



The potentiality of nature to tug at our heartstrings: an exploratory inquiry into supportive affordances for emotion-focused family therapy in the outdoors

Carina Ribe Fernee^{1,2} · Sophia Louise Hjorth Wahlgren¹ ·
Lise Katrine Jepsen Trangsrud³

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Abstract

A wealth of studies demonstrate the associations between nature contact and well-being, and gradually, nature-based solutions are becoming more widespread in mental health care and recovery. While emotion-focused therapies generally show promising results, evidence of nature-based family therapy is still scarce. In a forthcoming clinical trial at Sørlandet hospital in Southern Norway, we will compare indoor and outdoor provision of emotion-focused multi-family therapy. The foundation of emotion-focused therapeutic work with families is a deep belief in the healing powers of families, where resources within the “ecosystem” of a given family can be reactivated and nudged towards establishing a greater sense of harmony and connectedness over time. According to a Gibsonian understanding of affordances, humans respond to possibilities and limitations within an environment, where affordances in the context of this article arise from a systemic interplay between nature, participating families and facilitators. In this exploratory inquiry, we are particularly interested in the myriad ways nature may influence four core principles in emotion-focused therapy, including (a) emotion awareness, (b) emotion regulation, (c) reflection on emotion, and (d) emotion transformation. In this perspective article, we propose hypotheses and working metaphors in relation to everything from emotions’ multiple purposes to the delineation of facilitators’ accepting, empathic and curious stance. First and foremost, we attempt to generate a preliminary account of nature’s potentiality to tug at our heartstrings and offer a supportive environment for the novel provision of emotion-focused family therapy in the outdoors.

Keywords Theory of affordances · Socio-emotional affordances · Nature environment · Emotion-focused therapy · Family therapy · Outdoor therapy

«Grasping any aspect of nature affords possibilities to ameliorate the well-being of individuals, communities, and the environment – because as we grasp a bit of nature, in turn nature tugs at our heartstrings».

(Petersen et al., 2019, p. 5)

Introduction

Humans are social and affective beings with a fundamental need to feel love, validation and belonging (Baumeister & Leary, 1995; Fiske, 2018). Over the last decade, growing evidence demonstrates the health-related benefits and emotional well-being associated with nature connectedness (Capaldi et al., 2014; Petersen et al., 2019), to where nature-based solutions are gaining increased attention in health services (Bratman et al., 2019; Corazon et al., 2019; Mygind et al., 2019; Shanahan et al., 2019). An investigation into the added benefits potentially achieved through recontextualising health interventions from an indoor setting to a natural environment (Mattsson et al., 2022) is one of the lines of inquiry in a forthcoming clinical trial at Sørlandet hospital in Southern Norway. In a comparison study, we will explore the feasibility and effectiveness of an emotion-focused approach to multi-family therapy provided outdoors. Indoor facilitation of emotion-focused skills training with parents only (Dolhanty et al., 2022) and other non-emotion-focused family therapy will be utilised as comparison groups in a three-armed clinical study. Participants are children and adolescents between the ages of six and eighteen years of age who have been referred to specialist mental health care, along with their parents/caregivers and siblings, if applicable. As a transdiagnostic treatment approach, children and youth with various forms of psychological and emotional distress are included. We are curious to see whether a whole-family approach to emotion-focused therapy, provided in a multi-family format outdoors, will enhance outcomes compared to treatment-as-usual taking place indoors. In this article, more specifically, we intend to explore emotional and social affordances found in nature, and thereby attempt to explicate the rationale behind providing emotion-focused family therapy outdoors. While emotion-focused therapies generally show promising results (Ansar et al., 2022; Havighurst et al., 2020; Zahl-Olsen et al., 2023), the evidence base for nature-based family therapy is still limited (Stea et al., 2022). To the best of our knowledge, the combination of an emotion-focused approach to nature-based family therapy is novel. Establishing a preliminary shared theoretical and therapeutic foundation is therefore required.

As humans, like all living beings, we are affected by our immediate surroundings (Bateson, 1972). One lens to understanding the relationship between a family's needs and what a given environment may offer, is theory of affordances (Gibson, 1979). We shall return to this theoretical vantage point shortly, but to briefly introduce the main concepts of this article, socio-emotional affordances can be understood as how a given physical space (e.g., a Norwegian pine forest) and a social context (e.g., a multi-family group intervention) indeed influence the emotional and relational aspects of this very interaction (Roe & Aspinall, 2011). In the context of this article, affordances involve a systemic interplay between nature, family members

and facilitators in a dynamic and reciprocal process. Following a Gibsonian (1979) understanding, the participating animals (in this case, humans) respond to the possibilities and limitations within a given environment in a perceptible, bodily and cognitively integrated manner. Henceforth, we will particularly focus on the emotional and relational qualities of these interactions in order to attempt to understand some of the myriad ways nature may support an emotion-focused approach to family therapy. Here, we are particularly interested in the potential affordances, or rather invitations, found in a given nature environment that may support core processes in emotion-focused therapeutic work, including: (a) Emotion awareness, (b) emotion regulation, (c) reflection on emotion, and (d) emotion transformation (Greenberg & Pascual-Leone, 2006). This exploratory inquiry provides preliminary hypotheses of nature's potentiality as a supportive environment for emotion-focused family therapy prior to the onset of a clinical comparison trial.

Family therapy is proposed to be an effective treatment approach for children with mental health challenges (Carr, 2019) and over the last decades, a number of emotion-focused therapies have been developed (Greenberg & Goldman, 2019). Some of these are tailored for parents only, such as emotion-focused skills training (Dolhanty et al., 2022), while other approaches include caregivers and children, such as emotion-focused family therapy (Lafrance et al., 2020). The foundation of emotion-focused family therapy is based upon a deep belief in the healing powers of families (Dolhanty & Lafrance, 2019), where resources within the "ecosystem" of a given family can be reactivated and supported in order to gain stability and harmony over time (Pocock, 2010). The aim of emotion-focused skills training is often to support parents in enhancing their emotional awareness and regulation, thereby strengthening their ability to respond compassionately and sensitively to their children's emotional expressions (Dolhanty et al., 2022). Furthermore, it can help parents to guide their children in expressing and regulating emotions in a more adaptive manner. Emotion-focused family therapy is a systemic and transdiagnostic approach to mental health treatment (Lafrance et al., 2020). Systemic means that it focuses on the entire family's well-being, including their intra- and extrafamilial relations (Cottrell & Boston, 2002), where this continuous interaction forms stability or instability over time (Bateson, 1972). Some forms of instability may suggest that family therapy is not recommended, at least not initially, in circumstances where violence or abuse has occurred within the family, or instability is caused by for instance parental mental health struggles or substance use. Transdiagnostic implies that the approach cuts across traditional diagnostic boundaries, at times setting them aside altogether by introducing alternative ways to conceptualise mental health and recovery processes (Dalglish et al., 2020). As such, a transdiagnostic understanding might better represent the reality of mental health concerns. It can be argued that it not only more accurately reflects the biopsychosocial complexity frequently observed in clinical practice, and in daily life for that matter, but furthermore, acknowledges distress as an "existential cornerstone of the human condition" (Dalglish et al., 2020, p. 180) rather than an expression of mental ill-health. Compared to individual or single-family approaches, advantages to a multi-family format may reside in the support, motivation, and connection encouraged within and between participating families. As such, multi-family group interventions can

be an efficient and synergistic milieu to promote change, growth and connectedness (Asen & Scholz, 2010).

In this perspective article, we inquire into how nature may offer other affordances compared to an indoor environment when working with families (Freeman & Zabriske, 2002; Harper et al., 2019; Mattsson et al., 2022). Numerous affordances, pathways and qualities of the natural environment are identified in outdoor and forest therapy studies (Jimenez et al., 2021; Kotera et al., 2020; Mygind et al., 2019; Tillmann et al., 2018), however, an integrated theory that reflects the multidimensionality of outdoor therapy is still lacking (Harper et al., 2021). Particularly beneficial affordances of the natural environment include possibilities for mental and physical restoration (Kaplan & Berman, 2010), through for instance, the reduction of psychophysiological stress levels (Corazon et al., 2019), in addition to increased access to adaptive regulation and expression of emotions (Johnsen, 2011; Richardson et al., 2016; Roe & Aspinall, 2011). Whereas nature-based therapy is nothing new (Naor & Maysel, 2021), family therapy provided outdoors is not widespread to date, nor are there many clinical studies (Stea et al., 2022). The purpose of this article is to contribute towards the knowledge base of nature-based family therapy by specifically focusing on the socio-emotional potentials of a given natural environment. In particular, how opportunities afforded in nature may support core processes of emotion-focused therapeutic work in a multi-family group format. We will apply the aforementioned theory of affordances (Gibson, 1986) as a vantage point for this exploratory inquiry.

Potential affordances found in nature

Although there presently does not exist an integrated theoretical framework for outdoor therapy (Harper et al., 2021) or nature-based family therapy (Stea et al., 2022), a number of theoretical hypotheses have been proposed to constitute the foundation for outdoor health care. Of these, attention restoration theory (Kaplan & Kaplan, 1989) and stress reduction theory (Ulrich et al., 1991) are amongst the most frequently referenced. While these two working hypotheses are indeed relevant for socio-emotional therapeutic processes in nature, we utilise theory of affordances (Gibson, 1986) as a broader theoretical framework and in doing so attempt to explicate possibilities that exceed attention restoration and stress reduction. However, considering the preliminary stage of this conceptual investigation, we find it useful to apply a more general theoretical framework that aligns with the multidimensionality of outdoor health care and an emotion-focused approach, more specifically. This is not to disregard other theoretical vantage points, especially the longheld traditions of indigenous wisdom and practices in Norway and elsewhere, along with our ecophilosophical roots (Næss, 1989), which we shall return to shortly.

Introducing theory of affordances

Theory of affordances was coined by the American psychologist, James J. Gibson, in 1979, the same year as his death. Gibson allegedly aimed to formulate a new foundation of psychology by suggesting a more biologically plausible direction (Withagen, 2018). This ecological turn went against mechanistic conceptualisations and instead placed the autonomous activity of an animal (inclusive of humans) in its meaningful environment at the centre of attention (Withagen, 2018). Gibson's (1979) final book, *The ecological approach to visual perception*, links together the perceptual and kinesiobiological systems. Furthermore, explaining how the physical environment is interpreted as potential invitations for behaviour, thought and action, suggesting that “the affordances of the environment are what it offers the animal, what it *provides* or *furnishes*, either for good or ill” (Gibson, 1986, p. 127). Since it was first launched, theory of affordances has been widely applied and further developed within environmental studies (E.g., Heft, 1988; Kytä, 2004), within the field of education (E.g., Fjærtøft, 2004; Lerstrup & Konijnendijk van den Bosch, 2017), as well as in cognitive and environmental psychology (E.g., Suri et al., 2018). Several studies have investigated the specific qualities of outdoor environments that afford opportunities for children's physical activity, play and development (E.g., Bjorgen, 2016; Fjærtøft, 2004). Heft (1988), for instance, further developed the theory in relation to how children try to match the opportunities they perceive in an environment with their resources and abilities (for example, strength, competence, and fear). Whereas Kytä (2004) differentiated between the potentiality of a given environment or object, and the actualised dimensions that are realised when interacting with it. This differentiation is essential in that *potential* affordances refer to the possibilities within a given environment, while *actualised* affordances, in fact, are the opportunities that become acted upon. A precondition for actualising an affordance is that the potential affordance must first be perceived. The combination of a given person's abilities (such as competencies, needs or intentions) and a number of socio-cultural factors determine which affordances an individual is able to perceive and utilise in different situations (Raymond et al., 2017). Vice versa, a number of intra- and extra-personal barriers may likewise hinder the realisation of available affordances, including mental health struggles. In a larger systemic perspective, extra-personal barriers include societal and political structures, along with demographic variables, such as race and social class, which is likely to influence the potential affordances available to a given person, family, neighbourhood or even nation. Supportive and hindering factors will appear differently according to the person, family, group and situation. Because the perception of affordances varies from person to person, it may also differ for a child compared to an adult. A tree can, for instance, be perceived as an opportunity for climbing; however, it can also provide shelter from the rain or support your back as you sit down to rest in the shade of its branches.

In the context of this paper and a multi-family group intervention, the diversity of affordances found in nature offers a range of opportunities for participants' resources to manifest. Compared to an indoor setting, for instance, nature may allow more options for movement, mastery and a different sense of space, which affords some participants to feel more free and unrestrained (Fernee et al., 2019). Whereas an

indoor environment provides shelter and, with that, opportunities to remain dry and warm at all times. An indoor setting also affords a contained, relatively predictable space, surrounded by walls and a closed door, offering a privacy that some may prefer in the context of therapy. However, suppose this indoor environment is a mental health clinic; it can also afford stereotypes that may lead to intrusive thoughts and feelings, expressed by adolescents as feeling like a failure, ill or a “crazy” person (Ferneer et al., 2019). In that respect, nature can perhaps provide a more neutral sense of place compared to a hospital setting, where the nature environment may afford new perspectives and experiences and, with that, the emergence of new stories of self (Ferneer et al., 2021). Finally, affordances appear to emerge as needs and perception change, or as a growing sense of safety and mastery is acquired within an environment (Heft, 1988). Therefore, nature’s more or less constantly changing affordances can potentially support the various stages and microprocesses of a therapeutic trajectory. However, more insight is needed when it comes to understanding these oftentimes more implicit aspects of outdoor therapy (Harper et al., 2023).

While the field of psychology has been criticised for treating environments merely as an arena or backdrop to human activity (Clark & Uzzell, 2006), there appears to be increasing recognition of how nature can support and co-facilitate therapy and recovery (Naor & Mayselless, 2021). Specifically, how connectedness to the “more-than-human” nature is vital for our health and well-being, according to an ecosystemic viewpoint (Bratman et al., 2019). Furthermore, theory of affordances may represent a contrast to the cognitive bias of psychology through its emphasis on a holistic body-mind understanding, where participants remain actively engaged with their surroundings (Ingold, 2018). Theory of affordances sets out to build a bridge between the physical and the phenomenal, arguing that there is only one environment (Gibson, 1979). However, this shared environment holds a rich complexity where humans, of course, also share the outdoor environment with countless living species and plants (Bratman et al., 2019). At the centre of the theory of affordances lies the understanding of a reciprocity and complementary relationship between all living beings and the environment (Gibson, 1979). Affordances, thus, are connected to the physical, perceptual and relational properties of a given environment. However, they still only exist relative to a person’s ability to perceive and realise these inherent possibilities (Ingold, 2018). On a larger scale, without the knowledge and awareness of the possible affordances found in nature, entire fields of practice, such as psychology and medicine, run the risk of missing out on the potential for health promotion, healing and recovery that may be afforded outdoors. We shall now turn to the socio-environmental dimensions of the affordances that may be found in a natural environment.

Socio-environmental affordances of nature

Theory of affordances has traditionally been understood as referring to physical affordances or those that can be directly perceived. Some would argue on behalf of the affordances provided by the presence of other people (Clark & Uzzell, 2006). Gibson (1979), however, also recognised the importance of social interaction in relation to environmental perception, and today much research argues that affordances can be

both physical and social features of the environment (Clark & Uzzell, 2006; Kytta, 2004). In the context of this article, participants in nature-based family therapy navigate both interpersonal relations and their presence in nature simultaneously. We, however, rarely distinguish between various forms of connectedness happening simultaneously due to an often holistic perception of our surroundings and interactions, involving both people and context. Instead, we try to interpret and make sense of this interaction as a whole, and respond accordingly to what transpires (Clark & Uzzell, 2006).

Mental health struggles arguably influence, and often complicate, interpersonal relations, whereas nature, in many instances, may afford various forms of social support. Spending time together in, and with, nature appears to influence not only the human-nature connectedness (Capaldi et al., 2014; Petersen et al., 2019), but also the dynamics of the human-human interaction (Baklien et al., 2015; Trangsrud et al., 2021). Outdoor activities, such as navigating or setting up a camp together, can afford opportunities for bonding and establishing trust among peers and family members alike (Trangsrud et al., 2021). Some may find it easier to converse in an outdoor setting as nature affords a “comfortable distance” (Trangsrud et al., 2021, p. 5) when a person’s focus is shared between natural features and the other person(s) one is interacting with. Spending time together in nature can, however, also afford a natural closeness. Preparing meals, sharing a shelter or sitting around the campfire may create a sense of togetherness (Baklien et al., 2015; Trangsrud et al., 2021).

When a simplified life outdoors is facilitated, it may support a simultaneous process of disconnecting from the many disturbances and, perhaps, unhealthy patterns of daily life. Nature affords an alternative to urban or hectic lifestyles and a time-out from excessive use of technology (Gabrielsen & Harper, 2017). Such a disconnection can redirect focus, where participants become more interested and invested in their immediate surroundings and co-participants (Ferneer et al., 2019). This openness may generate attentiveness to the situation here-and-now, including parental attunement towards their children (Mattsson et al., 2022). Therefore, the socio-environmental affordances of nature may facilitate a reconnection that occurs on many levels. In addition to the potential connectedness to others and to nature, it may afford possibilities for a deeper reconnection with oneself – to one’s body, thoughts and emotions (Ferneer et al., 2019).

Furthermore, inherent in a person’s perception of environmental and relational affordances lies a social and cultural construction of meaning that is transferred or learned through our life experiences and relationships (Clark & Uzzell, 2006). Following this socio-cultural learning perspective, what a person perceives as affordances, in turn, depends on what other people afford, typically through their actions, words and non-verbal body language (Gibson, 1979). According to Kytta (2004, p. 181), this multidimensionality of affordances comprises “emotional, social and cultural opportunities that the individual perceives in the environment”. Whereas all three dimensions are key to emotion-focused family therapy outdoors, we focus on the social and emotional dimensions in this article. While the third aspect, cultural opportunities, is not emphasised further in this text, the practice of nature-based family therapy is likely influenced not only by what each participating family represents of cultural heritage and ways of being (Gottman et al., 1996), but also by the long-

standing cultural tradition of *friluftsliv* in the Nordic countries (Gurholt & Haukeland, 2020). Friluftsliv (literally translates as “free-air-life”) is often related to recreational activities in nature, such as hiking, skiing, camping, or canoeing, and bears resemblances with terms such as “outdoor pursuits” and “outdoor life”. Friluftsliv holds a relatively high participation rate for all age groups within the Nordic countries (Dervo et al., 2014) and is identified as an essential source of health and well-being in everyday life (Mygind et al., 2019). Beyond outdoor activities per se, some would argue that friluftsliv also is a philosophical lifestyle rooted in nature connectedness and the deep-ecology movement coined by the Norwegian philosopher, professor and mountain climber Arne Næss (1989). However, along with the cultural and philosophical underpinnings of friluftsliv (Gelter, 2000; Gurholt & Haukeland, 2020), outdoor health care and therapy practices within this region are also internationally inspired (Ferneer et al., 2015). Following this, a socio-cultural learning perspective of which affordances one sees possible may also be inherent in how the facilitators, directly and indirectly, communicate values and perspectives of friluftsliv and nature connectedness (Beery, 2013).

Outdoor health care may sound intimidating or unappealing for some. To others, nature might be their preferred place for health promotion and recovery, perhaps because of its compatibility with their personal preferences or due to the diversity of opportunities found in a given natural environment (Clark & Uzzell, 2006). Natural settings such as parks, forests, lakes and mountains have been categorised as favourite places (Korpela et al., 2001), whether it entails seeking out restorative experiences (Kaplan, 1995), regulating emotions (Johnsen, 2011; Korpela et al., 2001) or meeting other needs. Compared to an indoor environment, nature affords various ways to, for instance, regulate one’s social engagement versus the need for time alone (Trangsrud et al., 2021). Moreover, interaction with natural environments is reported to reduce negative affect and levels of stress, particularly due to lower levels of neural activity in the areas of the brain linked to rumination and behavioural withdrawal (Bratman et al., 2015). These socio-environmental affordances for self-regulation highlight the dynamic interaction between a person and a given environment, where individuals seek restorative settings to regulate both pleasant and unpleasant feelings (Korpela et al., 2001). We shall address some of the supportive emotional dimensions nature may afford; however we first find it essential to acknowledge how spending time in nature may also constitute unpleasant affordances.

What about the less supportive affordances in nature?

The sudden changeability and, to a certain extent, unpredictability of the natural environment can provide challenging experiences. Depending on the specific place, hour and season, combined with the competence, perception and judgment of the participating person(s), many of these temporal and changing affordances can be manageable and pleasant. For less experienced dwellers or hikers, on the other hand, time outdoors can become unpleasant and even dangerous. Nearby nature, where an immediate retreat is available when necessary, may afford perceptions of a “safer” environment compared to outdoor health care taking place in more remote areas.

Then again, natural affordances may differ in nearby nature close to civilisation, traffic, and human interference, compared to “wilder” nature where there is little trace of human activity. The quietness and absence of “city-sounds” (Trangsrud et al., 2020, p. 6), as well as the experience of darkness and stars (Bell et al., 2014), are examples of environmental features typically referenced in relation to extensive and more remote nature. Still, unpleasant affordances of nature include everything from wet, cold, dry or hot conditions, whether one is equipped for them or not, in addition to other natural occurrences such as lightning, avalanches, storms, etc.

However, some objects or features of an environment can be the source of both pleasant and unpleasant affordances. For instance, a campfire can afford warmth, illumination, preparation of food and serve as an inviting gathering point. At the same time, a campfire can also afford skin burns, unpleasant smoke and be destructive to nature. Thus, what can be referred to as less controllable aspects of spending time outdoors, can oftentimes constitute both supportive and challenging features (Trangsrud et al., 2021). This dialectic is found across many dimensions of outdoor therapy, including our conceptual frameworks. To name an example, according to Csíkszentmihályi’s (1990) flow theory, positive feelings occur when a balance between skills and challenges is present. Yet, recent research has suggested that such a balance may result in boredom or disinterest, and that a slight imbalance actually leads to the most powerful subjective experiences (Lovoll & Vitterso, 2014).

Although this exploratory inquiry seeks to understand the affordances of nature that may support emotion-focused family therapy (McMahan & Estes, 2015), we are aware that nature may very well not be the preferred place to spend time for some children and adults, perhaps due to their unfamiliarity with nature or based on previous negative experiences. Nature contact may, in such instances, cause fear or resentment. For some, the thought of nature may evoke unpleasant feelings such as grief or guilt arising from environmental concerns. Climate anxiety and eco-grief are prevalent, especially in the younger populations (Hickman et al., 2021) and, therefore, something we are likely to encounter more frequently in outdoor health care over the years to come. Processing of existential concerns, for instance, related to climate change and loss of biodiversity, again balanced with pro-environmental activities (Kals et al., 1999), can all easily be integrated into nature-based therapeutic practices and furthermore, align well with an emotion-focused approach, which we shall turn to next.

Emotion-focused therapy and the potentiality of nature

Emotion-focused approaches to therapy grew out of client-centred and experiential traditions that view people as “dynamic, self-organising systems in constant interchange with the environment, forming and being formed in mutually regulating ways” (Goldman, 2019, p. 9). Emotion-focused therapy is rooted in the humanistic-existential tradition, combining meaning creation with embodied and narrative perspectives (Greenberg, 2019). A narrative focus is, among other things, considered key to adaptive identity development and the articulation of a more coherent, emotionally differentiated account of self and others (Goldman, 2019), where, indicators of prog-

ress include: “heightened self-reflection, agency and new interpersonal outcomes” (p. 13). However, in the face of trauma or emotional loss, we may find ourselves nearly unable to speak or able to make meaning of painful experiences, especially in those incidences where our identity, close relationships or entire lifeworld is shaken to the core. Such events may require experiential, embodied processing before a narrative redescription and emotional healing can occur.

As humans, we engage affectively with our immediate surroundings. Emotions, therefore, play a crucial role in our daily lives and are essential to our mental and social well-being, as they influence how we think, behave and interact with others (Withagen, 2018). When it comes to connectedness with nature more specifically, Petersen and colleagues (2019, p. 1) utilise an interpersonal lens when proposing that “social relational emotions” are crucial to the processes through which humans affiliate with the more-than-human nature, rooted also, of course, in evolutionary explanations, such as the biophilia hypothesis (Wilson, 1984). Yet, how potential emotional affordances of nature are instantiated and realised remains unclear (Petersen et al., 2019). Before continuing our exploratory inquiry into nature’s potentiality to support emotion-focused family therapy, we first dwell briefly on emotions and what they might be.

Emotions: a coordinate system or perhaps a guiding compass

In emotion-focused therapy, emotions are viewed as “the fundamental datum of the human experience” (Greenberg & Goldman, 2019, p. xii). The emotional apparatus functions as a form of *coordinate system*, where a set of sensations or coordinates from the environment are synthesised with a set of tendencies and sensations from the body. These phenomena then are symbolised or labelled (Greenberg, 2019) as, for instance, anger, sadness, or fear coordinates on a “map” of our emotional “landscape”. Emotions may serve multiple purposes, including providing information, preparing for action, and generating motivation. Fear, for instance, is a warning signal that organises us to scan our immediate surroundings for danger and prepares us to take action, whether that involves fighting, fleeing or other. Fear may also give us a bodily sensation, possibly felt in the chest and stomach, accompanied by rapid pulse and respiration. Emotional responses emerge from our internal memory structures that synthesise affective, motivational, cognitive, and behavioural elements (Goldman, 2019). Emotions are ideally adaptive, allowing individuals to accurately appraise and respond to situations and cues in their environment. However, numerous intrapersonal factors and contextual circumstances may interfere with the accuracy and functionality of this “coordinate system”. Greenberg (2019) has identified four main intrapersonal hindrances to a well-functioning emotional apparatus, including: (a) a lack of emotion awareness, (b) emotion dysregulation, which involves both under- and overregulation, as well as (c) the inability to build narratives or find meaning. The latter may stem from difficulties in making sense of one’s experiences, which could consequently hinder the construction of narrative accounts of self, others, and contextual circumstances. All together, these factors may (d) hinder emotional adaptation and desired change. Emotional competence,

on the contrary, can be defined as “the ability to use adaptive emotional responses to *guide a process of becoming*” (Greenberg & Goldman, 2019, p. xi, emphasis in original text). In this view, emotions can be understood as our innate *compass* that points us towards the desired direction according to our needs, wishes and goals (Goldman, 2019).

Core processes of emotion-focused therapy and nature’s invitations

Principles of an emotion-focused approach that aligns well with nature-based facilitation are, however, not only the aforementioned fitting metaphors of compasses and coordinate systems. We hypothesise that nature has the potential to afford a supportive environment for the core processes of emotion-focused therapeutic work (Greenberg & Pascual-Leone, 2006). Other similarities within both traditions are the shared experiential foundation and a common deep-held belief in people’s capacity for self-healing (Peeters & Ringer, 2021). This ability is, however, directly linked to a two-way human-environment transaction, where according to Greenberg and Goldman (2019, p. 79), human beings are viewed as: “agentic, purposeful organisms with an innate need for exploration and mastery of their internal and external environments”. Regarding interaction with nature, more specifically, most natural environments are laden with a diversity of physical affordances. However, nature can also be “value” laden with available emotive responses (Roe & Aspinall, 2011, p. 2). While Gibson (1986) himself, to our knowledge, did not attempt to integrate affective content into his conceptualisation of affordances, there have been efforts to do so since (for an overview, see Withagen, 2018). Whereas Gibson often focused on the functionality of an environment and described affordances, for instance, in kinesthetic terms (e.g., climb-able, walk-able and so on), other studies that followed, such as Kaplans’ (1989) restorative framework, were primarily cognitively oriented. Whilst Csikszentmihályi’s (1990) conceptualisation of a state of flow and the sense of total absorption, on the other hand, included affective dimensions such as a heightened emotional state (Kyttä, 2004). An emphasis on emotional affinity to nature is nothing new (Milton, 2002). Russell and Pratt (1980), for instance, suggested that the key to understanding people’s reactions to a landscape is through emotion. Russell (1980) went on to develop a taxonomy that mapped affective responses along two axes: (1) pleasant/unpleasant and (2) arousing/relaxation, which aligns with the aforementioned dialectic of nature experiences. Over the last decades, several authors have criticised the Gibsonian conception of affordances, arguing that affordances go beyond providing possibilities for action, and rather *invite* or *solicit* action (Withagen, 2018, p. 22).

In this perspective article, we are particularly concerned with the triad of transactions occurring between nature, participating families and facilitators in the context of an emotion-focused multi-family group intervention. Before looking more closely at the facilitator role, we shall first turn to the four core principles of emotion-focused therapy, including: (a) emotion awareness, (b) emotion regulation, (c) reflection on emotion, and (d) emotion transformation (Greenberg & Pascual-Leone, 2006) and attempt to elicit preliminary hypotheses and working metaphors with regards to nature’s potential invitations.

Emotion awareness: nature invites us to open up and “listen” deeply

The first principle when working with emotions in therapy is the promotion of *emotional awareness* (Greenberg & Pascual-Leone, 2006). This may involve categorising emotions by differentiating between feelings considered adaptive or maladaptive, as well as primary and secondary emotions. A primary emotion is a direct reaction to what is happening in one’s surroundings, whereas a secondary emotion is a reaction that comes after a primary emotion is activated. What may happen then is that the secondary feeling oftentimes covers the primary emotion to the point where we do not even notice the initial feeling. The purpose of secondary emotions is to protect us from potentially painful primary feelings. However, there is often an important need associated with each primary emotion. Therefore, secondary emotional expressions can feel frustrating or confusing because they are difficult to understand in the context in which they occur, and they give misleading signals to those around us about what we need. For instance, if we express a secondary emotion of anger that pushes people away, when our primary emotion is sadness and the need for comfort (Dolhanty et al., 2022). Primary emotions can become maladaptive if our needs over time are not adequately met, where one example is a child that repeatedly cries out to a non-responsive parent. Due to such childhood experiences, encounters of non-responsiveness later in life can provoke maladaptive or disproportional sadness (Dolhanty et al., 2022). The awareness process generally involves approaching and accepting emotions. Acceptance, as opposed to avoidance, is the first step in awareness work. So-called maladaptive emotions must be accessed for these to be exposed to new experiences, whereby allowing the opportunity to create new meaning.

Emotions may serve the purpose of making us aware of intrapersonal, relational or contextual circumstances that are potentially important to our well-being, as such providing what Greenberg (2019, p. 38) has described as: “embodied connections to our most essential needs”. Our emotional apparatus is a complex response system that activates our basic action tendencies to, for instance, approach or withdraw and to *open up* or close down. These dynamics are again linked to our ability to become aware of our emotions and respond accordingly. On a meta level, an open responsiveness versus a withdrawn or guarded attitude is directly associated with participants’ level of engagement in emotion-focused therapeutic work. As we have seen, nature may afford a time-out from distracting factors and the change of environment can be an important facilitator for new or other understandings of oneself (Trangsrud et al., 2021). For some, the invitation to explore a novel environment affords possibilities for new experiences and perhaps different behavioural responses than what has previously been the case (Fernee et al., 2019). Responses to the affordances of the natural environment are typically influenced by embodied childhood memories of outdoor play (Fasting et al., 2022). However, it is essential to acknowledge that in Norway, several persons also describe a rather “strained” relationship with outdoor pursuits, often due to compulsory outdoor activities during school years. Following this, the introduction to nature must be tailored according to the person’s background and previous relationship with nature.

In this article, we hypothesise that nature may afford increased levels of openness and active engagement, particularly in the incidences where participants feel safe and

prefer nature compared to an indoor environment. Sharing time in nature can afford a reconnection on many levels to nature, others and one's self, which may allow an attunement to the present moment and a deep sense of awareness. One pathway to a deeper awareness is through nature's awakening and stimulation of our sensory system (Abram, 1997). Interoception refers to our ability to sense internal states, where we more or less constantly sense our bodies from the inside. Emotions are produced via these iterative mind-body signals in an attempt to maintain homeostasis (Forster et al., 2023). These processes are, therefore, also involved in emotion regulation, where mental health struggles and trauma can interfere with or even numb this ability. Interoceptive awareness is likely an increasingly neglected sense due to the countless distractions inherent to humans' presently "technified" and hectic lifestyles. In the context of trauma, more specifically, Fisher (2022) advocates for immersion in nature as a means to soothe a stressed nervous system, which indeed can support the process of emotion awareness and regulation. Perhaps in the calm of the forest or close to the flow of water, we may reconnect with our inner self, our bodies and emotions, and to "*listen*" *deeply*.

Emotion regulation: nature as a secure base and a diverse, roofless space

The second principle involves *emotion regulation*. The ability to regulate emotions, and whether regulation is utilised in an adaptive or maladaptive manner, has close ties to the emotional functioning of the entire family (Gottman et al., 1996). Children learn to regulate their emotions in the context of attachment relationships with important caregivers (Siegel, 2020). Hence, emotion regulation difficulties can be related to parental emotional competence and practices (Gottman et al., 1996), which is part of the rationale for including the entire family in emotion-focused therapy. For some, nature can serve as a primary attachment and thereby afford a *secure base* for processing and regulating emotion (Schweitzer et al., 2019). Due to our hypothesised affiliation, referred to as biophilia (Wilson, 1984), nature contact affords a seemingly effortless regulation of our emotions by increasing positive affect and decreasing negative emotions (Bratman et al., 2019; McMahan & Estes, 2015). Even brief exposure to nature is associated with higher levels of emotional well-being (Mayer et al., 2009).

Whether participants are generally under- or over-regulated, and which emotions are to be regulated and how, are all aspects that ought to be considered (Greenberg & Pascual-Leone, 2006). Depending on the need to activate or calm, nature invites us into a *diverse* environment with a range of affordances that can serve regulatory purposes (For a more thorough account of the use of nature for emotion regulation, see Johnsen, 2015). Since it is mainly the aforementioned secondary emotions that require regulation and processing through activation, the *roofless space* and extensiveness afforded by nature may allow for emotional outbursts such as crying, frustration, and anger to be released into the air. Perhaps returning as raindrops from the clouds, echoes in the mountains or thunder across the sky, where nature may afford encouraging metaphors, such as the appearance of the rainbow following heavy rain, stars lighting up the dark night, and the sun rising in the morning.

Reflection on emotion: an iterative journey searching for meaning

The third process of *reflection on emotion* is related to the first principle, emotional awareness. In addition to providing information about the emotional state, increased awareness may also promote reflection on emotional content, which is a prerequisite in order to find or create new meaning. In emotion-focused therapeutic work, much like in outdoor therapy, we may explore different routes, while continuously attempting to make sense of whatever we come across along the way. Whereas nature-based therapy explores both inner and outer “landscapes”, the primary emphasis in emotion-focused therapeutic work is naturally focused on emotional “terrain”. Perhaps, in particular, a focus on the rougher parts, in order to arrive at the kernel of our distress. The interdependence of emotional exploration, reflection and meaning-seeking on this *iterative journey* is reiterated by Goldman (2019, p. 21) in stating that: “emotion cannot be understood outside the context of the narrative, and the narrative does not have meaning without emotion”. *Searching for meaning* may also transpire via the aforementioned pathway of more implicit bodily-felt sensations through processes of deep awareness and reflection. Arguably, it is through the combination of thought and feeling that we come to know ourselves, where: “emotions move us and reason guides us, whereas the meaning we ascribe to our feelings is what we ultimately live by” (Greenberg, 2019, p. 39). Nature environments may in this stage support the therapeutic process in a number of ways, including inviting us into a reflective space, combined with a slower pace that allows time for iterative processes to unfold (Raymond et al., 2017). In addition, especially more remote nature areas may afford an environment where some feel more easily connected to existential questions related to meaning-making and coherence (Lumber et al., 2017; Bratman et al., 2019). This exploratory and reflective journey continues until our understanding or narrative becomes more coherent and the emotions attached to it gradually seize or change. Just as emotional awareness is a necessity for deep reflections and existential meaning-seeking to occur, emotional rewriting is suggested to be the key to transformation, which is the final core principle.

Emotion transformation: rewriting narratives on an experiential, embodied level

According to Greenberg and Goldman (2019), there are two key tenets when it comes to processes of change in emotion-focused therapy. The first one is self-acceptance, which entails that you must first accept yourself as you are in order to make yourself available for change. Transformation, therefore, requires a connection to yourself and your emotions. Second, you need to experience emotions in order to make emotional content accessible to change. In this fourth principle of *emotion transformation*, it is, therefore, not the level of understanding or awareness that is crucial for change to ensue, but rather new experiences. However, novel experiences, in and of themselves, do not suffice. New emotions must be expressed and sensed in a bodily way amidst novel circumstances for the *rewriting of narratives* to happen, according to Greenberg and Goldman (2019). We hypothesise that a multi-family group intervention provided in nature can afford parents and children both a richness in experience and novelty to varying degrees. The multi-dimensionality of nature-based therapy

activates their bodies and relational dynamics, all along softly nudged by nature's invitations, as families are rewriting their stories together moment-by-moment on an experiential, embodied level.

A final note on emotion transformation, before moving on to the facilitator role. Change in an emotion-focused tradition is not viewed as goal-directed in the sense of mending something that is "broken", rather, it is process-oriented in terms of allowing emotions to unfold and working through these four principles (Greenberg & Pascual-Leone, 2006). Transformation and growth are believed to emerge when nurtured, not only by family members and nature, but by an accepting, curious and empathic stance on the part of the facilitator(s) (Goldman, 2019).

The facilitator role: empathic conjecture and responsive guidance

An emotion-focused practice rests on a genuine and empathic stance on the part of the facilitator(s) or therapist(s), where empathy is regarded as both an attitude and a technique. Facilitators in the context of multi-family group work remain fully present, highly attuned, and sensitively responsive to the participating families. While an empathic relationship can be therapeutic in and of itself, in terms of providing validation, fostering acceptance and offering co-regulation, it can also be accompanied by invitations to engage in various forms of emotional processing. Goldman (2019) calls this positioning an *empathic conjecture*, where facilitators maintain an empathic stance, however still allow themselves to speculate, guess or feel what the participating families are experiencing. At times, facilitators might also suggest what might be sensed but not yet clearly articulated, which is considered an essential micro-skill in emotion-focused therapy. Empathic validation is another fundamental skill, which parents also learn and practice in emotion-focused skills training (Dolhanty et al., 2022). Validation is a way of communicating that makes another person feel seen, heard, understood and accepted through genuinely and empathically acknowledging the other person's feelings and experiences. As facilitators in emotion-focused family therapy, we help caregivers to be curious about their child's emotions and attempt to imagine what their child might be feeling "from the inside" in the present moment (Dolhanty et al., 2022, p. 90). While most of the time is spent emotionally exploring and reflecting, there are moments where a facilitator can also include short sessions of emotional psychoeducation when this seems useful and relevant. For the most part, however, the facilitator remains directive in process, i.e., process guiding, but not directive in content (Goldman, 2019).

Overall, emotion-focused facilitation involves a combination of following and leading, but following always takes precedence over leading, according to Greenberg and Goldman (2019). The degree of guidance versus structure should remain adaptive to participant needs. Participants who are clearly distressed or avoidant may benefit from more process guidance, combined with emotion coaching, soothing and compassion. Whereas participants who are fragile or express reactant tendencies, may feel more at ease with less guiding, and what Greenberg and Goldman (2019) refer to as responsive following. Instead of being directed by a priori assessments, working hypotheses in an emotion-focused practice ought to be developed and adapted

in conjunction with participating families on a moment-by-moment basis as their “journey” unfolds. This shared journey through inner and outer landscapes is co-constructed by nature, participating families and facilitators in a dynamic and reciprocal process, thus making the therapeutic alliance triangular (Berger & McLeod, 2006). Finally, the uniqueness of outdoor provision of health care allows facilitators and participants sharing novel experiences and enduring potential demanding conditions together, which may strengthen the therapeutic alliance and foster solidarity (Naor & Maysseles, 2021), whilst nature, as our co-therapist, supports this therapeutic process in myriad ways.

Concluding remarks

A wealth of studies demonstrate the association between nature experiences and psychological well-being. Observational and experimental investigations of single and cumulative nature contact demonstrate evidence of increased positive affect, decreases in mental distress such as negative affect, in addition to positive social interaction and a sense of meaning and purpose in life (For a consensus statement, see Bratman et al., 2019). Yet, how nature’s potential emotional and relational affordances are instantiated and realised is less clear. In this exploratory quest, we have therefore outlined preliminary hypotheses and working metaphors of the potentiality of nature to support emotion-focused family therapy provided outdoors, specifically focusing on four core processes, including emotion awareness, regulation, reflection and transformation, in addition to the facilitator role. Perhaps one overall hypothesis is that nature nudges us to open up rather than closing down, to remain attentively engaged rather than withdrawn, and to awaken our senses to an awareness that might occur on a deeper level. By responding to this open invitation, participants may approach each other and the outdoors in new ways that foster connectedness and a rewriting of their stories through an embodied, emotional journey.

Nature-based and systemic solutions are proposed to be cost-effective, as they simultaneously provide relational, psychological, physiological, and ideally environmental benefits. Multi-dimensional and transdiagnostic interventions can potentially strengthen the health and well-being on many levels, not only of the participating families, but over time also of our local communities and that of our planet, which is at the core of a reciprocal practice. While it is currently common, and oftentimes, expedient to separate humans from nature, in reality, this makes little sense (Bratman et al., 2019). Humans are nature and therefore dependent on the larger ecosystem for survival and thriving. A transactional paradigm, much like a Gibsonian understanding of affordances, assumes that an individual and the environment co-exist and are intricately bound together, whereby neither can be understood without the inclusion of the other. In the context of emotion-focused family therapy provided outdoors, a potential synergy may emerge when families and facilitators engage in experiential, embodied processing of emotional content, whilst nature all along tugs at our heartstrings.

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Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Carina Ribe Fernee, PhD, is a Senior Researcher and Outdoor Therapist at the Department of Child and Adolescent Mental Health at Sørlandet hospital in Kristiansand, Norway. She also holds a position as Associate Professor at the Faculty of Health and Sport Sciences at University of Agder in Kristiansand, Norway.

Sophia Louise Hjorth Wahlgren, MSc, is a Researcher and Outdoor Educator at the Department of Child and Adolescent Mental Health at Sørlandet hospital in Kristiansand, Norway.

Lise Katrine Jepsen Trangsrud, PhD, is an Associate Professor, Researcher and Outdoor Educator in the Department of Sports, Physical Education and Outdoor Studies at the Faculty of Humanities, Sports and Educational Science at University of South-Eastern Norway in Bø, Norway.

Authors and Affiliations

Carina Ribe Fernee^{1,2} · **Sophia Louise Hjorth Wahlgren**¹ · **Lise Katrine Jepsen Trangsrud**³

✉ Carina Ribe Fernee
Carina.fernee@sshf.no

¹ Department of Child and Adolescent Mental Health, Sørlandet Hospital HE, Kristiansand, Norway

² Faculty of Health and Sport Sciences, University of Agder, Kristiansand, Norway

³ Faculty of Humanities, Sports and Educational Science, University of South-Eastern Norway, Bø, Norway