Article

Therapy in the Open Air: Introducing Wilderness Therapy to Adolescent Mental Health Services in Scandinavia

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Abstract

Despite the rich traditions of outdoor life in the Scandinavian countries, structured nature-based therapeutic interventions remain underexplored in adolescent mental health services. We suggest that wilderness therapy is an age-appropriate and effective group treatment that may hold particular appeal for at-risk youth who are less responsive to conventional forms of treatment. Although more widespread in other parts of the world, wilderness therapy may also be a viable treatment modality for the Scandinavian region. Our overall aim of this state-of-knowledge article is to provide an overview of wilderness therapy with regard to conceptualization, practice and research, and to discuss current challenges. Based on the available knowledge, we suggest that the addition of this nature-based group treatment could increase the diversity of treatment options in adolescent mental health services in Scandinavia and recommend rigorous intervention studies exploring what works, for whom, and in what circumstances.

Keywords

adolescents, friluftsterapi, group treatment, mental health, nature-based therapy, wilderness therapy

Outdoor life in Scandinavia is generally known as *friluftsliv*, which translates as «life in the open air». *Friluftsliv* is originally a simple and spartan undertaking in which the primary focus is to seek out nature (Henderson & Vikander, 2007). There are

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numerous attempts at conceptualizing the essence of the *friluftsliv* tradition. Gelter (2000, p. 78) defines the Scandinavian *friluftsliv* as «a philosophical lifestyle based on experiences of the freedom in nature». Beery (2013) understands the Nordic approach to outdoor recreation primarily as a meaningful relationship and connectedness with nature. Despite the frequent use of nature in the Scandinavian countries for recreational purposes, structured nature-based interventions are infrequently utilized in a systematic manner in mental health services (Annerstedt & Währborg, 2011).

In 2010 the Nordic Council of Ministries and the Norwegian Ministry of Environment launched the project *Outdoor Life and Mental Health*. One of the stated goals was the establishment of a common platform for the Nordic countries' systematic inclusion of outdoor life in their mental health services, both in terms of prevention and therapy. The report assumes both an ecological and psychological framework for the human need for contact with nature. Although the project´s principal focus was not on the inclusion of outdoor life in specialist mental health services in particular, this article proposes that wilderness therapy can be a viable treatment option for adolescent mental health services in the Scandinavian countries.

Wilderness therapy is a group treatment modality in the field of mental health care, which seeks to augment the restorative qualities of nature in combination with structured and intentional individual and group-based therapeutic work (Davis-Berman & Berman, 1994; 2008). Wilderness therapy encompasses a diversified field of practice across a number of countries, but it is particularly widespread in North America and Australia. As an alternative approach to conventional mental health care, wilderness therapy has been suggested to have the potential to both engage and treat adolescent patients, including individuals who appear resistant or less responsive to traditional methods of treatment (Lariviére, Couture, Ritchie, Côté, Oddson & Wright, 2012).

In Norway, an increasing number of rehabilitation centers, community-based services and mental health clinics have actively utilized nature in a variety of initiatives for a number of years. However, according to Bischoff (2008), it is difficult to gain a complete overview of these efforts due to the lack of networking and systematic research. In our search for the clinical experiences of structured nature-based interventions in Norway, we have thus far only come across integrated variations of the modality, which have acted as a supplement to standard treatment. For example, the Sami National Center for Mental Health, located in Karasjok in northern Norway, offers families *Utmarksterapi* or *Meahcceterapiija* (Boine, 2010; Strand, 2006). In eastern Norway, wilderness therapy was formerly integrated at Modum Bad as an inpatient group program for adult patients with personality disorders (Eikenæs, Gude & Hoffart, 2006). Lastly, Norsk Mestring, located in Trøndelag, is a private for-profit company that offers *Villmarksterapi* for adolescents and young adults.

This state-of-knowledge article is a result of an iterative and continuous review of the international literature, along with professional networking, in the process of developing a clinical wilderness therapy research project in southern Norway. At the Department of Child and Adolescent Mental Health (ABUP) at Sørlandet Hospital HE, wilderness therapy was recently implemented as a stand-alone, outpatient group treatment for adolescent clients between the ages of sixteen and eighteen, who have been referred to the specialist mental health services for psycho-social symptomatology including depression, anxiety, adjustment disorder, withdrawal, low self-efficacy, relational- and/or behavioural problems. This paper attempts to provide an overview of the intriguing, though nearly incommensurable, field of wilderness therapy, drawing on scientific articles, textbooks, grey literature, and recent study visits to the US and Australia. The article aims to answer the following questions: *What is wilderness therapy? What might some of the current challenges facing this field of practice be, and to what extent are these challenges relevant to the Scandinavian countries?*

What is Wilderness Therapy?

Wilderness therapy has mainly been developed in the US and its origins trace back to the very first experiences with «tent therapy» in the early twentieth century, when several hospitals were forced to move a large number of patients into tents on the hospital greens due to particular tragedies, such as an earthquake in one incidence and a tuberculosis outbreak at another asylum. Over the next few decades, therapeutic camping for youth rapidly expanded, and from the 1950s onwards, Outward Bound programs were introduced nationwide. These early initiatives to utilize the outdoors for mental and physical restoration were in many ways considered the precursors to wilderness therapy, which emerged in the late 1980s [for a detailed overview, see Davis-Berman and Berman (1994) and White (2012)].

Today, wilderness therapy is practiced by a range of private programs, residential treatment centers and clinics across the US and elsewhere, providing care for adolescents suffering from emotional, behavioral, psychological, and/or substance use problems. According to estimates from Russell (2003a), there are well over 100 programs operating in the US alone, serving more than 10,000 adolescents and families annually. These various programs' practices are multi-faceted and diverse; thus, arriving at a precise yet integrative definition of wilderness therapy remains challenging. In the US, outdoor behavioral healthcare is increasingly used as a term for wilderness therapy programs. Russell, Gillis and Lewis (2008, p. 60) defines outdoor behavioral healthcare as follows:

> Programs that subscribe to a multimodal treatment model within the context of wilderness environments and backcountry travel to facilitate progress towards individualized treatment goals. The approach incorporates the use of evidence-based clinical practices including client assessment, individual and group psychotherapy conducted by independently licensed clinicians, and the development of individual treatment and aftercare plans.

Adventure therapy is often used interchangeably with, or as an umbrella term for, wilderness therapy. Gass, Gillis and Russell (2012, p. 1) define adventure therapy as «the prescriptive use of adventure experiences provided by mental health professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels». Wilderness therapy and adventure therapy are not readily delineated. However, generally speaking, adventurous activities and experiential learning are the primary components of adventure therapy, whereas the natural environment is secondary. Adventure therapy can therefore also be practiced indoors. Wilderness therapy, on the other hand, primarily operates in remote wilderness settings, where basic outdoor life and the nature experience are integral to the treatment process (Harper, 2012).

Furthermore, the aforementioned definition of adventure therapy is neither precise in terms of the inclusion or exclusion of psychotherapy, which is a debated topic in the field. In principle, adventure and wilderness therapy can be practiced during all stages in the continuum of care, ranging from recreational and enrichment initiatives to that of primary or adjunctive therapy/treatment (Pryor, 2012). This article will focus mainly on wilderness therapy as a specialized approach to mental health treatment, aligned with the aforementioned definition of outdoor behavioral healthcare. References to the wider adventure therapy literature will be noted in the text.

Around the world, cultural and contextual adaptations of wilderness therapy, in terms of terminology, conceptualization and practice, are found. For instance, in the South Pacific region, the word «wilderness» implies «people-free», which ignores the indigenous presence in the land. In Australia, Bush Adventure Therapy was therefore coined as the most appropriate term, as it encompasses the entire range of natural environments and bushland (Pryor, Carpenter & Townsend, 2005). In Norway, the Scandinavian approach to outdoor life – *friluftsliv*—has been incorporated into the term *Friluftsterapi* (Gabrielsen & Fernee, 2014).

In recent years, there have been increasing efforts among practitioners and researchers at both national and international levels to work towards establishing a more coherent professional community in the field of wilderness and adventure therapy (Pryor, 2012). Such initiatives include the Outdoor Behavioral Healthcare Center in the US, the Canadian Adventure Therapy Network, the Australian Association for Bush Adventure Therapy Inc., and the Adventure Therapy International Committee.

Although some practitioners express concerns regarding these endeavors to refine theories and establish best practice guidelines, Richards, Carpenter and Harper (2011, p. 86) argue that only through reaching more sophisticated conceptualizations of the psychological, social and ecological processes of wilderness therapy can we more fully understand which mechanisms in fact constitute the «soul» of this treatment modality.

Practice – the treatment approach

The application of wilderness therapy across a number of countries with different cultural contexts and socio-political settings represents a disparate clinical practice. Variations are found in terms of the physical environment, the duration, participant demographics, the group size (commonly between 6-8 adolescents), the staff-to-patient ratio, and the composition of staff/therapist teams (field guides, mental health professionals, and/or psychologists/psychiatrists). There are also different formats, such as base-camp versus expedition programs, open versus closed group structures, and intermittent versus continuous programs. The activities selected and challenges offered, the methods and dosage of psychotherapeutic work, as well as the degree of family involvement also varies. Additionally, a number of programs integrate substance use treatment.

However, despite a diversified clinical picture, there are some important commonalities. These commonalities may be expressed in a four-factor treatment model, with each factor having the potential to facilitate therapeutic change (Harper, Russell, Cooley & Cupples, 2007; Russell, 2001):

1. The wilderness as a restorative environment
2. Basic outdoor life incorporating sequenced and intentional tasks and challenges
3. Individualized, structured therapeutic work
4. The establishment of a supportive peer group and the provision of group therapy

First, what is rather unique about this treatment approach is that it is situated in the outdoors. Williams (2000) emphasizes the fact that wilderness therapy takes place in nature as opposed to an institutional setting. He proposes that the wilderness surroundings reduce adolescents' resistance towards treatment by acknowledging their need for freedom and to not feel constrained in any way. Hill (2007, p. 343) refers to the natural environment as a «vehicle for change», as it provides unfamiliar ground with no or few pre-existing standards of success or failure attached to it. The social and contextual basis for the adolescents' personal identities ceases as they leave their home environments, which can open up new experiences and alternative ways of socializing.

Furthermore, the direct consequences of being in nature generally include bringing out core patterns of behavior. The wilderness is socially unambiguous and treats everyone as equals, which implies that patients and therapists alike meet at the same basic human level (Williams, 2000).

Kaplan and Kaplan (1989) have been at the forefront of developing a psychological framework for human interactions with nature, and Attention Restoration Theory (Kaplan, 2001) suggests that the wilderness is a particularly restorative milieu for recovering from mental fatigue. Immersion in nature seems to induce reflexive states (Hinds, 2011) and to stimulate optimal brain functioning (Selhub & Logan, 2012). Selhub and Logan propose that the effects of interacting with and within nature are wide ranging across the physical, mental, social, and spiritual domains, in addition to being conducive to healthy development, particularly in younger populations (Louv, 2008).

Adolescent clients are likely to have varying outdoor experiences and competencies when entering the group treatment. While some may be confident and comfortable in a wilderness setting, others may initially experience considerable stress and fear. Over the course of the treatment, the participants are guided in the acquisition of basic outdoor living skills (Davis-Berman & Berman, 2008). Each individual is supported in striving for an increased degree of self-reliance on both a physical and emotional level. Through processing and reflection, the participants are expected to transfer these experiences to other life arenas (Crisp & O'Donnell, 1997). In addition to basic outdoor tasks, selected challenges and intentional therapeutic exercises are introduced and sequenced according to on-going individual and group processes. The goal is to increase self-efficacy, foster group cohesion, and ultimately maximize therapeutic benefits (Crisp, 2006). Therapeutic exercises may be facilitated «quiet time» or «alone time» for reflection. Wilderness therapy tasks or challenges may include anything from building a shelter or making a campfire, to rappelling down a rock face or navigating to the next campsite. Individual assessments of perceived risk are important requirements to ensure an emotionally and physically safe environment throughout the treatment process (Davis- Berman & Berman, 2002; Russell & Hendee, 2000), in which each adolescent is in dialogue with a therapist to define the appropriate challenge level at any given time.

Wilderness therapy generally utilizes a holistic and strength-focused approach to treatment that shifts the focus from dysfunction and failure towards the identification and promotion of each individual's abilities and resources (Hill, 2007). However, when operating in mental health services, clinical procedures must be followed to adhere to service guidelines and to ensure the standard of care. In the initial stage of treatment, a clinical assessment and tentative diagnostic formulation is often carried out in cooperation with each adolescent as the first step in creating an individual treatment

plan. Throughout the program, structured individual and group-based therapeutic work is facilitated. An interesting aspect of wilderness therapy is that it allows for in vivo counseling, through which therapists can work directly with the clients as a given behavior or concern arises. Gass et al. (2012) have presented an integrative psychotherapeutic framework for adventure therapy, called the *ABC-R triangle*. This model systemizes affect, behavior and cognition as therapeutic vantage points, which is combined with relational systemic work with peers, therapist(s), family, and in some cases the wider community. The more specific psychotherapeutic methods used varies across programs.

A supportive group milieu is vital for the treatment process, in which the participants are provided the opportunity to learn and practice interpersonal skills, in addition to developing group belonging and trust over time (Hill, 2007). Individuals who may have had major concerns about their sense of self-worth and/or ability to relate to others, perhaps particularly their peers, may be empowered in a direct and real way through the group treatment (Russell, 2003b). A here-and-now focus is often utilized, through which any situation or pressing issue is brought into the group for active problem solving. Over time, a given group will preferably reach a level of comfort and cohesion that allows them to constitute a «social microcosm» (Yalom, 2005, p. 31).

Lastly, communal living in the wilderness may foster interdependence within the group and the therapist team. Thus, the client-therapist relationship is potentially restructured in a wilderness setting. The therapist is not constrained in terms of time, space and the customary roles that are often found in traditional treatment environments (Davis-Berman & Berman, 2008; Russell, 2003b). They instead interact in a direct manner with the patients, wearing similar hiking gear, enduring the same challenging conditions, and sharing the many facets of camp life, such as meal preparation and campfire conversations. These dynamics appear to create the basis for a powerful therapeutic alliance, which is one of the aspects that has been explored in previous research (Harper, 2009).

Wilderness therapy research

Over the past two decades, there has been an increase in wilderness and adventure therapy research. Outcome studies have demonstrated positive psychosocial changes and significant reductions in mental health symptomatology for adolescents with various manifestations of emotional, behavioral, psychological, and/or substance use problems (Bettmann, Russell & Parry, 2013; Clark, Marmol, Cooley & Gathercoal, 2004; Harper et al., 2007; Russell, 2003b). Many of these studies have focused on two primary effects on adolescent participants, namely: (a) improvements in self-concept, and (b) the development of appropriate and adaptive social skills (Russell, 2012).

Longitudinal data indicate that significant symptomatic reductions were maintained at six months post-treatment (Harper et al., 2007) and had even improved by the 12-month follow-up (Russell, 2003b). Qualitative interviews with youth and parent informants have reported that most participants still perceived the intervention to be effective at 24 months post-treatment (Russell, 2005).

Two recent meta-analyses include Bettmann (2012) and Bowen and Neill (2013), the overall effect sizes documented being 0,43 and 0,47 respectively. The latter study also compared the overall results of adventure therapy studies with those of alternative treatment and no treatment, documenting considerably stronger results for adventure therapy. Although effect sizes in this range are coined moderate or medium by statisticians, they are in terms of clinical research indeed quite substantial, leading Bowen and Neil (2013, p. 41) to conclude that «adventure therapy programs are, on the whole, an effective intervention».

There is also a rising concern with regards to exploring and documenting which therapeutic factors are involved in the process of treatment and potential change (Norton et al., 2014). For instance, Russell and Phillips-Miller (2002) conducted a multi-site case study comprising four wilderness therapy programs. Qualitative interviews suggested that the peer dynamic created through communal living in the wilderness and the alliance with the therapist were important factors. Facilitated reflections on life through intentional use of alone time, as well as the challenging experiences inherent to wilderness therapy, were identified as key agents of change. These processes seemed to motivate the adolescents to change for the better and to confront undesirable past behaviors.

There are other interesting directions in contemporary wilderness and adventure therapy research, including studies that investigate the impact of this treatment modality on more specified patient groups, such as adolescents struggling with depression (Norton, 2010), substance use (Bettmann, & Parry, 2013; Lewis, 2012), issues related to attachment and adoption (Bettmann, Demong & Jasperson, 2008; Bettmann & Tucker, 2011), personality disorders (Clark et al., 2004), eating disorders (Kaptian, 2003), and delinquent behaviors (Walsh & Russell, 2010). The role of family involvement in relation to outcomes has also been evaluated (Harper & Russell, 2008).

There has been a recent increase in descriptive studies that explore patient populations in wilderness therapy programs. Bettmann, Lundahl, Wright, Jasperson and McRoberts (2011) gathered data based on 500 psychological evaluations from private-pay wilderness therapy programs across a total of 48 states in the US. The participants' primary diagnoses were Oppositional Defiant Disorder, Attention Deficit Hyperactivity Disorder, depressive and anxiety disorders, and substance use problems. The mean age of the sample was sixteen years of age, and 63 percent of the participants were male.

The data drew a clear picture of a population with significant strengths, including above average academic achievement and intelligence. Still, school problems, conflicts with parents, and troubling externalizing behaviors were frequently reported as the reasons for referral.

Bettmann, Tucker, Tracy and Parry (2014) explored differences in client history, gender and current functioning across a sample of 401 adolescent patients. Ninety percent of the participants had formerly been involved in outpatient therapy before entering the wilderness therapy treatment. The researchers found that female patients presented significantly higher levels of symptomatology than males, while males had a higher tendency for delinquent predispositions and substance use. A study by Tucker, Smith and Gass (2014) demonstrated that female participants reported greater clinical improvements compared to their male counterparts who entered treatment with the same level of dysfunction. Magle-Haberek, Tucker and Gass (2012) found no significant relationship between length of treatment, program type and outcomes in adolescent patients. These preliminary results suggest that wilderness therapy is currently serving and may also be effective for a diverse population of youth.

Further investigations ought to explore variations in patient populations, including diagnoses and gender, program characteristics, therapeutic processes, and immediate and long-term outcomes. The scope of the extant literature is still limited, and the evidence base could profit from advances in terms of both the depth of inquiry and methodological sophistication (Hoag, Massey & Roberts, 2014). Hence, more rigorous, in-depth and critical investigations are requested (Russell, 2006). Bettmann, Russell and Parry (2012, p. 1048) conclude, «As it is now evident that wilderness therapy is an effective form of treatment, researchers should dig deeper to investigate why, how and for whom such treatment is effective».

Current challenges to wilderness therapy and their relevance in the Scandinavian context

A recent article by Berman and Davis-Berman (2013) addresses the challenges of wilderness therapy programs to find a niche within mental health care systems in the US and United Kingdom. They argue that wilderness therapy must achieve recognition as an evidence-based practice in order to establish itself as a viable treatment option on the «treatment end» of the aforementioned continuum of care. However, there seems to be some level of resistance towards this form of advancement. According to Tucker and Rheingold (2010, p. 263), this resistance may stem from the fear that standardization of practices will absorb the clinical skills and flexibility that are required to respond instantly and adequately to the multitude of unpredictable situations that may arise in a wilderness therapy setting. Harper (2010) argues that an evidence-based approach to

treatment may lead to a practice that lacks ecological relevance and thus eventually disregards emergent outcomes in favor of calculated predictions. Discussions in international forums seem to attempt to establish a middle ground for best practices between the structure-oriented and process-oriented perspectives, through which they can potentially complement and expand on each other's practices, rather than having one paradigm rule out the other (Pryor, Carpenter, Norton & Kirchner, 2012).

Another eagerly debated topic related to wilderness therapy's positioning along the continuum of care is the composition of staff in terms of their professional backgrounds and combinations of qualifications. In North America, both field guides trained in outdoor education and mental health professionals commonly make up the staff. The direct or indirect availability of a licensed psychologist or psychiatrist in the field seems to vary across programs. Crisp (1998) has argued that the treatment team should consist of at least dual trained practitioners, which implies that the staff are exclusively mental health professionals that are also trained in outdoor education. The rationale for this recommendation is that each member of the therapist team will be competent to manage and oversee all facets of treatment, which essentially plays into a larger debate about the ethically sound practice of wilderness therapy.

Becker (2010) identifies a number of areas that require particular ethical consideration in wilderness therapy practices. Sensitive topics include the maintenance of the same levels of confidentiality in the wilderness therapy field as in the clinician's office and the subtle difference between more structured therapy sessions and less formal conversations that occur more spontaneously in a wilderness setting. The therapist's role and boundaries need to be contemplated, as the wilderness therapy context does not necessarily uphold inherent formalities as does the hospital setting. Although the wilderness setting appears to facilitate the therapist's development of a closer and more informal rapport with adolescents, which can be conducive to the treatment process, it does not rule out the relevance of maintaining a certain level of professional boundaries or at least reflecting on such boundaries.

Lastly, wilderness therapy programs that are located in the US face certain structural challenges that are specific to their socio-political and geographical region. The cost of most programs is considerable, which in itself may completely exclude adolescents from lower socio-economic backgrounds. The clients are also often removed from their home environments to join a program in another state, at times against their will, which may cause disruptions in these young people's lives. Concerns about the lack of appropriate aftercare upon returning home have also been raised (Scott and Duerson, 2010), which is related to the aforementioned concerns about wilderness therapy programs' position in the existing continuum of care.

Returning to the Scandinavian context to close, the call from the Norwegian Ministry of the Environment and the Nordic Council of Ministries (2010) to include outdoor life in mental health services encompasses the entire continuum of care, ranging from preventative measures to more specialized treatment. Wilderness therapy may potentially serve adolescent clients as a general preventative or enrichment intervention and as a more targeted primary treatment. It can serve as an adjunct to other forms of treatment or be offered as a stand-alone intervention, at both a community-based level and in specialist mental health services. There are also examples of wilderness and adventure therapy being offered to other at-risk populations of young people, such as adolescents suffering from traumatic brain injuries (Shanahan, McAllister & Curtin, 2009), cancer (Epstein, 2004), and obesity (Jelalim, Mehlenbeck, Lloyd-Richardson, Birmaher & Wing, 2005).

With regard to the aforementioned challenges in this field of practice, a number of these challenges may be resolved in the Scandinavian context through its successful implementation in the established universal health care system. More specifically, this treatment will be available for adolescents in need of care, regardless of their socio-economic status. In general, mental health services are voluntary and preferably grounded in self-motivation. Treatment is also increasingly outpatient-based, which attempts to keep disruption in the young patients' lives to a minimum. Lastly, the necessary regulations are in place to ensure the standard and ethics of care, the availability of competent mental health professionals, and facilitated aftercare when needed.

What remains to be seen is whether wilderness therapy will be adopted and established in the future as a viable treatment option in adolescent mental health services throughout the Nordic region. A refined Scandinavian approach to wilderness therapy can potentially contribute to the international wilderness therapy community and discourse with emerging perspectives from another corner of the world – the *friluftsliv* way (Henderson & Vikander, 2007).

Conclusion

Scandinavian colleagues are encouraged to integrate outdoor life into their mental health services in general and to more specifically implement wilderness therapy as a means of increasing the diversity of treatment options for adolescents in the Nordic part of the world. The purpose of this article is not to portray wilderness therapy as a panacea, and we are well aware that it will certainly not be the treatment of choice for every adolescent patient (or therapist for that matter). However, as mental health care ventures into nature, there is a rather unique therapeutic potential in this treatment

approach that the youngsters, the therapists and the wilderness environment co-create. In terms of research, there has been considerable progress over the last decade; still, more rigorous and in-depth investigations are warranted to explore what works (or what does not work), for whom, and in what circumstances when therapy is provided in the open air.

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The authors report no conflict of interest. The authors alone are responsible for the contents and writing of this paper.

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