studies on ecotherapy have not considered local contextualities in understanding the psychology of nature-based activities, as if nature is experienced in a relatively universal way across cultures. Drawing upon insights from discursive psychology, this article explores the ways local socio-cultural-ideological discourses constitute one's understanding about and relationship with nature, and how it might enable/limit mental health benefits. Based on the authors' reflections during the development of an ecotherapy project in Indonesia, this article argues that ecotherapy does not operate in a discursive vacuum, but instead, mental health benefits of nature-based activities were constituted through various cultural, spiritual, gender, ableist, ethnic, and class-related discourses. The implications are discussed in relation to how ecotherapy can be more contextual, inclusive, and diverse.

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## Introduction

Contemporary quantitative and qualitative psychological studies on nature-based activities have evidenced the mental health benefits of being in/with nature. Previous quantitative studies mostly verified the positive effects of nature-based activities for reducing mental health problems, such as stress, depression, anxiety, and trauma and improving creativity, concentration, motor ability, and life satisfaction (Corazon et al., 2018; Stigsdotter et al., 2018; Trkulja et al., 2021; Wagenfeld et al., 2018). Qualitative studies generally focused on the healing mechanisms—from the undemanding, non-judgemental, trustworthy, and inclusive properties of nature that promote self-acceptance and self-expression (Sahlin et al., 2012); social quietness and meditative-like calmness that nurture a here-and-now thinking and a sense of existential belongingness and wholeness (Brymer et al., 2021; Corazon et al., 2012; Kjellgren & Buhrkall, 2010; Pálsdóttir et al., 2014); to enlivening and less visually restrictive surroundings that encourage a sense of freedom and transformed perspectives about life (Heard et al., 2020). However, most of the existing studies on ecotherapy did not consider local contextualities in understanding the psychology of nature-based activities, as if nature is experienced in a relatively universal way across cultures, belief systems, and socio-ideological situations. For instance, there is only a very limited number of previous studies, if any, that has questioned how

the academic knowledge about the therapeutic pathways of ecotherapy mainly came from Western, Educated, Industrial, Rich, and Democratic (abbreviated as WEIRD; Henrich et al., 2010) contexts, and might not necessarily be applicable nor relevant in other contexts. There is a dearth of research exploring *contextual* discursive resources drawn upon to make meaning out of the experience in/with nature, and the implications for mental health.

Responding to this lacuna, the current study departs from the typical analytical postures in ecotherapy studies (i.e. quantitative evidence of effectiveness and qualitative identifications of therapeutic pathways) by drawing upon insights from discursive psychology (more in the next section) where human behaviours and psychological experiences are considered inseparable from local contexts, power relations, and/or dominant discourses in a given society. Taking Indonesian contexts as a case study, the research questions in this article are as follows: In what ways do local socio-cultural-ideological discourses constitute one's understanding about and relationship with nature, and how might they enable or limit various mental health benefits?

The article begins with a literature review on ecotherapy and how discursive psychology could complicate existing psychological knowledge about nature-based activities and mental health, particularly by drawing attention to how local contextualities could contest the dominant Western, positivistic, and universalist approaches to ecotherapy. Subsequently, the methodology and the context of the study is explained. Finally, five themes answering the research questions are presented and discussed in the Findings section, including the implications for ecotherapy practices.

## Literature review: ecotherapy and discursive psychology

Ecotherapy is understood as the use of nature-based methods for physical and psychological healing based on the beliefs that connection with nature nurtures human's health and disconnection from it is damaging to physical and psychological health (Buzzell & Chalquist, 2009; McCallum, 2007). Ecotherapy can take many different forms, such as—but not limited to—adventure and wilderness therapy, horticultural therapy, mindfulness practice in nature, nature walk, and nature art therapy (Freeman & Akhurst, 2019; Summers et al., 2019). Various physical and psychological benefits of ecotherapy have been documented, from accelerating general medical recovery, reducing pain, stress, and anxiety, to addressing obesity, dementia, ADHD, and PTSD (Corazon et al., 2018; Stigsdotter et al., 2018; Summers et al., 2019; Wagenfeld et al., 2018).

Several theories have attempted to elucidate the therapeutic pathways of ecotherapy. The now-classic Psychoevolutionary Theory (PET) by Roger S. Ulrich et al. (1991), for instance, theorised that humans have evolved in natural settings much longer than in urban ones, consequently, humans have an unlearned predisposition to respond positively to natural environments favourable for survival and well-being. In their experiments, Ulrich and his colleagues proved that viewing videos of natural environments can significantly reduce stress. PET resonates with the Biophilia hypothesis (Wilson, 1984) which proposed that humans have an innate tendency to seek connection with and respond positively to nature. The Biophilia hypothesis also gave rise to the conceptual development of Nature Connectedness (NC) as a personality trait and a part of one's identity (Mayer & Frantz, 2004). Another now-classic theory, Attention Restoration Theory (ART) coined by Kaplan and Kaplan (1989) explained that living in urban environments requires an effortful and continuous cognitive attention as compared to natural settings; ecotherapy is therapeutic because it restores human attention. A more contemporary theorisation, ecological dynamic theory (Brymer et al., 2014, 2020), departs from the more traditional theorisations by critiquing how human and nature are not two separate entities interacting mechanistically, but rather, human behaviour emerges from dynamic relationships between—and the embeddedness of—human and the environment. Drawing upon Gibson's (1979) ecopsychology, ecological dynamic theory suggests that ecotherapy studies should not be too concerned with characteristics of the natural setting that are therapeutic nor the effective dosage of therapy as in the more traditional biomedical approaches; but rather, with the behavioural and emotional invitations offered by the natural settings that may improve human wellbeing. These

invitations were theorised as affordances, that is, 'opportunities for behaviours that juxtapose the objective nature of the environment with the subjective nature of each individual' (Brymer et al., 2014, p. 191). Another form of theoretical critique towards the positivist, deterministic, one-size-fits-all, biomedical model of ecotherapy came from phenomenological studies that focus on the type and quality of nature-based experience that one finds therapeutic, which are not necessarily prescriptive for other individuals (e.g. Akhurst, 2010; Freeman & Akhurst, 2019).

Nevertheless, there is a missing angle in these contemporary theorisations of ecotherapy, namely, the socio-ideological—or to be precise the discursive—dimensions of human-nature relationship in a therapeutic setting. Between the 'objective' nature of the environment and the 'subjective' individual interpretations lies the social, cultural, ideological, or discursive constructions through which an individual gives meaning to their experience, in this case, about nature and human-nature relationship. While ecological dynamic theory (Brymer et al., 2014, p. 191) has proposed that affordances are always relative to an individual's 'constraints' (a term implying something external rather than embedded) including sociocultural ones, these sociocultural dimensions have not been explored extensively nor understood as embedded and mutually constitutive. Individuals do not make meaning out of a socio-cultural-epistemological vacuum, rather, there is always a set of assumptions that constitute the nature of reality which guides an individual's meaning making process in their specific geographical, cultural, political, and historical context. In the field of discursive psychology, this set of assumptions is called discourse (Parker, 2002; Potter, 2003).

Discursive psychology as a subfield is characterised by the use of discourse theories in understanding human psyche, thoughts, behaviours, and emotions (Parker, 2002; Potter, 2003). One's sense of self, for example, is not constructed only at individual or interpersonal level, but it is constituted through the ever-shifting discursive configurations available to be drawn upon in one's specific context (Weedon, 1987). To identify oneself as depressed, for example, might not be possible before psychiatric discourses became dominant in our contemporary world. A discourse of mental health in a given society is not static nor objective, its meanings are continuously redefined and always connected to politics (as in ideological contestations), such as the interests of for-profit pharmaceutical companies, psychological industries, and colonial epistemological posture of scientific rationalism in the highly unequal globalised world (Wijaya Mulya, 2021). Since the 1980s, discourse theories have begun to appear in psychological research, and the term 'discursive psychology' started to be used. Some of the earliest work in discursive psychology include 'Changing the subject: Psychology, social regulation, and subjectivity' by Henriques et al. (1984), and 'Discourse and social psychology: Beyond attitudes and behaviours' by Potter and Wetherell (1987). In recent years, books on discursive psychology are relatively available, such as that by Parker (2002) and Wiggins (2016). These scholars mainly critiqued mainstream psychology for its focus on individualised, positivistic analyses, and showed how human behaviours are constituted through discursive mechanisms and what the implications are. These researchers applied critical discourse analysis, a methodology which focuses on the identification of discourses which have given rise to individuals' understanding of their worlds, the consequences of their drawing on those discourses, and the possibilities of destabilising the dominant discourses (Willig, 2013). However, in the authors' best knowledge, there is no research that has specifically explored ecotherapy using discourse theories, for example, how discourses of race, ethnicity, class, and gender might have constituted human-nature relationship in a specific cultural context or therapy setting.

Nevertheless, there are some hints of socio-politically-oriented critiques in the existing literature on ecotherapy. A study by Keniger et al. (2013) might best represent these hints. Their review of 57 previous studies showed that 'there is a clear bias in the literature with respect to cultural and socio-economic differences between geographic regions' (p. 928). More specifically, almost 80% of evidence for the benefits of nature-based activities is 'geographically biased towards high latitudes and Western societies' (p. 913), indicating 'skewed representation of different human cultures' (p. 914). Consistent with Keniger et al. (2013), in their editorial introduction to special issue on ecotherapy Brymer et al. (2019) mentioned UK, Australia,

United States, Finland, Norway, France, and Austria as the contexts where ecotherapy studies were mainly conducted. Another hint was provided by Freeman and Akhurst (2019) who proposed that ‘interactions between people and natural landscapes are intricate and bound by cultural influences’ (p. 214). Unfortunately, Freeman and Akhurst did not elaborate in detail in their analysis how such cultural influence characterised human-nature interaction. Further, qualitative studies exploring possible therapeutic pathways, such as undemanding properties of nature that promote self-acceptance (Sahlin et al., 2012), social quietness that nurture a sense of existential belonging and wholeness (Kjellgren & Buhrkall, 2010; Pálsdóttir et al., 2014), and visually less restrictive surroundings that encourage a sense of freedom (Heard et al., 2020), were silent on how such pathways may be different across cultures and social class—inadvertently gesturing universalism based on Western data. Therefore, Keniger et al. (2013) called for further research exploring how human-nature connection might manifest differently in different value systems and attachments to natural areas.

The current article responds to this call by focusing intently on *contextuality* as a key analytical framework in examining ecotherapy. In a broader sense, our analysis in this study connects with the literature on cross-cultural psychotherapy in general where Western-originated psychotherapies were critiqued and/or culturally adapted, and local psychotherapy models were developed particularly through the inclusion of religion, spirituality, and local wisdoms (e.g. Koç & Kafa, 2019). In ecotherapy, a small but growing number of studies have indeed begun to highlight the contextuality of nature-based activities and their unique psychological ramifications. Prehn’s (2021) study among Aboriginal men in Australia, for example, found that being in nature did not only improve health and wellbeing, but also strengthened participants’ spiritual and cultural identity because they were away from the settler-colonial society that stigmatised their masculinity. In a New Zealand context, Amy Horn (2021) identified how traditional spirituality is often missing from the Western biomedical model of nature-based therapy. Her Maori participants have already practiced land-based spiritual healing through being with mountains, trees, rivers, winds, and oceans which were considered as their ancestors. In terms of religion and/or spirituality, Buddhism has been discussed by researchers as an alternative discursive framework to understand ecotherapy. Caroline Brazier (2014, 2017), for example, has eloquently discussed nature-based therapy through Buddhist philosophies and practices, such as how grounding exercise, that is, mindfully paying attention to our feet and the ground where we are standing, is an embodied spiritual experience of reconnecting with the sacred. Drawing upon Stoic ideas of *oikeiosis* and Buddhist concepts of *bojjhanga* and *dharmma*, Fabjański and Brymer (2017) offered ‘the practice of attuning to the process of life’ as a key framework to understand the therapeutic pathway of ecotherapy. Joining these researchers, the current study explores the ways local socio-cultural-spiritual discourses in an Indonesian context may constitute one’s understanding about and relationship with nature, and how it may enable or limit various mental health benefits.

## Notes on context and methodology

Indonesia is the world’s largest archipelago located in Southeast Asia. It has more than 1300 ethnic groups and 700 languages, making it an extraordinarily diverse cultural context. Currently categorised as an upper middle-income country, Indonesian society is now being increasingly educated despite perceptible inequalities in terms of socio-economic status and access to education. Nevertheless, new terms related to mental health imported/directly translated from English language have increasingly become everyday vocabularies in popular culture and social media, such as stress (stress), depresi (depression), terapi (therapy), and hiling (psychological healing). More technical diagnostic terms such as dementia, ADHD, autism, PTSD, and anxiety have also increasingly—and accurately—understood among the more educated segments of Indonesian society. There are slight contextual appropriations, however, such as how the term hiling/healing is now widely used in

Indonesia to refer to any leisurely outing or activity, including going out to eat/drink/socialise in green outdoor space.

To answer the research question, qualitative data were reflexively generated from the authors' involvement in the development of an ecotherapy project in their university's outdoor campus in Penanggungan Mountain, East Java, Indonesia. The project was jointly funded by the Faculty of Psychology and the Integrated Outdoor Campus management at the University of (concealed). The outdoor campus was generally hired as a venue for student camps, out-of-town meetings, team building activities, religious retreats, family gatherings, and even wedding receptions. The project was developed to add a new package to be marketed by the outdoor campus, that is, an eco-healing package. The outdoor campus is a large green area at Penanggungan Mountain with modern meeting rooms, *pendapas* (Javanese-style pavilion for meetings), a swimming pool, a human-made lake, coffee plantations, a small museum displaying photos and remnants of ancient local temples, and a range of accommodation from luxurious cottages, dorms with bunk beds, to camping grounds. After several meetings with the management and field supervisors and site visits, the authors designed and tried out an overnight eco-healing retreat with 23 participants who were alumni of the Faculty of Psychology, University of (concealed) and their families. The participants were recruited through an advertisement distributed in the alumni social media groups. The participants include 14 adults, 5 children (3–12 years old), and 4 teenagers (13–18 years old). Considering both the existing literature on ecotherapy and the resources at the outdoor campus, the try-out retreat's therapeutic activities included nature walk and observation, nature art and craft, guided meditation in outdoor greenspace, gardening/horticultural experience, museum visit, traditional dance learning, and gamelan (traditional music instruments) learning. While primarily aimed at therapeutic benefits, to a degree, these activities also incorporated educational processes as an additional benefit. Participants had the opportunity to acquire new knowledge about local history, plants, or to develop new skills in traditional dance, meditation, and gamelan. While this project had no specific learning objective as in an educational programme, the activities that turned out to be learning opportunities may add another therapeutic pathway as previous studies have evidenced that learning new skills can bring mental health benefits for adults (e.g. Hammond, 2004, Narushima et al., 2018). Participants spent the night at the camping ground in small tents for each family around a campfire. The authors were facilitators in this retreat, and each took detailed field notes throughout the preparation and the implementation of the retreat.

The data collection methods include these field notes, focused group discussions (FGDs) with try-out retreat participants, conversations with the traditional dance and gamelan teachers, and an interview with a local elder. The field notes taken during the preparation and the implementation of the retreat include notes on informal conversations with try-out participants, student assistants, the outdoor campus management team, and local workers. Audio-taped FGDs were conducted at the beginning (when participants arrived), in the middle (end of day 1, before night sleep), and at the end of the retreat. Questions asked during these FGDs were around participants' previous experiences with/in nature; their psychological conditions before, during, and after the retreat; their personal reflections about the experience during the retreat, and suggestions about how to improve the retreat into a marketable package. An audio-taped, 60-minute interview was conducted with a local elder (with whom the outdoor campus management had built good relationship) in order for the authors to understand the local cultural context of the villagers around the outdoor campus. Building upon these data gathered in the ecotherapy project, the authors also reflected and discussed their previous personal experiences of seeking healing in nature or being in natural spaces in Indonesia; these auto-ethnographical reflections were then used as additional data to complement and illustrate contextual specificities of our Indonesian background. These data collection methods and procedures had been approved by the University of (concealed)'s research ethics committee before being implemented, and written consent was obtained from all participants including parental consent for underaged participants. Participants' original names were not revealed in this article.

The data were analysed using thematic analysis technique (Braun & Clarke, 2006) in which the researchers familiarised themselves with the data by reading them repeatedly. Codes were then generated inductively and categorised. Based on these codes and categories, the researchers identified, specified, and articulated themes relevant with the research question. Five themes emerged from the data in this study; these themes are discussed in the Findings section below. It should be emphasised that our analytical intention was not to provide a comprehensive account of the ecotherapy outdoor camp and its results; rather, we present glimpses of the experience during the camp and our critical reflections upon them in order to answer the research question.

## Findings

Our analysis identified several dominant discourses through which nature is constituted in the contexts of our study. The findings show that ecotherapy does not operate in a discursive vacuum, but instead, mental health benefits of nature-based activities were constituted through various cultural, spiritual, gender, ethnic, and class-related discourses. It is important to note that these key themes are not intended to be exhaustive; rather, they function as illustrations of the contextuality of ecotherapy and human-nature relationship more generally. In discussing each of these discourses, we will start by explaining what the discourse is, then evidencing such a discourse using the data in this study, and then we discuss how relevant international literature—not necessarily in ecotherapy field—might have addressed this discourse, and finally, we (re)connect the discussion back to ecotherapy practices.

### Beyond nature versus culture: a discourse of natureculture

The first key discourse we sought to problematise in our analysis is the dominant discourse of nature as the opposite of culture. Literature on ecotherapy often positions nature as an objective, universal, independent entity. As a result, those discussions were mainly sterile from any conversation on cultural interpretations, beliefs, and practices embedded in the ways nature is understood in a given context. Reflecting on our experience in developing an ecotherapy project in Indonesia, we argue that nature and culture are fundamentally interwoven, and consequently, ecotherapy's 'nature'-based methods for physical and psychological healing might have always been 'natureculture'-based methods (more below on this neologism).

The inseparability of nature and culture was evident in our first meeting with the outdoor campus management during the development of our ecotherapy project. While our intention was to explore possible nature-based activities in the area, the management excitedly talked about the museum they had on the premise, displays of cultural heritage in it, and how the whole mountain was a huge prehistoric temple that had been just recently discovered because of a major forest fire in 2015. To connect oneself with nature, in the context of this location, inevitably involves a reconnection with its long history and rich cultural traditions. In our interview with a local elder from a nearby village, Javanese traditions and belief systems emerged as the underlying framework of his talks about human relationship with nature, from the rituals before sowing and harvesting, to the cultural belief of choosing the 'good' day to initiate the next batch of agricultural work. While our ecotherapy program did not involve a visit to paddy fields, the agricultural dimensions of this natural landscape were still perceptible such as how easy it was to include horticultural therapeutic activity in our try out, because most local people are knowledgeable about growing plants. In contrast with the seemingly cultureless Western biomedical model of ecotherapy, we find that developing an ecotherapy project inevitably involves attending to the ways local culture has discursively and materially constituted nature.

In addition, the interconnection between nature and culture can reveal the link between the past and current culture. One of the functions of cultural sites is to provide a means for people from the current generation not just to learn about the past culture, but also to connect with the land and the

spirits of ancestors who were believed to be dwelling in the sites. On the premises, there is a type of split monolith called *Batu Pecah* (broken or split stone) where local beliefs hold that people in the past used it as a place to contemplate their problem in order to obtain insightful solutions. Although their numbers seem to be decreasing, there are still people who visit the site, burn incense, meditate and/or pray, and communicate with the spirits of ancestors who are believed to be dwelling on the split monolith. Their motives can range from seeking a mundane solution to performing a spiritual worship to the land and the spirits of ancestors. Since outcomes cannot be separated from their motives, a visitation to such a place besides giving these individuals a break from their routines of work, daily hassles, and targets, it also refreshes the individuals with spiritual solutions, meaning embracing the past, present, and future, and a sense of greater connectedness with and support from things beyond rational thoughts (e.g. unseen forces, including, the spirits of ancestors). One participant expressed how he was really immersed into the exquisiteness of the past civilisation when he visited the museum. During the reflective session, he explained that he had made the decision to skip certain sessions of our ecotherapy program because he found enjoyment during the museum visit session.

Scholars have proposed the neologism 'natureculture' to represent the synthesis of nature and culture in an inseparable and mutually constitutive way (Fuentes, 2010; Haraway, 2003; Malone & Ovenden, 2016). These scholars were critical of human/non-human dualism predominant among modern sciences and humanities dating back to Rene Descartes' matter and mind dichotomy, including body/mind, human/animal, and nature/culture. A prominent example here is the analysis of mutual ecology between long-tailed macaques and Balinese people in Indonesia for hundreds of years, and the recent addition of international tourists (Fuentes, 2010). The notion of natureculture enabled an analysis of the co-constructed, multispecies relationship between Balinese people, the macaques, and tourists in terms of dietary, economic, parasitological, religious, behavioural, political, and geographical dimensions. In the field of mental health, Mchpie (2019) drew upon Deleuzian posthuman idea of assemblage to radically problematise the separation of nature and culture, and body and mind. Mchpie even goes further challenging the very concept of mental health itself, and offers a new way to understand mental health beyond such separation (p. vi, 1, 304):

If we begin to conceive mental health as immanently placed of environments as opposed to transcendently placed . . . solely within a brain or even within a body, . . . we were to extend the territory of madness beyond the human skin . . . Mental health and wellbeing is an ecologically distributed physical process. It is spread perceptually, conceptually, affectively, politically, socially, materially, topologically, spatiotemporally and through research itself.

While we consider Mchpie's conceptual provocations as the direction to pursue in the field of ecotherapy, a gradual bridging from those radical ideas into praxis might indeed be a long process. As a start, we propose that ecotherapists might find benefits in recognising the inextricable interplay of nature and culture. This awareness of nature-culture mutual constitution may provide additional discursive resources for various therapeutic pathways vis-à-vis ecotherapy. For instance, in the development of our project we eventually included gamelan (traditional Indonesian music instruments) learning and traditional dance learning in open, greenspace as therapeutic activities in our ecotherapy try out. While theoretically ecotherapy may include body therapy through movement and art therapy (Clinebell, 1996; Degges-White & Davis, 2010), local culture in the context of our study provided the forms of and resources for these art-based and body movement-based therapeutic methods, through which the participants may experience the healing power of nature (-culture). Therefore, by emphasising the ways ecotherapy was always embedded in local cultural practice, ecotherapy studies are not only becoming more inclusive, but also creatively diverse.

### **The gendered discourses around natural spaces and nature-based activities**

The second discourse we identified in the analysis is a gender-related discourse which constituted outdoor/natural spaces and activities as masculine domains imbued with risks and dangers (Clark,



2015; Kennedy & Russell, 2020; Wesely & Gaarder, 2004). Consequently, such spaces or activities were mainly considered as only for the strong, adventurous, reckless, and risk-takers—qualities that traditionally are considered masculine. We argue that this patriarchal discourse might be at odds with the concept and practice of ecotherapy where nature is constituted as calming, nourishing, and consoling.

During the try-out retreat, we invited alumni and their families to engage in nature-based activities and spend a night at our outdoor campus. While there are VIP cottages available, we gave them a camping experience so that they can be physically close to nature and feel the energy of it. However, sleeping in tents involved closer contact with soil and dirt, unpredictably wet weather at that time of the year, and a general lack of comfort and cleanliness as compared to the VIP accommodation. In an informal conversation, one of the authors/facilitators talked to a participant about their lack of interest in joining nature lovers' clubs (*Pecinta Alam*) which are quite popular at Indonesian schools and universities. The conversation came to a conclusion that camping and joining nature lovers' clubs in Indonesia were traditionally a physically and mentally challenging experience where only strong and tough students can survive, or in other words, a masculine domain. As the authors reflected on this conversation, there is various evidence that supports that claim in Indonesian contexts. Every now and then, there were news reports in Indonesia reporting incidents of the death of nature lovers club members while hiking or training (e.g. 'Mahasiswa Unhas,' 2023). It was a common secret that seniority and physical punishments were prevalent in such clubs, although not all of them. A large majority of such clubs still continue the legacy of militarism of the government regime (i.e. Suharto's regime from 1966 to 1998) before Indonesia's democratic reformation in 1998. One of the authors recalled a conversation in the past with a friend who was a leader in the university's nature lovers' club, who told proudly how he beat his juniors when they were exhausted and unable to finish the hiking because 'nature is cruel, if we are not harsh to juniors, they could die in nature.' It is interesting to note how this 'nature lovers club leader' projected his cruel, male-oriented treatment of his juniors to nature, depicting nature as 'cruel;' which was in stark contrast to the concept of ecotherapy where nature is depicted as consoling and nourishing. Unsurprisingly, the members of nature lovers' clubs were overwhelmingly male; female students were a small minority. While such proportions might have begun to change in Indonesia at the moment, the dominant discourse is still that nature is not for urban women or feminine men.

As the authors reflexively examined their experience and memories of growing up in Indonesia, one of us found that this dominant patriarchal construction of nature can also be seen in cultural representations, such as, in an Indonesian movie he watched titled 'Me and You vs the World' (Nugros, 2014). The story was about a diligent high school girl who participated in a camp held by two male college students only because she wanted to stop her friends from participating. The college students were portrayed in tattoos and did not reveal openly that they were going to spend the night camping so that none of the students have let their family know. While the camp was depicted as fun, the scene ended in the morning with furious parents barging into the camp. Here, and in the larger urban Indonesian contexts, spending time in nature is constructed as an activity for the strong, adventurous, reckless, and risk takers.

Previous studies on gender and space have identified that outdoor spaces are traditionally constituted as masculine domains. Wesely and Gaarder's (2004) and Clark's (2015) research, for example, have demonstrated how outdoor spaces were imbued with discourses of risk and danger, and women are constructed as the 'weak' and 'vulnerable' in such environments. Consequently, these constructions limited female participation in outdoor activities and recreations. In the same vein, Kennedy and Russell (2020) examined how hegemonic masculinity has underpinned and constrained diverse gender performances in outdoor education. In a North American context, Stanley (2020) further identified how outdoors people have not only been discursively constituted as predominantly male, but also white, able-bodied, and straight—indicating the operation of discourses of racism, ableism, and heteronormativity alongside patriarchy. However, such considerations of the gendered constructions of space were still marginal in the literature on ecotherapy.

Some exceptions include chapters in Warren's (1996) seminal anthology on women and experiential education, where some authors pointed out how nature-based experiences can be countertherapeutic for women survivors of sexual abuse (Mitten & Dutton, 1996) and incest survivors (Rohde, 1996) because it can trigger feelings of fear, being out of control, or invaded.

Taking care of one's own mental health is traditionally associated with the feminine practice of care. Seeking psychological healing or improving mental health through being in natural, outdoor spaces might be at odds with the dominant patriarchal constructions about nature, particularly for women, trans people, non-binary gender identities, and men who do not associate themselves with traditional masculinity. Eco-therapists might find benefit in considering these discursive situations in the specific contexts of their practice and develop therapeutic activities that are inclusive of and responsive to various genders and gendered forms of human-nature relationship. Some practical suggestions include—but not limited to—better preparation and anticipation of risks when stepping into novel natural settings, a focus on physical and emotional safety by offering choices (Estrellas, 1996), providing better facilities to get clean, and facilitators who are sensitive, non-intrusive, and maintain a posture of inclusivity (Mitten & Dutton, 1996).

### **The discourse of ableism: natural space as challenging**

The third discourse identified in our analysis is the discourse of ableism, in which nature-based activities were predominantly represented as the activity for able-bodied and able-minded persons. Taking the experience of people who are differently able (diffable) into account, we argue that nature might not be experienced by everyone in the same way so that research on and practice of ecotherapy cannot presume a universalist nor objectivist stance, but contextual ones. People with diffability have often been absent from many contemporary spaces of nature to the point that such absence tends to be taken for granted; consequently, there is a limited consideration of disabilities in many key conceptualisations of such spaces (Horton, 2017). Based on the authors' collective experience and reflections, in this section we discuss how people of different abilities have not been accommodated in many nature-based locations and activities, and conceptually, in the design of infrastructures in those locations as well as in the design of nature-based therapeutic activities.

In our reflections during the ecotherapy retreat and in our personal experiences, both the infrastructure of the natural spaces and the design of ecotherapy activities often do not accommodate the needs of diffable persons. Simple everyday infrastructures such as elevated roads, narrow paths, or grassy fields may not appear as a barrier, but these infrastructures are frequently experienced as barriers that are insurmountable, or at best deeply frustrating, for people with different abilities. This invisible barrier was experienced in a limited fashion by one of the authors in his attempt to take his mother, who mostly requires a wheelchair in traveling, to the same Outdoor Campus that was used for this study. In his experience, even the simple act of bringing his mother in and out of the VIP cottage was not easy. Taking his mother in a wheelchair on a leisure stroll in nature was challenging at its best, impossible at its worst. Tiny cracks and bumps on the path, and muddy or sandy tracks that able-bodied persons hardly notice were often proven to be a difficult, sometimes impossible challenge for people in wheelchairs. This experience resonates with Horton's study (2017, p. 1154) among children with diffability where 'memories and narratives of outdoor play and urban natures were frequently closely intertwined with anticipatory, intersectional feelings of "resignation" and "dread".' During the ecotherapy retreat there was also a 15-year-old participant who is a person with Down's syndrome. Despite our attempts to be prepared and the fact that participants are alumni of our Faculty of Psychology—therefore have some knowledge about Down's syndrome, there were moments when he showed difficulties engaging in the designated activity (e.g. following meditation instructions, gamelan learning, etc.), and there was also an incident of inappropriate touching by him to another participant. Inclusive and effective design of an ecotherapy programme requires not only general understanding about how an average person experiences

nature and its therapeutic potential, but also thoughtful considerations of how a person with different abilities might perceive nature as challenging instead of comforting, how the social and communicative dimensions of the ecotherapy might inadvertently exclude them, what situations might lead to unnecessary incidents, and what facilities are needed by various types of disability.

Scholars in the field of disability studies and outdoor space have concertedly criticised the problem of accessibility and social inclusion in outdoor and natural spaces (Aylward & Mitten, 2022; Sterman et al., 2020). Without accessible facilities and inclusive sociality, natural spaces were typically described by people with disability as “unpleasant, unsettling, dispiriting, disappointing, upsetting, frustrating, exasperating, exclusionary, tiring, sometimes ‘hell-ish’” (Horton, 2017, p. 1154). Taking these critiques into therapeutic settings, we identify that—beside accessibility and inclusion—the design, the implementation, and the socio-spatial dynamics of an ecotherapy programme also need to be carefully considered based on the contextuality of the participants, namely, different forms of disability. Ecotherapists can think through/against ableist discourses in order to enhance effectiveness and inclusiveness of ecotherapy. More studies are needed to further explore how people with different abilities perceive, engage with, and experience nature and its healing properties in order to contextualise the hitherto ‘universalised’ knowledge on ecotherapy.

### **The discourse of class and ethnicity in experiencing nature**

The fourth discourse identified in our analysis is the discourse of class and ethnicity in experiencing nature. In this section we demonstrate how some contextual discursive constructions around class, race, and ethnicity might have constituted one’s experience of being in natural space. We connect this discussion with literature on ecotherapy that has not addressed race, class, and ethnicity adequately in understanding nature and psychological healing.

Natural landscapes are mostly available in rural areas. The site for ecotherapy retreat in the current study was our outdoor campus up on a mountain, approximately a 2-hour drive from our city campus. Visiting natural spaces, for urban dwellers like our participants, might involve a meaning-making process through the dominant discursive constructions about urbanity and rurality in Indonesian contexts. Indonesian urban settings are often associated with modernity, technology, and circulations of wealth; while rurality with lack of wealth, traditionalism, and less educated people. There is a derogatory word in our local Javanese language, *ndeso* (adjective for ‘rural village’), to refer to the characteristics of people who were backward and unable to behave according to the expectations of the modern world. Here, social class is culturally inseparable from geography, in this case, urbanity/rurality. Being in rural, natural spaces might be associated with spatially navigating these so-called ‘backward’ socio-cultural environments occupied by the lower class.

Being in nature also often implies being outdoors, which for urban dwellers in tropical Indonesia, is commonly associated with sweat, dirt, and darker skin—signifiers of the poor. City parks in our city Surabaya, for example, were expanding in recent years, but some of our try out participants said they never enjoyed those parks because they ‘were always crowded with people,’ or to be precise, in our observation of those parks, lower class people. In this socio-spatial setting here in Indonesia, fear of petty crime, like pickpockets, is common. As the authors auto-ethnographically explored this theme, one of the authors found that he often sought healing through being in green spaces in Surabaya with his family, and he found that beautiful parks that they can enjoy were located in upper class private residential areas, not the state-owned, congested public parks. He and his family were once told off by a security guard and asked to leave because they were not residents of that housing complex; they immediately left with a feeling of shame. On the one hand, shaming is indeed a powerful mechanism of urban segregation. On the other hand, a sense of being looked upon as an unusual spectacle by other public park visitors because of one’s middle-class outlook and brighter skin can be an equally powerful mechanism to make one feel one does not belong there. In short, parks and other natural spaces might not be completely inclusive nor accessible for all, but rather,

they are imbued with psycho-spatial mechanisms of segregation based on—among others—class and skin tone.

While brighter skin tone in Indonesia is generally a feature of the middle-upper class who own cars and work in air-conditioned indoor spaces, it can also indicate one's ethnic origin. As one of the authors who is a Chinese-descendant Indonesian—and thus ethnically has a brighter skin—recalled, a trip to a beautiful local waterfall tourist attraction 1-hour drive from Surabaya to heal from stressful urban life can turn into a discomforting experience as the gaze of mostly lower-class visitors upon this bright skinned middle class Chinese Indonesian family was noticeable. Reflecting on this narrative, the authors discussed and wondered why they enjoyed being outdoors when visiting Bali, and we realised that it was not just the beautiful natural landscape or the perception of safety from petty crime; it is also, in the context of Bali, the whiteness of the outdoor space. Popular outdoor tourist attractions in Bali were often packed with white Western tourists. These reflections and examples demonstrate that access to nature and its therapeutic power is not neutral or universal; it is imbued with racial, ethnic, and class-related discourses, practices, and presence.

Previous research in outdoor studies and outdoor education has pointed out how outdoor spaces have not been racially and ethnically inclusive. Academic studies and reviews in Western contexts have identified how outdoor greenspaces are associated with the wealthy whites (Armstrong & Greene, 2022; Gauthier et al., 2021; Gentin, 2011; Kephart, 2022; Roberts, 2016). Similarly, there have been criticisms in mainstream media in the UK that British outdoor space visitors were not proportionately representing Black, Asian, Muslims, and other ethnic minorities (Parveen, 2020). Corliss (2019) traced the history of this dominant discourse in American wilderness and found that the discourse of settler colonialism has constituted the Whites as civilised, courageous conquerors, rightful owners of the land, protectors of space, and entitled beneficiaries of any potential benefit. Feminist scholars have also pointed out how Black women and women of colour's lack of participation in outdoor education and recreation might not only be due to the limited role models, exposure, and representations, but also economic conditions and difficult access to wilderness (Roberts & Drogin, 1996). In the field of ecotherapy, Mchpie's (p. 124) has critiqued ecotherapy as "a white, middle-class Euro/Amerocentric hegemonic concept" selling wilderness as romanticised, aesthetic, and semi-spiritual idea for the privileged few, that is, those who have forcibly driven out other class and ethnic groups to create a national park. In the same vein, Taylor (2023, p. viii) identified the lack of discourses on ecotherapy 'from explicitly political perspectives that consider the influence of intersectional injustices (class, race, gender), and the wider socio-economic and socio-ecological contexts of ecocidal capitalism.' These researchers concertedly called for more studies on and improvements of how to make outdoor greenspaces and outdoor education more multicultural and socially just. Taylor (2023, p. 81) even further argued that ecotherapy is a capitalist construct where:

To be 'healthy' is to be a good capitalist, a good worker and consumer- to own a home, a car and be able to provide for yourself and your family and adhere to dominant societal norms and expectations. . . . (Ecotherapy is) consciousness-numbing activities that anaesthetise and shelter them from the harms and exploitative consequences of capitalism in general and formally paid, compulsory work in capitalist economies.

To date there are still considerably little attempts, if any, in the ecotherapy literature to include class, ethnic, and racial critiques in the design, implementation, and practice of ecotherapy, let alone redirecting ecotherapy against its capitalist underpinning. In terms of praxis, as our data and discussions in this section illustrated, a culturally sensitive ecotherapy must be aware of societal dynamics in relation to class, race, and ethnicity of the context where the ecotherapy is considered. Accommodating both social justice and healing experience through a sense of belonging in natural spaces could be an intricate and complex work; but at least being cognisant of these social identities could improve the effectiveness of ecotherapy by carefully considering choices of, among others, therapeutic activities, locations of the greenspace, and relevance of therapeutic pathways known so far.

## The construction of nature through local spiritual beliefs: ghosts, humans, and natural landscapes

We moderns, despite our mechanistic and rationalistic ethos, live in landscapes filled with ghosts. The scenes we pass through each day are inhabited, possessed, by spirits we cannot see but whose presence we nevertheless experience. ~ Michael Mayerfeld Bell (1997, p. 813)

The final key discourse we identified in our analysis is the constitution of nature through local spiritual beliefs about supernatural beings. Besides haunted buildings or human-made structures where unusual numbers or ways of death happened, narratives of ghostly experiences in Indonesia commonly take place in open greenspaces, such as graveyards, forests, or traditionally sacred places in rural areas like trees, mountains, or caves. In this section we argue that while modern ecotherapy studies originated from the Western scientific rationalist contexts, it is also beneficial to consider local beliefs about invisible beings dwelling in natural spaces of which modern scientific methods were hitherto reluctant or unable to capture. Depending on the contexts, understanding local spiritual discourse of ghosts and spirits could better inform the design and practice of ecotherapy.

During the try-out retreat in the current study, an 8-year-old try out participant told one of our student assistants that he was awakened by a ghost in the morning, and that he refused to visit the museum because there were many ghosts in there. The assistant observed that he said that very calmly, as if he was used to it. It is not a secret that some Indonesians were sensitive to such extra sensorial perceptions from a very young age, and stories about ghost-related experiences were abundant in Indonesia. In fact, next to our outdoor campus is a local graveyard. Graveyards in Indonesia are commonly understood as the place for ghosts, which is not necessarily the case in other contexts, like in the West, at least not as strong and as common. A wall was built between the graveyard and our outdoor campus, and unfortunately, next to the wall on our side was a large bamboo garden. In Indonesian local beliefs, bamboo trees are often considered as the dwelling place for invisible beings. In one of the pre-retreat site visits, one author took his family to the outdoor campus, and they explored the area around the quiet bamboo garden next to the graveyard. After leaving the bamboo garden he asked his wife whether she felt something there. She responded, 'What, why? I did somehow feel scared when we were there.' She did not know that the other side of the wall was a graveyard, but she could sense the otherworldly presence. Another author reflexively recalled his interview in another research project with a participant who told her story of being haunted by voices in her head for years after she attended a student camp in a forest where she tried to help another friend who entered a trance-like condition in the middle of the night. In our interview with a local elder from a nearby village, stories about magic practice were abundant, such as how he told a traditional method of effectively fending off rats from paddy fields using prayers and rituals. While not everyone finds these stories believable, these examples demonstrate that human experience in natural spaces is not universal, mechanistic, nor objective; but rather, contextually constituted through particular dominant discourses in each cultural setting.

A small number of academic studies in social sciences have researched ghost-related topics. These studies acknowledge the existence of ghost stories in the history of human civilisation which has been much longer compared to the recent rise of scientific rationalism that has cast such stories to the realm of superstition (Barad, 2017; Bell, 1997; Furman, 2022; Holloway, 2010). Furman (2022), a critical educator, demonstrated that 'children are knowers who live amongst ghosts' (p. 262) evidenced by their perception, fascination, and engagement with ghostly experience; however, classrooms generally do not welcome these beliefs in ghosts. This is problematic. As some scholars like feminist new materialist philosopher Karen Barad (2017) argued, the notion of justice demands our 'response-ability to ghosts of the past and those yet to come' (Furman, 2022, p. 253). In the wake of the current climate crisis, it is crucial that humans learn to live together with and expand their responsibility from human-oriented rights

and social justice to considering broader planetary inhabitants (Wijaya Mulya et al., 2022), such as animal rights, environmental care, and if we may add here, respect for invisible spiritual beings inhabiting the earth.

However, existing ecotherapy literature hitherto has not engaged with ghost-related considerations. We posit that ecotherapists need to first acknowledge and understand how local spiritual discourses constitute ghost, human, and natural space in order to develop contextually relevant therapeutic activities. To be both cognisant, respectful, and responsible with invisible spiritual beings dwelling in natural spaces while tapping into the therapeutic power of nature is a key posture here. Considering ghosts in the design of ecotherapy might include carefully choosing the natural spaces for activity, the time of the day, the activities themselves, and keeping in mind the participants who might be sensitive to extra sensorial perceptions.

## Conclusion

In this article we have demonstrated how human-nature relationship is not neutral, objective, and universal as often implied in the existing academic publications on ecotherapy. Human-nature relationships are constructed through various contextual discourses, from cultural, spiritual, ethnic, gender, to class-related discourses. These contextual situations might have enabled or limited mental health benefits of ecotherapy in different ways. By intently examining the contextuality of ecotherapy, the current article contributes new insights into the ecotherapy literature that was hitherto dominated by Western biomedical model and has not considered cultural specificities and discursive mechanisms operating within the practice of ecotherapy.

Some of our findings and discussion may be relevant and can be applied to other contexts, for instance, discussions on relatively more universal rather than contextual issues, such as gender, disability, or class. However, we encourage the readers to also critically reflect on how ostensibly universal issues might have always existed in contextual situatedness. Disability, for example, might be predominantly understood through a discourse of equality and human rights in one context, and a discourse of shame and burden in another context. The line between universality and contextuality might not be easily demarcated, as they both might co-exist in intricate and complex interplays.

The implication of the current research is as follows. When designing a nature-based therapeutic programme, ecotherapists might find benefits in considering the contextuality of the location, identifying participants' intersectional identities, and understanding local socio-cultural-discursive frameworks through which human-nature relationship is constituted. For example, participants' gender, class, ethnicity, disability, cultural background, and religious/spiritual beliefs pertinent to their engagement with natural spaces need to be attended carefully. The more the ecotherapy design is grounded in locality and contextuality, the more relevant and effective the benefits might be. This can be achieved by inviting local government bodies and providers of nature-based programs and locations to engage in practices that are inclusive and taking into consideration local customs and cultures. One example of these practices is providing access and special assistance to people of different abilities, such as providing ramps, special track for wheelchairs, instructions in Braille, etc. Another practice is including local beliefs and customs (e.g. rituals, spiritual beliefs, local wisdoms and philosophies about nature) in designing nature-based programs, but not in a cosmetic or 'add-on' way. Advertisements and brochures of nature-based programs should also feature minority representations. As the current study has begun to indicate and together with the broader studies on cross-cultural psychotherapy, future research may enrich ecotherapy literature by exploring various versions of ecotherapy vis-à-vis local resources, socio-cultural adaptations, therapeutic pathways, and mental health benefits.

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## Notes on contributors

**Teguh Wijaya Mulya** is a professor of psychology at the University of Surabaya, Indonesia. He specialises in critical psychological research in various topics, including gender, sexuality, religion, mental health, and eco-psychology. He holds a doctorate from the University of Auckland, New Zealand.

**Harijanto Tjahjono** is a teacher and a facilitator in adult learning and training. In those capacities he teaches university-level courses, especially in Training and Development and Organisational Psychology at the School of Psychology, University of Surabaya. In addition, he serves as a consultant in training design and organizational learning for organizations and companies. He enjoys helping and facilitating learning in organizations, including companies and schools, because he believes that learning is the key to developing people, liberating thoughts, and improving organizational and societal conditions. Harijanto was the director of the Centre of Learning and Curriculum Development, University of Surabaya. He was responsible for conducting periodic reviews at all schools and departments, developing and organising professional development programmes for lecturers and professors, and spearheading new learning initiatives, strategies and methods. In addition to this, he was appointed as the head of the online learning development team at the university level to develop and design the system (eg. online learning guidelines, salary structure, etc.), organise, and supervise milestone events and programmes.

**C. W. Prijonggo** is a faculty member at the Psychology Faculty of Universitas Surabaya. He received a PhD degree in Psychology from the University of New England, Australia. His research interest is on the psychology of religion and spirituality, with particular emphasis on religious, spiritual, and mystical experiences. His doctoral dissertation examined these experiences among contemporary Australians and Indonesians.

**Nadia Sutanto** is a lecturer at the Faculty of Psychology, University of Surabaya; and a clinical psychologist at Premier Hospital, Surabaya, Indonesia. Her expertise include biopsychology, neuropsychology, and mental health of individuals, spouses, and families. She has been invited to speak in various schools and companies in Indonesia.

## ORCID

Teguh Wijaya Mulya  <http://orcid.org/0000-0002-8899-1157>

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