


Therapy the Natural Way: A Realist Exploration of the Wilderness Therapy Treatment Process in Adolescent Mental Health Care in Norway

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Abstract

Wilderness therapy has the potential to meet the specific needs of the current adolescent population by providing a rather unique outdoor group treatment. Wilderness therapy is not a new approach to mental health treatment, but its theoretical basis is not yet clearly delineated, in part because of the diversity found across programs and contexts. This article presents a critical realist exploration of a wilderness therapy program that was recently implemented as part of adolescent mental health services in Southern Norway. In this study, we combine fieldwork and interviews for an in-depth investigation of the treatment process, where the objective was to acquire a deeper understanding of the opportunities that arise in the wilderness therapy setting. The therapeutic mechanisms and influential contextual premises found across the ecological, physical, and psychosocial factors of this multidimensional approach to treatment are presented, and their underlying conditions are briefly discussed.

Keywords

mental health and illness; adolescents/youth/young adults; agency; embodiment; bodily experiences; fatigue; exhaustion; group interaction; psychology; psychological issues; stress; distress; well-being; critical realism; Norway

Born after 1995, *iGen* is the first generation to grow up with a smartphone in hand, a change that affects how adolescents of today relate to themselves, to others, as well as where and in which manner they spend their time (Twenge, 2017). Whereas teens of earlier generations generally preferred in-person interactions and occasionally going out together, the “party” is now constant and on Snapchat, resulting in social media exerting a seemingly incessant demand on the attention of the younger population. While *iGen*’ers are perhaps not as rebellious as their predecessors and generally express more tolerant views, they report unprecedented levels of maladjustment, loneliness, and mental health struggles (Twenge, Joiner, Rogers, & Martin, 2018).

Human health and well-being is described as being contingent on a state of balance, not only in relation to oneself and others but also in terms of one’s interaction with the environment (Herrman, Saxena, & Moodie, 2005, p. 23), inclusive of the more-than-human nature (e.g., Annerstedt, 2009; Selhub & Logan, 2012; van den Bosch & Depledge, 2015; Wilson, 1984). Parallel to the global technification and urbanization of human lives, we find an expanding dislocation from nature in many places (Gabrielsen & Harper, 2017; Louv, 2008; Williams, 2017). These trends appear to direct the attention of individuals

toward technological devices while decreasing physical movement, as well as limiting in-person interaction with other people and the natural environment.

Over the past decade, there have been efforts to integrate the use of nature and green care within public health, rehabilitation, and various treatment services (e.g., Fernee, Gabrielsen, Andersen, & Mesel, 2015; Haubenhofer, Elings, Hassink, & Hine, 2010; Norwegian Ministry of the Environment, 2010; van den Bosch & Bird, 2018). To address the maladjustment and stress represented in the adolescent population more specifically, Gabrielsen and Harper (2017) promote wilderness therapy as a promising group treatment that can provide the time and space to reconnect with oneself, with other human beings, and with nature to reestablish a sense of equilibrium (Harper, Gabrielsen, & Carpenter, 2017).

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Wilderness Therapy

Often placed under the umbrella term of adventure therapy (Gass, Gillis, & Russell, 2012), wilderness therapy is a group treatment that seeks to augment the restorative qualities of nature combined with structured and intentional therapeutic work (Davis-Berman & Berman, 1994, 2008). Adventure therapy and wilderness therapy are practiced in a number of countries around the world and represent a wide diversity in terms of philosophies and formats (Fernee et al., 2015; Norton, Carpenter, & Pryor, 2015). Recent publications continue to support its efficiency as being equivalent to that of other therapies for adolescents who struggle with social, emotional, and behavioral issues (e.g., DeMille et al., 2018; Dobud & Harper, 2018; Harper, 2017). However, despite recurring demonstrations of desirable outcomes in adventure therapy research, the understanding of the treatment process and the specific therapeutic factors involved is less clear and has been referred to as the “black box” in the literature (Norton et al., 2014, p. 51).

Wilderness therapy stands out from adventure therapy in general by invariably taking place in nature. Enquiries into what wilderness therapy is and how it works are nothing new (Russell, 2001; Russell & Farnum, 2004; Russell & Phillips-Miller, 2002). A recent qualitative review set out to synthesize these previous explorations into the black box of wilderness therapy (Fernee, Gabrielsen, Andersen, & Mesel, 2017). This realist synthesis produced detailed descriptions of the contextual premises and therapeutic mechanisms that together were hypothesized to have facilitated the perceived outcomes across the included primary studies. The review resulted in a proposed conceptual framework called the wilderness therapy clinical model, consisting of three therapeutic factors: (a) the wilderness, (b) the physical self, and (c) the psychosocial self (Fernee et al., 2017). This tentative model was suggested to allow for more accurate descriptions of the multifaceted treatment process and range of outcomes, and furthermore provide the groundwork for further empirical testing and theoretical refinement. Precise conceptualization and theorizing, if at all possible, may assist in moving beyond what Russell (2006) previously referred to as a tacit theory in the field of wilderness therapy. It may furthermore augment the credibility of outdoor mental health treatment, as well as supporting the incorporation of nature-based therapeutic approaches within a wider range of mental health services (Berman & Davis-Berman, 2013).

Objectives of Present Study

A Norwegian adaptation of wilderness therapy, called *Friluftsterapi* (FT), was recently implemented in the adolescent mental health services in Southern Norway. The objectives of this in-depth qualitative investigation were

to (a) identify some of the therapeutic opportunities—also called mechanisms—that arose throughout the FT treatment process. Furthermore, to (b) explore the circumstances under which these therapeutic mechanisms emerged and, finally, to (c) briefly discuss the possible fundamental or underlying conditions of the FT treatment. The first two objectives are presented throughout the “Results” section, while the third objective is addressed in the “Discussion” section.

A critical realist approach (Danermark, Ekström, Jakobsen, & Karlsson, 2002; Maxwell, 2012) was utilized as a tool to attempt to move beneath or beyond the surface level, and the client perspective was operationalized as the empirical vantage point explored through fieldwork and interviews.

Methods and Procedures

The Critical Realist Approach

In applied critical realism, society is studied as an open, complex system in which one is particularly concerned with the interdependence between human agency and social structures operating on many levels (Archer, 1998). Critical realists attempt to understand what makes things happen, come into being and change, or alternatively not occur when expected (Danermark et al., 2002). The epistemological challenge is to comprehend this complexity, in part due to the ontological reality of many of these processes being initiated or taking place beyond the observable level (Pilgrim, 2014).

When investigating mental health interventions more specifically, realist explorations generally result in configurations that postulate how particular contextual factors may trigger certain therapeutic mechanisms, which again may facilitate observed or perceived outcomes (Pawson, 2006). Therapeutic mechanisms refer to the processes operating within a program that provide opportunities for change. A realist understanding holds that a positive outcome is dependent on whether a given program succeeds at introducing appropriate opportunities to the clients and, furthermore, whether the clients are able to make use of these opportunities for change (Pawson & Tilley, 1997; Wong, Greenhalgh, & Pawson, 2010). This study, however, was not concerned with outcomes, but rather with more specifically exploring the therapeutic opportunities that appeared to arise throughout the wilderness therapy process, along with the enabling and constraining contextual conditions that seemed to influence these mechanisms.

Program Description

The FT program was offered as a stand-alone, outpatient, and voluntary group treatment for adolescents aged 16 to 18 at a state-run public hospital in Southern Norway. FT

Table 1. Program Overview.

Week	Day/Trip	Description
1–3	Day 1	Introductory day. Network invited.
	Day 2	First day outdoors. Team building. Individual goal setting.
	Day 3	Preparing for the first overnight trip.
	Trip 1	3-day overnight trip. Camp-based.
4–8	Day 4	Reflections on Trip 1.
	Day 5	High-ropes course.
	Day 6	Preparing for the expedition.
	Day 7	Final preparations for the expedition. Practice hike with backpacks.
9	Trip 2	6-day overnight hike. Expedition.
10	Day 8	Reflections on program during the day. Closing seminar in the evening. Network invited.

translates as “therapy in the open air” (Ferneer et al., 2015) and has previously been defined as follows (Gabrielsen, Ferneer, Aasen, & Eskedal, 2016, p. 7): “A specialized approach to mental health treatment that combines individual and group-based therapeutic work with basic outdoor life, engaging participants through ecological, physiological and psychological processes.” The FT project was in its second year at the time of the study, and data were collected from the two first interventions that succeeded the pilot stage. In terms of treatment fidelity, the FT program followed a manual and there were frequent meetings between the therapist teams to strengthen treatment integrity (Tucker & Rheingold, 2010).

This first version of FT was a 10-week intervention that included a total of eight single-day sessions and two overnight trips of 3 and 6 days’ duration (see Table 1). The intermittent structure of the program allowed clients to live at home and continue schooling and/or other activities throughout the duration of the intervention, interrupted only by the two overnight trips.

The clinical groups were composed of eight to 10 participants, preferably mixed gender, in a closed group structure. A therapist team of three, made up of a clinical child psychologist and mostly master’s level mental health practitioners, remained with the group throughout the entire intervention, including the overnight trips. On the second day of the program, each client was provided a primary therapist from the therapist team. Together the client and therapist developed a treatment plan with individualized goals. Individual and group-based psychotherapy was carried out during most day sessions and preferably on a daily basis on the overnight trips.

With the exception of the introductory day, the treatment as a whole was provided in the outdoors. The wilderness context was considered a restorative environment that could enable therapeutic processes with minimal facilitation. Nature was not to be conquered, but according to the *friluftsliv* tradition, a connectedness to nature was sought through a simple life outdoors (Ferneer et al., 2015; Gabrielsen & Ferneer, 2014). The first overnight trip took place during the third week of the program and included 3 days in a permanent outdoor education camp. The overall aim was to promote group cohesion and establish a safe foundation for therapeutic work. This groundwork was built upon over the course of the next four weekly single-day sessions leading up to the final expedition, where the group hiked and paddled along a predetermined route over the course of six consecutive days. A new camp was set up most nights, with the exception of the second night, which was spent in the outdoor education camp from the first overnight trip.

Following the expedition, the intervention came to an end through a closing ceremony. Final decisions were made with regard to individual after-care plans, whether the client was discharged or arrangements were made for further treatment. The FT program itself did not include follow-up sessions, and family involvement was limited to an invitation to take part on the introductory day and closing ceremony.

Participants

Criteria for inclusion and exclusion. Participants were to be regarded in need of mental health treatment as assessed by the clinical team in charge of the general intake procedures at the hospital department. Furthermore, participants were required to be aged 16 by the onset of the treatment and not older than 18 by the end of the intervention. The exclusion criteria were psychosis, severe anxieties, significant substance use problems, and/or other issues that were considered incompatible with an intensive group- and/or wilderness-based treatment.

Recruitment. The recruitment period took place during the past 4 months, leading up to the onset of the intervention in March 2015. There were two entries to participation, either via (a) external referral, where potential participants were recruited from the weekly intake meetings at the department, or (b) internal referral, where clients who were already in treatment in the department, and expressed an interest to try FT, could be referred by their therapist. The next step in the recruitment procedure was an invitation to the potential participant to attend an appointment with one or two members of the FT team. The final decision to participate was based on a mutual agreement between the potential participant and the

therapist(s) from the FT team after a detailed exchange of information. In some instances, the parent(s) and/or referring therapist took part in these meetings; however, considering that the participants were 16 years or older, they themselves could provide the informed consent.

A total of 18 adolescents, 11 girls and seven boys, were initially recruited to participate in the FT program. Of these, 14 remained in the study by reconfirming participation throughout all of the stages of the subsequent research process. Of the four who left the study, three opted to return to individual therapy rather than remaining in the group treatment. The fourth completed the FT program, however withdrew her consent to be interviewed after the treatment ended as she was preoccupied with moving into her own apartment at the time.

Final sample. The final sample of 14 adolescents included eight girls and six boys distributed across two clinical groups. Of these, 11 completed the majority of the treatment. The three individuals who did not complete the program still consented to remain in the study by participating in the interviews. The reasons for not completing the intervention were that one participant felt that she had recovered by Day 6 of the program and asked to be discharged from further treatment from then on. The final two opted out of the 6-day expedition: one of them due to school obligations and the other individual stating that he was not physically capable of participating. The first individual was discharged from further treatment, whereas the latter two continued in individual follow-up in the same department.

All participants were ethnic Norwegian, with the exception of one individual who originated from another Scandinavian country. Four participants were first-time referrals. The remaining 10 had been in treatment before, four of whom for more than 3 years. Approximately half of the participants in the final sample were diagnosed with one or a combination of diagnoses along the anxiety and/or depression continuum. Other diagnoses represented in the sample were attention deficit hyperactivity disorder, adjustment disorders, posttraumatic stress disorder, myalgic encephalomyelitis/chronic fatigue, pathological gambling, conduct disorder, reactive attachment disorder of childhood, and developmental disorder. In addition, most of the adolescents were reported to have experienced one or multiple adverse childhood experiences, including (a) bullying and/or discrimination; (b) physical, sexual, and/or emotional abuse; (c) divorce, separation from, or loss of a parent; and (d) mental illness, problematic alcohol, and/or drug use of a household member.

Six participants were in school full time and three part-time, while five participants had dropped out of school prior to taking part in the FT program.

Data Collection

The first author collected the empirical data through the methods of fieldwork and interviewing. The researcher was present as a participant observer throughout the majority of the two FT interventions. Shortly following the conclusion of the parallel programs, individual interviews were carried out with the adolescent participants.

Participant observation. The main purposes of the fieldwork were to gain insight into the FT process in context and to add nuances and depth to the subsequent interviews and data analysis (Carnevale, Macdonald, Bluebond-Langner, & McKeever, 2008). The fieldwork included six single-day sessions, the 3-day trip, and the 6-day expedition with each of the two FT groups, which amounted to a total of 30 days and 14 nights in all.

The clients and therapists were informed regarding the purpose of the fieldwork and the researcher's role. The researcher had several years of clinical experience working within different units of the hospital department where the study was situated. She also had previous experience with the FT program, initially as part of the therapist team and later as a participant observer in the pilot program. The researcher, therefore, was familiar with the population and setting and attempted to act sensitively and non-intrusively so as not to disturb or interfere with the ongoing therapeutic processes. She took part in the various activities and interacted with the group while remaining a passive listener during the group therapy sessions.

The fieldwork was not structured, but remained open and explorative (Bogdewic, 1999; Davies, 2008). Descriptive fieldnotes and reflections (Mulhall, 2003; Phillippi & Lauderdale, 2018; Warin, 2011) were mostly recorded the same evening or the next day following the single-day sessions. On the overnight trips, notes were recorded each night in the field and finalized shortly following the trips.

Interviews. A total of 14 individual interviews were carried out from the first 2 to 4 weeks after the FT treatment ended. Each participant decided where to meet. Two interviews were carried out at the hospital, whereas the remaining interviews took place either in the participants' home or in public locations, such as schools, cafés, or outdoors. The researcher and individual adolescent were the only partakers in most interviews, with the exception of one interview where a parent was present upon request of the adolescent.

The interviews followed a semi-structured interview guide that initially mapped how the participants described their psychosocial difficulties and previous treatment experiences, before moving on to exploring the subjective experiences from participating in the FT program. To pursue the unique reflections of each participant, the researcher

expressed puzzlements and used probing questions in a sensitive manner (Smith & Elger, 2014). As a means to prevent social desirability, as well as obtain frank and substantive interviews, the researcher initially explained the importance of the respondents expressing their sincere and critical appraisal of the FT experience from their specific point of view.

The interviews lasted anywhere from 27 to 81 minutes. All interviews were audio recorded and transcribed verbatim in Norwegian by the researcher. A bilingual academic assisted in the process of translating interview excerpts.

Data Analysis

The critical realist guidelines developed by Danermark et al. (2002) were applied in the analytic process and included the following four stages: (a) initial description, (b) analytical resolution, (c) abduction, and (d) retroduction.

The initial description stage (Danermark et al., 2002) was guided by the question, "What is happening?" This first phase involved immersion in the fieldnotes and interview transcripts, where the purpose was to attempt to understand the clients' perspectives and experiences. The researcher made notes of opportunities that were reported to arise throughout the treatment intervention and started to elicit influential conditions, which amounted to preliminary descriptions of the therapeutic process.

Moving on to the second phase, called analytical resolution (Danermark et al., 2002), the next task was to attempt to dissolve the complexity of the therapeutic process by continuing to explore the contextual premises and potential mechanisms, along with possible influential enabling and restricting factors, more in depth. The researcher used mind-maps in the iterative process of conceiving and refining mechanisms, based on participant statements linked with in-context observations. The guiding question for this second phase of the analytical process remained: What is happening, but it simultaneously moved more toward: why is this happening? The wilderness therapy clinical model (Fernee et al., 2017) was applied as a structuring conceptual framework for systemizing these more detailed descriptions.

In the abductive stage, these tentative descriptions were potentially redescribed, refined, or recontextualized as a result of being subjected to new frames of thinking (Danermark et al., 2002). The guiding question was, "How could the explanations be different?" As such, this phase implied challenging and extending the existing mind-maps to arrive at a more nuanced conception of the therapeutic processes. This stage involved an intensive period of rereading wilderness therapy-specific publications along with relevant literature from allied fields, the

idea being that several frames of interpretation could challenge or complement each other and at times could be integrated.

In the final stage, the objective of retroduction was to arrive at the basic characteristics, also called the transfactual conditions, of the FT process. Transfactual means to move beyond the empirical, while conditions are the necessary circumstances for something to take place (Danermark et al., 2002). The guiding question was, therefore, "What basic qualities must exist for these processes to happen?" Retroduction implied advancing from the level of empirical observations and arriving at conceptualizations of the underlying explanation for why something is what it is and not something else. The strategy of counterfactual thinking was applied as a means to attempt to understand the fundamental characteristics of the FT process. According to Danermark et al. (2002), this is a dialectic process as one examines a phenomenon in relation to its opposite.

The first author carried the main responsibility for the analysis, as well as presenting findings and the final account. However, the research team (the co-authors) was involved throughout all stages of the research process. The co-authors were provided access to the data and participated in thorough discussions particularly during the analysis and write-up, where consensus was reached through exchanges of perspectives. The research team met on average every 2 months over a 12-month period.

Ethics

Participant observation and in-depth interviews of adolescent clients undergoing mental health treatment are inherently challenging from an ethical point of view, where the researcher must act sensitively (Carnevale et al., 2008; Claveirole, 2004; Woodgate, Tennent, & Zurba, 2017). Ensuring participants' informed voluntary consent, confidentiality, and privacy throughout all stages of the research project is challenging (Damianakis & Woodford, 2012). For instance, it is imperative to treat consent as a continuing process, rather than a single event, when conducting research with young people and vulnerable populations (Warin, 2011). Consent was therefore reconfirmed at various stages, beyond the initial signing of the informed consent form. Finally, the study was approved by the Regional Committee for Medical and Health Research Ethics South East, Norway (No. 2013/1841).

Results

The therapeutic mechanisms that appeared to emerge throughout the FT treatment process, along with the influential contextual premises, are presented across the three factors of the wilderness therapy clinical model:

Table 2. Therapeutic Mechanisms of the Wilderness.

Therapeutic factor	Mechanisms	Propositions
The wilderness	Venturing outdoors: the catalyst effect	<p>The proactive choice of venturing outdoors despite the many potential barriers had a potential empowering and emancipatory quality to it. The empowerment was linked to making the first decisive steps toward change, while emancipation derived from opposing the often long-held constraints imposed by symptoms in such a concrete way. The empowering and emancipatory qualities, along with the relative degree of challenge inherent in the process, were the first components of the catalyst effect.</p> <p>Another set of dimensions derived from the effect of contrasting contexts on many levels, that is, indoor to outdoor, urban to nature, familiar to nonfamiliar, passive to active, isolation to socialization, and so on. The contrasts became a catalyst for acquiring new experiences and/or perspectives. Nature had particular qualities as a contrasting context, where clients expressed being rejuvenated and enlivened, as well as experiencing increases in well-being and mood from spending time outdoors compared with staying indoors. Furthermore, symptoms could appear differently across contexts, for instance, having less of a hold on them in the outdoors. There were other strategies that they could make use of as opposed to in an indoor setting.</p> <p>The barriers to the catalyst effect were, for instance, when high symptom levels persisted across the contextual transition and did not decrease over time in the outdoor setting. Other moderating factors were the perceived degree of contrast and/or challenge inherent in venturing outdoors.</p>
	From chaos to calm	<p>Many of the clients experienced various forms of internal and external stressors and pressure in their daily lives so that seeking out nature could have a calming effect on the chaos they were normally surrounded by. The most frequent descriptions of being in nature were feelings of tranquility and stillness, which enabled the time and space to engage in prolonged, undisturbed reflection. There were various means to reaching these moments of clarity, either through sitting down in stillness or a more active entry by being able to think more clearly while, for instance, hiking. In contrast, others noticed a calming effect when managing to channel their chaotic thinking into external stimuli from the natural environment.</p> <p>Time spent in nature, and as such indirectly removed from the many disturbances of modern, urban lifestyles, such as noise, stress, and, in particular, technology, was regarded as an important premise for the calming and reflective therapeutic processes.</p>
	Disconnect to reconnect	<p>Internet use and social media were reported to have an implicit control on many of the clients, to where time spent in nature became a direct form of therapy. The technological disconnection effectuated a redirection of focus where clients appeared more open and less apprehensive, which again facilitated an increased attentiveness to their immediate surroundings and making the most of the present moment. The outdoors offered a tranquil environment to reconnect with themselves, others, and nature.</p>

(a) the wilderness, (b) the physical self, and (c) the psychosocial self (Ferneer et al., 2017). However, it is important to note that the various factors and dimensions that are put forth throughout the “Results” section interact and are hardly separable. Thus, there is considerable overlap as the mechanisms are interwoven across the three factors of the model. In the FT field, or real life per se, the ecological, physical, and psychosocial aspects are all part of a complex whole. The emphasis on the client perspective is reflected in the frequent use of quotes throughout the “Results” section. We now turn to the first therapeutic factor—the wilderness.

The Wilderness

The natural areas sought out in this version of the FT program are not generally perceived as “wilderness” in a

Norwegian context, considering that both groups remained in relative close proximity to civilization throughout the duration of the intervention. Hence, the FT program arguably did not offer continuous undisturbed time in wilderness areas over a consecutive number of days. However the majority of the program was situated in nature, and the participants expressed sincere experiences that were a direct or indirect result of spending time outdoors. These nature-influenced processes were mostly positive, although life outdoors was perceived as challenging at times, for instance, throughout periods of heavy rain or during cold nights with freezing temperatures.

Explorations of the wilderness factor resulted in three nature-related therapeutic mechanisms: (a) venturing outdoors: the catalyst effect, (b) from chaos to calm, and (c) disconnect to reconnect (see Table 2), which are presented below.

Venturing outdoors: The catalyst effect. Although implicit, the starting point of the FT experience was the individual decision to initially accept to partake in a mental health group treatment in the outdoors. The actual act of choosing to venture into nature, despite the many barriers that the range of psychosocial and physical struggles could entail, had a potential empowering and emancipatory quality to it. The empowerment appeared to be linked to the individual choice to make these first more or less decisive steps toward change, while the emancipation potentially derived from opposing the often long-held constraints of symptoms in such a concrete manner. These enabling aspects, along with the perceived degree of challenge inherent in the process, were identified as the first dimensions to what we have called the catalyst effect of venturing outdoors. A female participant emphasized the effect of herself choosing to oppose the constrictions of physical fatigue and leaving the comforts of her home environment to participate in the FT program:

For me, it made a difference that I went outdoors and away from everything at home, everything that was safe and familiar. That gave me a challenge.

Another set of dimensions of the catalyst effect of venturing outdoors was the potential to experience contrasting contexts. These contrasts could occur on many levels, for example, from indoors to outdoors, urban to nature, familiar to nonfamiliar, passive to active, isolation to socialization, and so on. A commonality across many of these dualisms was that the contrasts often became a catalyst for acquiring a possible range of new experiences or perspectives depending on the conditions. A number of contrasts were, for instance, activated when another female participant spent hours out and about in the woods together with other people as a direct consequence of her decision to partake in the FT treatment. This athletic and studious girl had ended up dropping out of school and withdrawing to her room most of her waking hours due to chronic fatigue. Having kept both physical and mental strains to an absolute minimum for almost a year, she described the satisfaction upon experiencing the contrasting environments:

It was wonderful to be outdoors because I spend a lot of time indoors . . . You feel better in a way when you have been out in the woods and you return home compared to if you have just been laying around in bed all day.

Furthermore, nature was often perceived as a nurturing environment that provided additional or secondary effects at the receiving end of the catalytic transaction. A third female participant who had remained isolated in her room most days, in her case due to social anxiety,

explained some of these joint effects of experiencing the change in context to nature:

It was great to get out, and you feel rejuvenated from being outdoors . . . You are in a better mood and enlivened and things like that when you are outside compared to when you just sit around indoors.

Other aspects of the contrasting dimensions were that symptoms could appear differently across contexts. A fourth female participant, who struggled with what she referred to as chronic depression and social anxiety, explained that she at the time of referral suffered from anxiety attacks up to 3 times daily at school. This was a regular occurrence although she shared a classroom with no more than four other students. Asking her why she believed this did not seem to happen while in the FT setting, she responded, "That is something completely different because you do not feel confined . . . it is so open." Several participants mentioned that symptoms seemed to have less of a hold on them in the outdoors and that there were other strategies that they could make use of in the natural environment. For instance, moving away from the group for a while was perceived as less problematic in the outdoors compared with an indoor setting, where walls created physical boundaries.

Potential barriers to the apparent catalyst effect were, for example, the incidences where high symptom levels persisted across the contextual transition and did not decrease over time in the FT setting. Other moderating factors were the perceived degree of contrast, or extent of challenge, inherent in venturing outdoors. While expressing appreciation for the possibility to participate in a nature-assisted mental health treatment, a male participant explained that being outdoors did not represent a contrast to him: "I grew up in nature, so I am used to nature, so it does not exactly have any therapeutic meaning to me." Another male participant, who had spent increasing amounts of time gaming and had dropped out of school a few months earlier, suggested that the treatment should have taken place in a more remote wilderness setting. This would, in his opinion, have increased the degree of contrast sufficiently. Remaining in nearby nature throughout the majority of the FT program did appear to dissolve the catalyst effect partially for some of the participants, which suggests that the deeper into nature one ventures, the greater the primary and secondary catalytic effects may become.

We shall now move on to the second set of mechanisms of the wilderness factor.

From chaos to calm. A number of participants reported experiencing various forms of internal and external stressors and pressure in their daily lives, where being present in

nature appeared to bring about calming responses to the chaos that normally surrounded them. The most frequent descriptions of being in nature were feelings of tranquility and stillness. A female participant, who often felt stress and worry accumulating in her mind and body, expressed appreciation for the time-out from the many distractions of modern life while in the FT setting:

It was wonderful and quiet and peaceful and there was not so much chaos around me . . . There are no phones, there are no TVs . . . There are not a bunch of modern things around making noise and being unnatural and all that. Everything is just calm.

The opportunity to experience moments of serenity in nature further appeared to enable cognitive processes, where the participants had the time and space to access their thoughts and to engage in prolonged undisturbed reflection. A male participant, who described his main challenge as the internal buildup of stress, worry, and ultimately anger, explained how he discovered a new remedy to calm down and think clearly through the experience of sitting down in stillness in nature:

It was sort of another mindset in the forest . . . I noticed that when you are in nature, it is so quiet. You do not hear any cars. There is no family chaos or anything, and you are not on the computer. When it is so quiet and you just sit there, you enter into your own way of thinking . . . and it really helps.

While some clients reached such reflective states as relatively passive recipients in a calming environment, others reported a more active entry. Another male participant, who stated that his mind was always racing, reached similar calming effects while being physically mobilized in nature. He explained, "One sort of calms down when you are out hiking and things like that. It is easier to get a hold of your thoughts." Furthermore, being active in nature could also be a means to subside chaos reversely by shifting the focus from internal worries and rumination onto external stimuli from the natural environment. A female participant, who reported struggling with social anxiety and fear of peers after being bullied over a number of years, for instance managed to redirect her attention outward onto the many interesting discoveries that were readily waiting in nature. She succeeded at channeling her anxiousness into this concrete task and consequently stated that "I did not have much chaotic thinking. The only thing I thought about was to stay alert . . . I loved to discover things . . . owls, lizards, a bird that I have never seen before." Her focus shifted from a preoccupation with protecting herself from potentially vicious peers and negative remarks to enthusiastically sharing her discoveries with the rest of the group.

Time spent in nature, indirectly removed from the many disturbances of modern, urban living such as noise, stress, and particularly technology, was regarded as an important premise for the calming mechanisms. Although managing without technology for some created considerable temporary unease, it was mostly depicted as a precursor for connecting with their immediate surroundings. We shall now inspect the third and last mechanism of the wilderness factor, which entailed the disconnection from technology, in line with a *friluftsliv* approach to the simple life outdoors.

Disconnect to reconnect. Not having access to the Internet and technological devices appeared to bring about opportunities for new experiences and perspectives while participating in the FT program. For a few of the participants, gaming and social isolation were their main challenges so that time spent in nature and away from the computer became a direct form of therapy. A male participant explained that 3 years prior to taking part in the FT treatment he had escaped into a virtual existence through computer games. Over time, he noticed that his body became weaker and that he started to feel depressed. He shared his reflections regarding the importance of absence from technology as a contextual premise for the therapeutic process:

You do not have access to the Internet and those things, and I think that is very important. Adolescents spend a lot of time online. It is good to go without the Internet because that is one of the reasons why you have anxieties, I'd say . . . Instead of going out and challenging yourself socially, you enter the digital world. It is, in a sense, another reality . . . I feel more open when I do not have access to a computer or access to the Internet . . . For me, it was really good.

The Internet, and in particular social media, was reported to have implicit control over a number of the participants prior to taking part in the FT treatment. The technological disconnection appeared to effectuate at least a temporary cessation of the negative influence on self-image that was inflicted by social media use, rather contributing toward a redirection of focus where participants appeared to be less apprehensive, as noticed by a female participant: "It [social media] has a very big impact on how I view myself in a way. So I thought less about it, was less self-conscious in a way." The increased openness appeared to generate attentiveness to the here-and-now. And the desire to make the most of the present moment appeared to facilitate a potential reconnection on many levels in the FT setting, as expressed by a male participant: "I am in nature now. There is no one else around me besides this group that I am here with. Let's try and have a good time." Thus, nature served a dual purpose, both indirectly in terms of providing disconnection from the many preoccupations of

Table 3. Therapeutic Mechanisms of the Physical Self.

Therapeutic factor	Mechanisms	Propositions
The physical self	Physical feat—emotional emancipation	<p>Positive psychological responses appeared to follow physical accomplishments, in particular, when they were unexpected or had a deeper meaning to them, where, for instance, a successful climb became a concrete manifestation of a client's abilities. In instances where these physical challenges resonated with a real-life situation, these experiences could produce an emancipatory emotional effect that became a catalyst for increased engagement in the therapeutic process.</p> <p>Physical exhaustion could bring about emotional openness, particularly around the campfire at night, where the clients seemed more emotionally invested and less restricted in their interaction with their peers.</p> <p>At times, physical demands resulted in inhibitive emotional responses that could, at least temporarily, hinder the engagement with the group. These reactions appeared to arise after the strain or risk was over, for example, a panic attack after a paddle through a rapid happening when the client was back on shore. Although these situations were difficult at the time, these were the incidences where clients gained insight into their mental and physical limitations. These were also the times when participants could receive support from peers and in vivo counseling and direct care from therapists, if allowing themselves to be vulnerable in the presence of others.</p>
	Bodymind restructuring: reversing the spiral	<p>Many clients were physically tired when joining the program due to the internal mental trauma they were experiencing in their lives. However, because they were determined to challenge themselves regardless, this effort appeared to initiate movements along a conceptualized bodymind spiral.</p> <p>In addition to emotional support and psychotherapy, the clients also received direct and concrete care, for example, food to eat, relief from physical pain/blisters, and so on, advice on how to keep warm and dry and to manage the changing conditions outdoors. These situations facilitated numerous entry points to assist the bodymind axis spiraling upward.</p> <p>Many clients were struggling with internal mental stress while, for instance, hiking, to the point where they were negotiating both negative thinking and bodily pains parallel to the physical undertaking. Whereas before the joint mental and physical sensations were overwhelming and difficult if not impossible to differentiate, a demanding yet feasible physical challenge could facilitate a restructuring of and insights into bodymind relations. The physical mobilization and simple outdoor life could also have a positive influence on other downward bodymind spirals, for instance, potentially in relation to early stages of eating disorders.</p>

modern life and directly in terms of offering a tranquil environment for the participants not only to reconnect with themselves and with nature but also with others. We shall revisit these aspects when we reach the psychosocial factor; however, we shall first explore the second therapeutic factor.

The Physical Self

The FT program involved physical movement of some type each day spent outdoors. The majority of the single-day sessions included hiking that lasted anywhere from 30 to 90 minutes in total, except for Day 5 where the clients were invited to do a high-ropes course. The 6-day expedition was experienced as physically and mentally challenging for most of the participants, particularly because of the duration of the trip and also because of the total distance covered alternating between paddling canoes and hiking with backpacks.

However, the physical mobilization of a seemingly exhausted body and mind—or *bodymind*—could hold rewarding secondary psychological and emotional responses and potentially spark new insights. The term *bodymind* is used to more directly refer to mind and body as a single integrated unit, where the *bodymind* spiral can illustrate this intertwined network of mutual influence (Maxwell, 2012).

Explorations of the physical self-factor resulted in the following two therapeutic mechanisms: (a) physical feat—emotional emancipation, and (b) *bodymind* restructuring: reversing the spiral (see Table 3), which are presented below.

Physical feat—emotional emancipation. Moments of rather powerful psychological responses appeared to succeed physical accomplishments that were unexpected or had a deeper meaning. A female participant, who was mistreated by her mother throughout her childhood years,

had internalized the recurring insults to where she was convinced that she was lazy and generally incompetent. Looking back on her achievements while participating in the FT program, she expressed contentment with successfully completing a climb and thereby proving her mother's accusations wrong in a very concrete manner:

It was a good feeling . . . I actually managed to hike up that mountain. That was very positive really. You sort of think I am not as lazy as my mom used to tell me. I can do things! Just look at me now.

Another female participant emphasized an experience during one of the day sessions that she referred to as transformative. On this particular day, the adolescents were split into groups of two to three who together were to navigate to a lookout point during a coastal hike. The girl explained that she felt trapped in this group exercise, which resonated with her life situation at the time where she had remained isolated in her room. On the return hike, there were no instructions and she found herself spontaneously starting to run down the mountainside. She continued running the entire distance back to the meeting point and felt an increasing sense of liberation along the way, to where this particular experience became a turning point in the FT process for her:

When I got to run back, it was just like my body suddenly became happier and well . . . was energized in a way . . . I don't know exactly what it was, I just . . . I felt that something had to be released in a sense. And then it got better.

These physical feats appeared to have an inherent significance for these two individuals, as the experiences had an emancipatory quality to it, such as the first participant proving the internalized insults wrong and in the latter example breaking free from the debilitating hold that physical fatigue had on her life. These concrete incidences of mastery had the potential to bring about considerable psychological rewards and also appeared to be catalysts for increased engagement and hope in the therapeutic process.

Similar tendencies were observed at times when participants were physically worn out, typically in the evenings around the campfire after a strenuous day. The physical exhaustion seemed to enable the participants to become more emotionally invested and less restricted in their interaction and communication with their peers, as observed by one of the male participants:

When you become tired or worn-out, you know, you become more open in your way of thinking . . . You become short of breath, so you lose a bit of oxygen and blood circulating to your brain. So you become more open, a little hyper, and things like that if you are tired. Maybe you become a bit more talkative or perhaps you can challenge yourself a bit more while you are tired . . . I think that is what people did . . . at least that is what I noticed in my group.

Although the FT program appeared to facilitate a number of opportunities for positive rewards throughout the treatment process, there were also occasions when there would be seemingly adverse reactions to physical challenges and strains along the way. Although a given task or challenge was accomplished per se, at times it was overwhelming for some of the participants, which could result in responses that were more inhibitive in character and that, at least temporarily, would hinder their engagement with the group. These reactions appeared to arise in circumstances when an individual was, for instance, worried that he or she would not succeed, would collapse, would hold the rest of the group back, and so forth. The emotional responses would typically come after the risk was over. Examples were a panic attack after a paddle through a rapid, where the actual reaction manifested itself when the client was back on shore. Another time an individual curled up into the fetal position on the ground shortly after reaching the campsite because she was feeling cold and exhausted after a long hike. Although these situations were difficult at the time, these were also the moments where participants gained insights into their physical and mental limitations. In addition, these were the times when they could receive in vivo counseling and direct care from therapists, along with support from their peers, regarded that the participants allowed themselves to be vulnerable in the presence of others. We return to these processes when we reach the final factor—the psychosocial dimension. However, first we focus on the second set of mechanisms of the physical self-factor, which explores some of the bodymind processes that were potentially activated throughout the FT program.

Bodymind restructuring: Reversing the spiral. A number of the clients expressed feeling physically tired before even having taken the first step of the 6-day expedition. This was understood as being caused by mental trauma, as explained by a female participant: “My body is completely worn-out. To tell you the truth, my body is seriously beat up because of bruises on the inside.” Regardless of such apparent barriers, most of the participants were, however, determined to challenge themselves and thus initiated processes or movements along what we have conceptualized as the bodymind spiral.

Participants would frequently link mental states to physical sensations, and vice versa, while in the FT setting. One female participant recalled having a tough start to the expedition, in which she ascribed her decreased mood to a number of physical factors: “The first night [of the expedition] I felt very depressed . . . I was cold, had an upset stomach . . . had only slept one hour . . . and woke up with blisters on both feet.” Upon receiving attention and care from therapists that included not only emotional support but also practical relief, comprising anything from taking care of sore feet, providing food to eat, and offering advice regarding how to keep warm the following night,

individuals were supported both psychosocially and physically. This extended interaction and direct care provided several entry points to offer support so that the clients could have better odds for reversing the bodymind axis, conceptualized as spiraling in an upward direction.

A number of participants explained how the joint mental and physical sensations they experienced were often difficult, or impossible, to differentiate. Many of them described a constant or recurrent mental struggle—for instance, while hiking, where they were negotiating both negative thinking and bodily pains parallel to the physical undertaking. Over time, these demanding, yet feasible, physical challenges appeared to offer opportunities for an increased level of self-insight and a possible restructuring of the bodymind dynamics. Whereby the participants more accurately could assess when they were, for instance, feeling mentally drained, however still physically capable to keep going. An example of such a realization was expressed by a female participant, stating that “I knew myself that it basically was just me that was tired on the inside. That it was not really a physical exhaustion.” Referring back to the time she managed to reach the plateau where the group was to set up camp for the night, although the ascent appeared impossible at first.

The FT treatment process also appeared to provide opportunities for restructuring other bodymind processes, for instance related to the potential downward bodymind spiral due to the combination of low self-worth, a skewed body image, and a consequently limited food intake in an early stage of an eating disorder. First, the change in context entailed being away from the many rituals and particularities of food preparation and intake that may have been established at home. Furthermore, the aforementioned disconnection from social media could help reduce the intense focus on body image, supported by the removal of other factors that could reinforce self-consciousness such as the absence of mirrors and scales in nature. Finally, the FT program included a generally healthy physical mobilization, where the need for intake of nutrition was nearly constant for the participants to maintain strength and energy to keep going. These circumstances, along with other supportive psychosocial factors, could together spark a positive turn to a downward bodymind spiral. One of the participants, while reporting finding it difficult to eat together with the rest of the group in the FT setting, noticed letting go of some of the internal and external restrictions that were normally activated at home:

When you sit around at home and are depressed and things like that and you are on social media—oh wow—I want to look like that! So you just skip lunch that day. However, when you are outdoors in the woods and you do not have that [the many pressures of social media] and you move around all the time and you are cold, then you just eat three lunches [laughs]. There is a lot less focus on those things.

Indeed, being physically mobilized in an outdoor environment over a longer time period could initiate a number of bodymind processes. Moving on to the third and final therapeutic factor, the psychosocial self, it all comes together, on a within-person, between-person, and person-in-environment level. There are a multitude of mechanisms that potentially emerge and interact that are impossible to capture entirely, but we can attempt to reach some of them directed by the clients’ perspective.

The Psychosocial Self

Wilderness therapy differs from more traditional approaches to mental health treatment in a number of ways. We have already addressed some of the nature-related mechanisms of the treatment, as well as processes that appeared to accompany the physical mobilization, where both these therapeutic factors also lead to a range of psychosocial opportunities. In FT, as with other group treatments, the composition of the clinical group and the therapist teams, along with the dynamics that unfolds both between clients and client(s)-therapist(s), influences the therapeutic process. Furthermore, in FT the clients and the therapists spend prolonged periods of time together in an outdoor environment, where many of the connotations, dynamics, and structures inherent to more talk-based, therapist-directed treatments in an indoor clinical setting are not necessarily transferred.

Inspecting the two clinical groups represented in this study more specifically, the social compositions appeared to exert a relatively well-balanced distribution of, for instance, introvert versus extrovert disposition, with several participants in both groups feeling apprehensive with regard to being part of a group. This initial reservation could become a barrier in the therapeutic process, considering that an important premise for seizing the opportunities that arose in the FT setting appeared to be the ability to remain open and engaged throughout the intervention. For the ones who opened up at times, then closed off again whenever feeling overwhelmed, the treatment process tended to become a continuous internal and external struggle due to this unsettling ambivalence.

Explorations of the psychosocial factor resulted in the following three therapeutic mechanisms: (a) heterogeneous synergy, (b) the intricacies of vulnerability and support, and (c) therapy the natural way (see Table 4), which are presented below.

Heterogeneous synergy. The synergism that appeared to arise from the composition of both groups was reiterated as an important premise of the FT treatment process. As opposed to the typical pattern of other social constellations that require similarities to acquire acceptance, there seemed to be other mechanisms at play in the FT setting.

Table 4. Therapeutic Mechanisms of the Psychosocial Self.

Therapeutic factor	Mechanisms	Propositions
The psychosocial self	Heterogeneous synergy	<p>A synergism appeared to arise in the clinical groups due to the heterogenic compositions. The differences became a source of positive stimuli and interest while contributing toward creating an inclusive and supportive milieu.</p> <p>Another dimension of the group synergy was the emergence of an implicit understanding deriving from all of the clients having experienced suffering of some type. This innate understanding seemed to condition a less judgmental climate that allowed the clients to be themselves.</p> <p>The barriers to being part of this synergism were reservation or ambivalence in terms of engaging with the group and if the individual level of suffering was not considered compatible with that of others.</p>
	The intricacies of vulnerability and support	<p>Being vulnerable and open in the presence of others, peers and therapists alike, as well as being exposed to other clients struggling, was an intricate matter and not a straightforward ordeal. In addition, accurately assessing when someone would like to be offered support, by whom, and in which manner was a complicated endeavor. While attempts at providing support, despite good intentions, in some incidences could be experienced as a form of pressure, supportive transactions also had the potential to hold great significance for both the receiver and the helper.</p> <p>Enabling conditions for support was a trusting relationship between the involved parties and realistic expectations regarding the nature of the support.</p> <p>Support from peers could be considered more significant than support from therapists as there were notions such as “they are only doing their job” that were more or less prevalent. Such notions could be at least initial barriers to investing in an alliance with the therapist(s). However, time spent together in the outdoors and the direct care from therapists appeared to gradually foster trust and feeling safe, which became important precursors to establishing a therapeutic alliance.</p>
	Therapy the natural way	<p>FT appeared to be perceived as an intriguing and appropriate approach to treatment for the clients, as it carried inherent positive, naturally health-inducing qualities.</p> <p>FT had different connotations compared with more traditional, hospital-based approaches to treatment where clients at times reported feeling ill, constrained, bored, sad, or disengaged. The clients reiterated the importance of the availability of different approaches to treatment, where they in the FT setting expressed having fun, feeling free and well.</p> <p>The FT program appeared to provide an environment for the clients to have the space to unfold and unwind, their time to open up and to share at their own pace. Furthermore, the outdoors provided a tranquil, naturally stimulating, and technology-free milieu that had the potential to both invigorate the body and to refresh the brain—the natural way.</p>

Note. FT = Friluftsterapi.

The heterogeneity was reported to primarily be a source of positive stimuli that sparked an interest in getting to know each other. Furthermore, it appeared to create a milieu where each individual’s uniqueness was welcomed and a supportive atmosphere arose. A female participant described the group interaction as the highlight of the FT experience:

It was sort of the mix of people to be honest . . . It had a lot to do with meeting others, learning about people’s past and why they were there. It was very interesting to learn that everyone was there for different reasons . . . You learn so many things about everyone. It was very fascinating . . . We managed somehow to make room for everyone because everyone was so different . . . Everything seemed to work with us, I think . . . You felt that others were there to support you.

One could easily assume that there would be advantages to organizing the FT groups according to similarities, such as specific diagnostic criteria, to where the intervention could be optimized according to the particular needs of a more homogeneous group. However, asking a male participant whether it would have been a better alternative to have an FT group exclusively facilitated for clients with anxieties, he expressed his reservations:

Friluftsterapi cannot be for just one person and one problem. It has to be open to all sorts of problems. It will not be perfect for just one or two. It has to open up in a way . . . If you put all those people [people with anxiety] together it will be awkward . . . Then, you know this person has anxiety, he has anxiety, and he has anxiety. How will that play out? If everyone has anxiety, people won’t really connect with each

other. The way it was now was perfect because you had some people who at least tried . . . The group needs people like that. Then, you at least get someone to strike up a conversation.

Another dimension to the group synergy was that beyond, or perhaps across, the heterogeneity, an implicit understanding appeared to emerge among the participants, believed to derive from them all having experienced suffering of some type. Relationships, referred to as friendships, were developed among the participants in many incidences. These bonds were referred to as different from relationships taking place otherwise in life, where the participants could feel lonely despite having friends, as noted by a male participant:

It is kind of great to have someone, instead of being all alone . . . I do have good friends, but not ones who understand the types of things that they do [referring to the friends from FT]. They have been in similar situations themselves. That was the best thing about the trip. That was them.

This innate understanding and commonality appeared to condition a less judgmental climate within the group, where the participants became comfortable just being themselves. This notion was particularly important for one of the female participants, who was concerned that she would not be able to connect with the rest of the group because she did not consider herself a talkative person. However, the synergism appeared to embrace each individual albeit, or because of, their particularities. She shared her experience from interacting with the group:

I really felt that no one would judge me because everyone struggled with something. So if I was quiet that was fine and if I was talking a lot, that was also ok . . . So it was really good to sort of feel that everyone had something and no one really minded that much. It was fine to just be yourself.

However positive a group dynamic might be, the apparent downside are the incidences where one or several individuals do not become part of this unity. Although such dynamics and interactions must be considered a two-way process, the most obvious barrier appeared to be the aforementioned reservation or ambivalence in terms of engaging with the group. Another hindrance was the instances where the degree of suffering was not considered compatible. In the case of one of the female participants, she was convinced that her personal situation was not reconcilable with both the nature and degree of suffering of the other clients, as she felt that she was worse off compared with the rest of the group. This sentiment inhibited her engagement in the therapeutic process and restricted her interaction with the group:

I think it is really good to be in a group, but I sort of feel like I have been in the wrong kind of group . . . I should not say that these adolescents did not have serious challenges, but that it should have been a group that had more similar challenges to me. I felt that it was a bit darker with me in a sense.

The participant emphasized that she might be mistaken, that perhaps in fact the others did suffer immensely, only that it was not transparent to her. This dilemma plays into the level of openness that was established on both an individual and group level throughout the therapeutic process and whether the clients managed to share their struggles openly with the rest of the group and therapists alike or whether they remained more reserved. We shall explore some of these dynamics next as we move on to the second set of mechanisms of the psychosocial self-factor.

The intricacies of vulnerability and support. Any group treatment trajectory is not necessarily a linear process where openness and trust increase steadily over time. First, the implicit expectation to opening up to the group and be vulnerable in the presence of others was an intricate matter and not a straightforward ordeal in the FT treatment process. Factors that influenced this intricacy were, for instance, that vulnerability often was derived from traumatic experiences from relationships or social settings with peers or adults in the first place, which again could inhibit engagement. Second, in terms of other implicit expectations related to offering support to others, it appeared to be a complicated endeavor for the participants to accurately assess when an individual who was suffering would in fact like to be offered support, by whom, and in which manner. Attempts at providing support, despite their good intent, could be experienced as a form of pressure. Furthermore, being exposed to other adolescents' suffering was overwhelming for some, particularly for the individuals who were preoccupied with managing their own struggles at the time. However, on the contrary, successful transactions of support could hold great significance, and thus therapeutic potential, for both the helper and the receiver.

A male participant, for instance, who had struggled with long-term depression, stated that he did not care much about other people before partaking in the FT program. Still, gradually noticing that his fellow peers were struggling from time to time, he carefully began to offer his support to the other participants. This engagement in empathetic relations with the other participants was experienced as deeply meaningful, and became an emotional awakening, for him. A female participant, who was on the receiving end of a supportive interaction, expressed appreciation for the direct compassion from a peer:

I had a pretty bad anxiety attack. I was shaking and was not able to breathe properly, and she was just present. And she helped me a lot. There is not much you can do. But as long as she was there and I felt safe that she was there, it went really well. And it was good to know that someone cares and not just the adults who are doing their job . . . It was very kind of her. It made me really happy.

Conditions that enabled supportive transactions appeared to be that the individuals involved had already established a trusting relationship and that there were realistic expectations regarding the nature of the support.

Third, in terms of establishing an alliance with the therapist, some participants expressed an inclination for being more appreciative of supportive initiatives from peers compared with therapists. Statements such as the above referring to therapists as “adults who are doing their job” appeared to reflect preconceived notions that a number of the participants brought into the FT setting either based on previous disappointing experiences from therapy or possibly negative experiences with adults in general. Such impressions could be at least initial barriers to confide in the therapist(s). A few individuals maintained this reservation throughout the intervention to where the therapeutic relationship remained at a superficial level. However, overall the participants stated that they were generally content with the therapists in terms of running the program and supporting the participants throughout their ventures in the outdoors. Experiences of direct care from the therapists throughout the program appeared to foster trust and the participants generally feeling safe and looked after. Contributing factors to establishing an alliance were the amount of time spent together and the familiarity that was able to unfold between therapist(s) and client(s) when, for instance, hiking together. A male participant compared the conditions for developing a therapeutic alliance in the FT setting to his previous visits in a psychologist’s office:

Sitting in a room and staring at the wall and listening to the therapist talking . . . It is not the same as hiking in the woods . . . He [referring to the former therapist] just sat there and asked a lot of questions and I simply answered yes and no and was on my mobile phone . . . When you just talk for an hour, you don’t get to know each other. When you hike together for six days, you get to know each other.

This statement points to some of the particularities of FT that sets it apart from more one-dimensional approaches to treatment. As such, FT appeared to provide a multitude of possible entry points for inviting adolescents, who appeared resistant or disengaged in more conventional treatment settings, into a therapeutic journey that was quite different.

Other dimensions to the uniqueness of FT are more fundamental to the treatment experience per se, one that

possibly conditions the previous qualities. These notions are somewhat subtle and challenging to grasp at first other than the observation that participation in FT seemed to bring about another set of connotations and feelings in the clients compared with more traditional treatment settings. Simply put, FT appeared to “make sense” and feel more “natural” to the participants as a health-promoting treatment.

Therapy the natural way. This last set of mechanisms of the FT process was accessed indirectly through remarks made by the participants repeatedly stating how much they enjoyed their time in the FT setting. Despite challenging and difficult moments throughout the intervention, overall participants had fun, were appreciative of the experience, and would do it again if they had the chance to. Such statements could easily be disregarded as irrelevant, overly positive, or superficial at first by a critical researcher, which was also the case in this instance. However, dwelling on these statements appeared to hold the key to reaching some of the underlying processes of FT and play into dichotomies such as healthy versus not healthy, feeling well versus feeling ill, and structural premises such as feeling unconfined versus feeling constrained or restricted. From the adolescent mind-set, these connotations were often expressed as having fun versus being bored, feeling happy versus sad, feeling free versus trapped, feeling normal versus crazy, and so forth. Although a number of the adolescents had managed to establish engaging and beneficial therapeutic processes through other approaches to mental health treatment prior to taking part in the FT program, several shared negative experiences. However, what seemed to transcend these former treatment experiences, whether positive or negative, were references to feeling like a failure when having to go to the hospital due to their struggles in life. This stigma could, in addition to the intimidation some felt in more conventional treatment settings, be a source of the disengagement some had experienced previously. FT, on the contrary, represented a very different context and structure that appeared to generate more positive connotations. While still facilitating high quality treatment, and in the case of FT also being provided through the hospital, this approach involved the clients and therapists to strap on their hiking gear and venture together into nature. As such, FT appeared to offer a refreshing treatment alternative that the adolescents were intrigued by. This perception is exemplified by one of the female participants, who expressed appreciation for the opportunity to participate in a mental health treatment that did not carry expectations of becoming a dismal experience:

It is always great to sort of have different things one can do besides always sitting in an office . . . For me, I think it is kind of good to be part of something that is through the hospital but at the same time a bit fun and not just sad all the time.

The emancipatory effect of moving a mental health intervention away from the hospital setting and into nature, from indoors to outdoors, was reiterated by a male participant: “You appear freer and not trapped in a little room.” Reflecting on how a group treatment would have been experienced in an indoor hospital context as opposed to in nature, a female participant, for instance, imagined that it would have been intimidating and more intense, in addition to carrying associations with dysfunction and illness:

The adults [referring to the therapists] would have sat and stared at us all the time and we would not have been able to have comfortable sessions. But I think that when you are outdoors, you do not feel that confined. You feel like you can share a bit at your own pace. But if you sit around in a hospital, it just reminds you that you are ill.

Some participants expressed direct resentment toward the idea of a more conventional therapy context. One male participant readily admitted that his impatience, constant flow of energy, and reactive temperament would have made it hard for him to thrive in an office-based therapeutic setting:

There is no way in hell that I will sit in a fucking office and be bored to death! I am too restless to sit around like that . . . I probably would have knocked that guy [referring to a potential therapist] out three or four times by now, I reckon!

By contrast, the boy proudly announced that he had not lost his temper a single time throughout the FT treatment process. Rather, the FT setting seemed to provide the participants the space to unfold and unwind, the time to open up and share at their own pace, all while being in a naturally calming, yet stimulating, environment that was screen-free and rich in oxygen. A female participant shared her reflections regarding FT and what she deemed a treatment that invigorated her brain and body through therapy the natural way:

If I sit around indoors and watch TV every day, like I do, the mobile phone and computer and everything, the brain becomes very slow. But I notice that if you just look at something else that is not a screen, you become more awake. Fresh air, the body needs that to survive really. If not, your skin goes pale and you get rings around your eyes and the body goes numb, so that shows that it is not supposed to be like that. And if you are outdoors, that is in a way therapy for the brain in itself. That is what I really like about friluftsterapi too. Not that it is therapy, but being outside in the open air . . . So I think it is a really good form of therapy, in that it can refresh the brain the natural way.

As such, the FT treatment process appeared to integrate ecological and biological dimensions into the psychosocial therapy process making up what appeared to be a

holistic approach to health and well-being that naturally responded to a number of the challenges the participants were faced with. We shall now briefly explore the underlying conditions of the FT treatment process, drawing on the retroductive stage of the analysis, as we move into the discussion.

Discussion

Returning to the initial understanding of health as a state of balance including the self, others, and the environment, the FT treatment setting appeared to provide a microcosm for individuals who were experiencing some form of disequilibrium in their lives. The specter of opportunities or mechanisms, which under varied circumstances were reported to emerge within this microcommunity (Harper et al., 2017), appeared to have contrasting, calming, emancipatory, empowering, and synergetic qualities to them, as presented throughout the “Results” section. Together, these opportunities seemed to facilitate a number of potential entry points for initiating movement along the aforementioned bodymind spiral. This dimension of the treatment is, along with the wilderness factor, suggested to epitomize part of the uniqueness or core of wilderness therapy as a distinct approach to mental health care for adolescents. Through venturing into nature and experiencing the basic life outdoors, the FT setting capacitated both ecological and bodily processes, which together with the psychosocial dimensions comprised a multidimensional approach to therapy. This multidimensionality appeared to represent a holistic health care intervention through facilitating an ecobiopsychosocial treatment process. Fundamental conditions, in addition to this multidimensionality, we propose are two other basic principles of FT, specifically referring to the treatment program being voluntary-based and resource-focused.

In this first section of the discussion, we shall briefly address these three proposed underlying characteristics of the FT treatment process, thus responding to the third and final objective of this study. These reflections must be considered as tentative, but may however still serve as vantage points for further empirical and theoretical explorations. Upholding a critical realist approach, the dynamics of agency and structure will first be introduced. Next, we integrate literature on embodiment and shame in an attempt to acquire a deeper understanding of the participants’ state at the time of referral to mental health treatment, where their sense of agency appeared to be compromised. And finally, we consider the appropriateness of the FT approach in meeting the specific needs of these young individuals.

Agency and structure. A critical realist view tends to focus on the interdependence of human agency and various

structural constraints and possibilities (Archer, 1998). These structures operate at different levels of reality, whether they are intrapersonal, interpersonal, or societal structures. Human health and functioning is affected by this interface between structure and agency, perhaps in particular structural constraints versus perceived degree of agential freedom (Williams, 1999). Over time, this mutual interplay can either result in continuous reproduction where a given state or situation remains the same or in minor or major changes, also referred to as morphogenesis (Archer, 2003). The ability to not reproduce a current situation and to instead initiate change through, for instance, resist succumbing to debilitating symptoms, break negative patterns, depart from destructive milieus, and choose to move in a health-promoting direction, is to a large extent dependent on the degree of agency an individual is able to mobilize. Human beings potentially possess immense capabilities to make and remake themselves and their relationships and to influence their surroundings as personal agents. At the same time, these abilities operate within the confines of natural limitations on our bodies and are also affected by our self-perceptions, which again supports or inhibits action (Smith, 2010).

The body and self: Alienation and shame. The body as the ground of the self and organ of the will constitutes not only agency but also spatial relations, perception, as well as our sensations and feelings. As such, the body is the ground for and site of meaningful existence, according to Dolezal (2015), and we can never experience anything as totally independent from this bodily engagement. First, whatever mental, spiritual, or interpersonal capacities an individual may have, neglect of the body in terms of access to its basic needs of oxygen, nutrition, sleep, and rest has detrimental effects. Second, as humans we encounter profound both bodily and emotional limitations and vulnerabilities, where we are susceptible to a range of personal hurts, disappointments, sorrows, anxieties, despair, and existential threats that can manifest themselves through the body. Thus, despite powerful human capabilities, there are structural limitations and potential risks to the body and self that exist in natural reality (Smith, 2010).

Furthermore, the period of adolescence is a particularly critical developmental stage, as there are numerous cognitive, biological, and behavioral processes that are formed during these years on the paths toward maturity and adulthood (Braun-Lewensohn, Idan, Lindström, & Margalit, 2017). Adverse life experiences, insecure attachment patterns, and mental health struggles may interfere with or interrupt the establishment and maintenance of a coherent sense of self and agency, where contradictory views of self may lead to intrapsychic conflict, confusion, and distress (Harter, 2012). Many of these

emotional sensations are embodied experiences, where the body in some incidences can become an obstacle to one's relation to the world instead of serving as the enabler of agency, which may result in experiences such as alienation and/or shame. Alienation, according to Dolezal (2015), is an experience where a person may feel an estrangement from the self—or rather the possibilities of the self. This feeling of alienation may occur in situations where one is feeling or treated as inert, as having an impotent subjectivity, hence lacking autonomy and self-determination. Alienation may furthermore bring about shame, which not only is likely to impact an individual's self-esteem and self-worth but could also become a barrier to social engagement. As such, alienation and shame can easily compromise the degree of agency to the point where a person may perceive himself or herself as what Sartre (in Dolezal, 2015, p. 39) has referred to as a degraded, fixed, or dependent human being in need of help from others:

Shame is the feeling of an *original fall*, not because of the fact that I may have committed this or that particular fault but simply that I have “fallen” into the world in the midst of things and that I need mediation of the Other in order to be what I am.

Turning to the main agents of this study in particular, the adolescent participants, they all shared their individual experiences of having “fallen into the world in the midst of things” and not feeling capable of managing on their own.

The “fallen” adolescent: Compromised agency. The numerous versions of having “fallen” included experiences of becoming outsiders in various ways, of dropping out of school, being bullied, not fitting in, and, for instance, finding it hard to communicate or relate to their peers and/or families. Many had experienced considerable suffering and adversities in their lives, and common across the majority of the accounts were stories of long-held hardship, feelings of chaos, overwhelming stress and demands, and the disappointment of repeatedly not living up to expectations. The series of perceived failures were in many instances accompanied by a depletion of energy and/or a fundamental sense of insecurity that often resulted in social isolation, anxieties, and a downward bodymind spiral. These tendencies could ultimately lead to a partial or seemingly all-encompassing state of fatigue and a life that in the adolescent's mind in some instances was coming close to the point of no longer being worth living. Thus, the individual participant's status at the time of recruitment to FT entailed feelings of despair, hopelessness, alienation, frustration, and shame being on the rise, parallel to the perceived degree of agency becoming increasingly compromised.

The referral to mental health treatment became the manifestation of the aforementioned “fall” in life where the “mediation of the Other,” in this case mental health treatment, was requested to in Satre’s words “be what I am.” Still, a number of the participants who were well aware of needing some form of “mediation” were still apprehensive toward the idea of receiving mental health care. However, FT appeared to represent an approach to treatment that came across as different from what they expected and that was perceived as intriguing and appropriate to the individuals who accepted the invitation to participate.

We shall now explore the fundamental conditions for this apparent appropriateness of FT and its potential to respond to the complexity of the adolescents’ needs.

An appropriate approach to adolescent mental health care: The path to reclaim agency. The aforementioned proactive choice to partake in the FT treatment, despite the prevalent barriers and concerns, became the first concrete step for these young boys and girls on the path to (re)establish agency. Fundamental to the ability for this decision making and the fragile restoration of agency appeared to be the prospect of taking part in an approach to treatment that sparked an interest and also instilled a ray of hope in the midst of their struggles. This apparent appropriateness is suggested to derive from the three aforementioned fundamental characteristics of FT in terms of being a voluntary, resource-focused, and multidimensional approach to treatment. These basic conditions for therapeutic work first invited and then supported the participants to challenge the ideas of themselves as degraded, fixed, or dependent beings in a concrete manner through their proactive participation in the FT program.

The voluntary foundation of the treatment implied that the initial decision to accept the invitation to participate, and from then on each day of the program continuing to attend, was a proactive choice on the part of the individual adolescent. This aspect of the participation was a direct vehicle for reinstating agency, which was practiced in a direct manner in terms of actively pursuing to move in a health-promoting direction. The voluntary basis appeared to be an important condition for establishing and maintaining an intrinsic motivation in each participant. And furthermore for fostering trust and safety, as the participants were there because they themselves chose to be there.

The resource-focused foundation of FT also seemed to support agency and facilitate engagement. In contrast, a more pathogenetic approach to treatment was reported to carry inhibiting connotations and potential stigma, where the adolescents would feel disengaged, confined, or incapable. While FT appeared to bring about empowering and emancipating conditions by providing a therapeutic setting that focused on the participants’ abilities. This basic

orientation of involving the clients as the main agents in their own recovery process has been emphasized by Duncan, Miller, and Sparks (2007, p. 36):

Rather than constructing a patient in need of correction—an ill, bad, or victim child—we have the possibility of constructing resourceful, active agents deciding how they wish to re-organize their lives and relationships.

The multidimensional nature of FT appeared to comprise a holistic and potentially synergetic approach to treatment. The combination of the ecological, physical, and psychosocial dimensions is aligned with the conceptualization of human health and well-being as a state of balance in relation to oneself, others, and the natural environment, along with the understanding of human agency as embodied. FT as a voluntary, resource-focused, and multidimensional approach to treatment might not only have inherent structures that are fundamentally different from other treatment contexts but is also suggested to match the complexity of the needs of adolescents in particular. This must however be regarded as a tentative proposition that could benefit from further in-depth exploration.

Finally, it is important to emphasize that the FT program is not representative for all wilderness therapy programs. We are aware that some wilderness therapy practices do rely on various forms of coercion, which inherently is likely to limit the degree of agential freedom in the recovery process. Furthermore, utilizing coercion as one of the basic conditions for wilderness therapy treatment may potentially maintain disequilibrium and add distress for vulnerable adolescents who are brought into a wilderness setting, rather than striving to establish a sense of safety and support. While the FT program is not guaranteed to always succeed at fulfilling its fundamental conditions in every situation for each individual client, the FT practice appeared to invite the participants to be the main navigators of their ventures outdoors. Where each adolescent could collaborate with their fellow travelers—both peers and therapists—and nature in co-creating their journeys toward change.

Limitations and Implications

There are a number of limitations to note. First, as this qualitative study represents two clinical groups within a single wilderness therapy program situated in Southern Norway, the findings must be read with these limitations in mind. The findings are likely to be highly context-dependent and not necessarily representative beyond the included sample, as there potentially can be great variations across groups and conditions within the same program, let alone across cultural contexts.

Second, according to the critical realist approach, our knowledge and theories of the world are always limited and mediated by our perceptual and theoretical lenses, and as such they are also partial, incomplete, and fallible. Thus, there should always be room for revision (Maxwell, 2012). Of relevance to the lenses of the principal researcher in this study were, for instance, circumstances such as being familiar with this approach to mental health treatment and the therapists, herself a nature lover, with previous clinical experience from working with adolescents and also originating from the geographical area in which the study was situated. These factors influence her perspective as a researcher and can create blind spots and inclinations, thus requiring a high level of reflexivity throughout all stages of the study (Davies, 2008). At the same time, this familiarity may have enabled her to delve deeper into the core of the therapeutic process and commit herself to critically investigate this treatment modality in striving for a continual improvement of the services provided to young people in this particular region.

Third, this article was limited to exploring the therapeutic mechanisms and contextual conditions of the FT treatment process, and as such did not include an evaluation of the efficiency of the program, elicitation of outcomes, or testing of the wilderness therapy clinical model (Ferneer et al., 2017).

The implications of this study are primarily the contribution of an in-depth inquiry into a specific wilderness therapy treatment process through a critical realist investigation. The study introduced a number of therapeutic mechanisms and contextual premises within the FT treatment setting across the ecobiopsychosocial dimensions. These various therapeutic processes ought to be further explored through future in-depth investigations that also link outcomes to the contextual conditions and the potential mechanisms of the intervention. Insight into this complexity can contribute toward theoretical progress and increase the understanding of, for instance, specific versus common factors involved in the process of change.

Finally, the multidimensionality that was briefly addressed in the discussion is represented in the wilderness therapy clinical model (Ferneer et al., 2017); however, the depth of the therapeutic process has yet to be reflected in the current model, as well as the interconnectedness of the various factors. In addition, both the role of nature and the bodymind dimensions of the wilderness therapy process could benefit from further in-depth explorations, also drawing on literature from allied fields.

Concluding Remarks

Wilderness therapy has the potential to offer a microcommunity in which individuals are invited to engage in ecobiopsychosocial processes that may capacitate a number

of opportunities for reestablishing a state of balance through reconnecting with oneself, others, and a nurturing natural environment. The purpose of this article was not to present wilderness therapy as a panacea to mental health treatment but rather to explore some of the therapeutic opportunities that may arise throughout the FT process more specifically. The fundamental conditions for the FT treatment process were its voluntary and resource-focused foundation, along with the potential multidimensional synergy, that together are suggested to make up a timely, holistic, and appropriate approach to adolescent mental health care. And as such responding to the particular and complex needs of the younger population of today—the so-called iGen'ers—through therapy the natural way.

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References

- Annerstedt, M. (2009). Health promotion, environmental psychology and sustainable development—A successful “ménage-à-trois.” *Global Health Promotion*, 16, 49–52. doi:10.1177/1757975908100750
- Archer, M. S. (1998). Realism and morphogenesis. In M. Archer, R. Bhaskar, A. Collier, T. Lawson, & A. Norrie (Eds.), *Critical realism: Essential readings* (pp. 356–381). London: Routledge.
- Archer, M. S. (2003). *Structure, agency and the internal conversation*. Cambridge, UK: The Cambridge University Press.
- Berman, D. S., & Davis-Berman, J. (2013). The role of therapeutic adventure in meeting the mental health needs of children and adolescents: Finding a niche in the health care systems of the United States and the United Kingdom. *Journal of Experiential Education*, 36, 51–64. doi:10.1177/1053825913481581
- Bogdewic, S. P. (1999). Participant observation. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research* (2nd ed., pp. 47–69). Thousand Oaks: Sage.

- Braun-Lewensohn, O., Idan, O., Lindström, B., & Margalit, M. (2017). Salutogenesis: Sense of coherence in adolescence. In M. Mittelmark, et al. (Eds.), *The handbook of salutogenesis* (pp. 123–136). Cham, Switzerland: Springer.
- Carnevale, F. A., Macdonald, M. E., Bluebond-Langner, M., & McKeever, P. (2008). Using participant observation in pediatric health care settings: Ethical challenges and solutions. *Journal of Child Health Care*, 12, 18–53. doi:10.1177/1367493507085616
- Claveirole, A. (2004). Listening to young voices: Challenges of research with adolescent mental health users. *Journal of Psychiatric and Mental Health Nursing*, 11, 253–260.
- Damianakis, T., & Woodford, M. R. (2012). Qualitative research with small connected communities: Generating new knowledge while upholding research ethics. *Qualitative Health Research*, 22, 708–718. doi:10.1177/1049732311431444
- Danermark, B., Ekström, M., Jakobsen, L., & Karlsson, J. C. (2002). *Explaining society: Critical realism in the social sciences*. London: Routledge.
- Davies, C. A. (2008). *Reflexive ethnography: A guide to researching selves and others* (2nd ed.). London: Routledge.
- Davis-Berman, J., & Berman, D. S. (1994). *Wilderness therapy: Foundations, theory & research*. Dubuque, IA: Kendall/Hunt Publishing.
- Davis-Berman, J., & Berman, D. S. (2008). *The promise of wilderness therapy*. Boulder, CO: Association for Experiential Education.
- DeMille, S., Tucker, A. R., Gass, M. A., Javorski, S., VanKaneagan, C., Talbot, B., & Karoff, M. (2018). The effectiveness of outdoor behavioral healthcare with struggling adolescents: A comparison group study a contribution for the special issue: Social innovation in child and youth services. *Children and Youth Services Review*, 88, 241–248. doi:10.1016/j.childyouth.2018.03.015
- Dobud, W., & Harper, N. J. (2018). Of dodo birds and common factors: A scoping review of direct comparison trials in adventure therapy. *Complementary Therapies in Clinical Practice*, 31, 16–24. doi:10.1016/j.ctcp.2018.01.005
- Dolezal, L. (2015). *The body and shame: Phenomenology, feminism, and the socially shaped body*. Lanham: Lexington Books.
- Duncan, B. L., Miller, S. D., & Sparks, J. (2007). Common factors and the uncommon heroism of youth. *Psychotherapy in Australia*, 13, 34–43.
- Ferneer, C. R., Gabrielsen, L. E., Andersen, A. J. W., & Mesel, T. (2015). Therapy in the open air: Introducing wilderness therapy to adolescent mental health services in Scandinavia. *Scandinavian Psychologist*, 2, e14. doi:10.15714/scandpsychol.2.e14
- Ferneer, C. R., Gabrielsen, L. E., Andersen, A. J. W., & Mesel, T. (2017). Unpacking the black box of wilderness therapy: A realist synthesis. *Qualitative Health Research*, 27, 114–129. doi:10.1177/1049732316655776
- Gabrielsen, L. E., & Ferneer, C. R. (2014). Psykisk helsearbeid i naturen—friluftsliv inspirert av vår historie og identitet [Mental health work in nature—Open air life inspired by our history and identity]. *Tidsskrift for Psykisk Helsearbeid*, 11, 358–367.
- Gabrielsen, L. E., Ferneer, C. R., Aasen, G. O., & Eskedal, L. T. (2016). Why randomized trials are challenging within adventure therapy research: Lessons learned in Norway. *Journal of Experiential Education*, 39, 5–14. doi:10.1177/1053825915607535
- Gabrielsen, L. E., & Harper, N. J. (2017). The role of wilderness therapy for adolescents in the face of global trends of urbanization and technification. *International Journal of Adolescence and Youth*. doi:10.1080/02673843.2017.1406379
- Gass, M. A., Gillis, H. L., & Russell, K. C. (2012). *Adventure therapy: Theory, research, and practice*. New York: Routledge.
- Harper, N., Gabrielsen, L. E., & Carpenter, C. (2017). A cross-cultural exploration of “wild” in wilderness therapy: Canada, Norway and Australia. *Journal of Adventure Education and Outdoor Learning*, 18, 148–164. doi:10.1080/014729679.2017.1384743
- Harper, N. J. (2017). Wilderness therapy, therapeutic camping and adventure education in child and youth care literature: A scoping review. *Children and Youth Services Review*, 83, 68–79. doi:10.1016/j.childyouth.2017.10.030
- Harter, S. (2012). Emerging self-processes during childhood and adolescence. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 680–715). New York: The Guildford Press.
- Haubenhofer, D. K., Elings, M., Hassink, J., & Hine, R. E. (2010). The development of green care in Western European countries. *Explore*, 6, 106–111. doi:10.1016/j.explore.2009.12.002
- Herrman, H., Saxena, S., & Moodie, R. (2005). *Promoting mental health: Concepts, emerging practice* (A report of the World Health Organization, Dept of Mental Health and Substance Abuse in collaboration with Victorian Health Promotion Foundation and The University of Melbourne). Geneva, Switzerland: World Health Organization (WHO).
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill: Algonquin Books.
- Maxwell, J. A. (2012). *A realist approach for qualitative research*. Los Angeles: Sage.
- Mulhall, A. (2003). In the field: Notes on observation in qualitative research. *Journal of Advanced Nursing*, 41, 306–313.
- Norton, C. L., Carpenter, C., & Pryor, A. (Eds.). (2015). *Adventure therapy around the globe: International perspectives and diverse approaches*. Champaign: Common Ground Publishing LLC.
- Norton, C. L., Tucker, A., Russell, K. C., Bettmann, J. E., Gass, M. A., Gillis, H. L., & Behrens, E. (2014). Adventure therapy with youth. *Journal of Experiential Education*, 37, 46–59. doi:10.1177/1053825913518895
- Norwegian Ministry of the Environment. (2010). *The nature experience and mental health* (Report of the “outdoor life and mental health” Nordic project. T1474E/2010). Oslo: Author.
- Pawson, R. (2006). *Evidence-based policy. A realist perspective*. London: Sage.
- Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London: Sage.
- Phillippi, J., & Lauderdale, J. (2018). A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research*, 28, 381–388. doi:10.1177/1049732317697102

- Pilgrim, D. (2014). Some implications of critical realism for mental health research. *Social Theory & Health*, 12, 1–12. doi:10.1057/sth.2013.17
- Russell, K. C. (2001). What is wilderness therapy? *Journal of Experiential Education*, 24, 70–79.
- Russell, K. C. (2006). Publishing to the choir or digging deep: Implications of a snapshot of experiential education research. *Journal of Experiential Education*, 28, 243–247. doi:10.1177/105382590602800306
- Russell, K. C., & Farnum, J. (2004). A concurrent model of the wilderness therapy process. *Journal of Adventure Education & Outdoor Learning*, 4, 39–55. doi:10.1080/14729670485200411
- Russell, K. C., & Phillips-Miller, D. (2002). Perspectives on the wilderness therapy process and its relation to outcomes. *Child & Youth Care Forum*, 31, 415–437. doi:10.1023/A:1021110417119
- Selhub, E. M., & Logan, A. C. (2012). *Your brain on nature: The science of nature's influence on your health, happiness, and vitality*. Mississauga, Ontario, Canada: John Wiley.
- Smith, C. (2010). *What is a person?* Chicago: The University of Chicago Press.
- Smith, C., & Elger, T. (2014). Critical realism and interviewing subjects. In P. K. Edwards, J. O'Mahoney, & S. Vincent (Eds.), *Studying organizations using critical realism: A practical guide* (pp. 109–131). Oxford, UK: Oxford University Press.
- Tucker, A. R., & Rheingold, A. (2010). Enhancing Fidelity in Adventure Education and Adventure Therapy. *Journal of Experiential Education*, 33, 258–273. doi:10.1177/105382590113300305
- Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy—And completely unprepared for adulthood*. New York: Atria Books.
- Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates. *Clinical Psychological Science*, 6, 3–17. doi:10.1177/26702617723376
- van den Bosch, M., & Bird, W. (Eds.). (2018). *Oxford textbook of nature and public health: The role of nature in improving the health of a population*. Oxford, UK: Oxford University Press. doi:10.1093/med/9780198725916.001.0001
- van den Bosch, M., & Depledge, M. H. (2015). Healthy people with nature in mind. *BMC Public Health*, 15, 1232. doi:10.1186/s12889-015-2574-8
- Warin, J. (2011). Ethical mindfulness and reflexivity: Managing a research relationship with children and young people in a fourteen year qualitative longitudinal research (QLR) study. *Qualitative Inquiry*, 17, 805–814. doi:10.1177/1077800411423196
- Williams, F. (2017). *The nature fix: Why nature makes us happier, healthier, and more creative*. New York: W.W. Norton.
- Williams, S. (1999). Is anybody there? Critical realism, chronic illness and the disability debate. *Sociology of Health & Illness*, 21, 797–819.
- Wilson, E. O. (1984). *Biophilia*. Cambridge, MA: Harvard University Press.
- Wong, G., Greenhalgh, T., & Pawson, R. (2010). Internet-based medical education: A realist review of what works, for whom and in what circumstances. *BMC Medical Education*, 10, 12. doi:10.1186/1472-6920-10-12
- Woodgate, R. L., Tennent, P., & Zurba, M. (2017). Navigating ethical challenges in qualitative research with children and youth through sustaining mindful presence. *International Journal of Qualitative Methods*, 16, 1–11. doi:10.1177/1609406917696743

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