ROUTLEDGE

OUTDOOR THERAPIES

An Introduction to Practices, Possibilities, and Critical Perspectives

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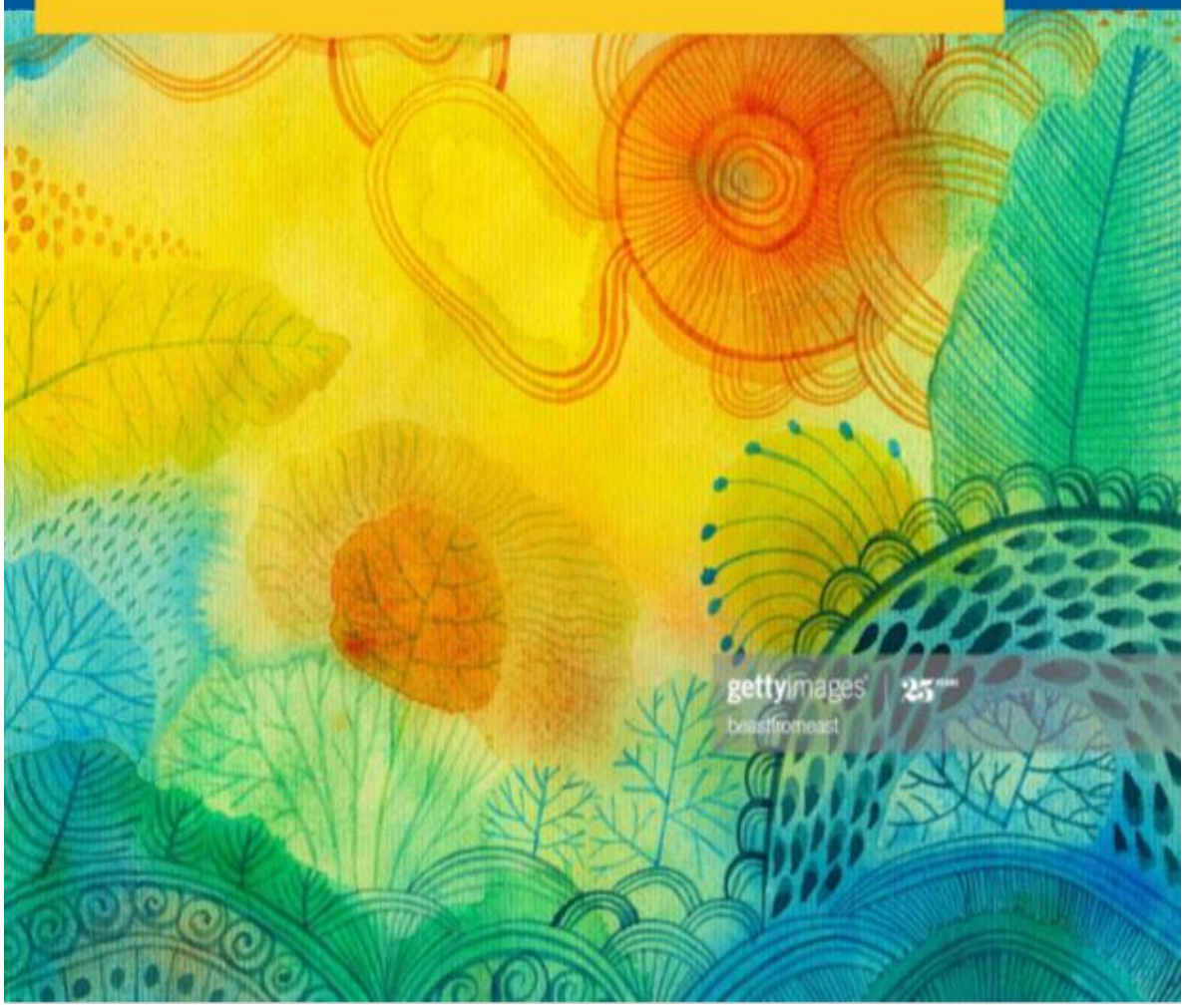

Chapter 6 - Wilderness Therapy

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"Come home.
Go in there bending branches –
go until you know
what it means to belong"
~Tarjei Vesaas

Wilderness therapy is an experiential approach to mental health treatment combining the restorative qualities of nature with individual and group-based therapeutic processes (Davis-Berman & Berman, 2008; Russell, 2001). Ecological, physical, and psychosocial health dimensions together make up a holistic intervention. Venturing into the wild ideally involves a disconnection from technology and the slowing down from a hectic, urban existence. The group treatment may provide the time and space to begin a recovery process where relationships are built with the self, others, and the natural world. Wilderness therapy practice is diverse, ranging from structured, leader-directed approaches, to dynamic processes that are co-created between the participants, facilitators, and the natural environment.

Historical and Cultural Perspectives

In the United States, youth camping programs and experiential education are commonly referred to as the predecessors of wilderness therapy (Davis-Berman & Berman, 2008). In countries like Canada and Australia, influential traditions are Indigenous perspectives and a strong connection to land (Harper, Gabrielsen, & Carpenter, 2018); while in the Scandinavian countries, a deep affiliation with nature and the simple life outdoors are essential in the *friluftsliv* tradition (Fernee, Gabrielsen, Andersen, & Mesel, 2015). The development of

wilderness therapy across a range of socio-cultural contexts and traditions is expressed in the great diversity represented in the field today (Norton, Carpenter, & Pryor, 2015).

Target Populations and Key Developments

Wilderness therapy serves primarily youth and young adult populations, most commonly providing care for emotional, behavioral, psychological, and/or substance use problems (Hoag, Massey, & Roberts, 2014). Many programs integrate family work and some include local communities in the treatment process to anchor positive changes and fostering protective factors in the home environments (Norton, 2011).

Wilderness therapy can be provided as preventative or enrichment interventions in school- or community-based settings, and as a targeted primary treatment. It may serve as an adjunct to other services or be offered as a stand-alone intervention. Although wilderness therapy takes many forms and continues to grow in visibility as a promising treatment option (Becker & Russell, 2016), this approach has not gained formal recognization in the continuum of youth mental health services (Berman & Davis-Berman, 2013).

Networking and collaboration are widespread across local, regional and international forums (Norton et al., 2015). Considerations of theoretical conceptualization, therapeutic factors, along with professional and ethical standards are receiving increased attention (Becker & Russell, 2016). Substantial differences are found among the ways in which wilderness therapy programs are developed, implemented, and evaluated (Becker & Russell, 2016). Moving forward as a profession, this diversity must be negotiated and reconciled if our goal is to arrive at an integrative wilderness therapy practice.

We use this chapter to elaborate on what we see as future challenges which we will discuss throughout. However, we reiterate that as Norwegian authors we represent a particular perspective on the practice of wilderness therapy.

Discussion of practice

Core Elements

Three main therapeutic factors have been proposed to make up core elements of the wilderness therapy treatment process, which is the combination of time spent in wilderness, the physical self and the psychosocial self (Fernee, Gabrielsen, Andersen, & Mesel, 2017; Russell & Farnum, 2004). These core elements interact and are hardly separable. They do, however, illustrate the multidimensionality of nature-based group treatments.

The *natural environment* is important as both a treatment context and co-facilitator in wilderness therapy (Harper et al., 2018). Nature provides a novel and neutral therapeutic setting that can open up for new experiences, perspectives, and alternative ways of being or becoming (Hill, 2007; Williams 2000). Harper, Rose, and Segal (2019) proposed the natural environment has calming qualities that can reduce stress and provide restoration. The therapists can step back from traditional positions of authority and let nature provide a therapeutic milieu where change is not forced, but rather evolves over time (Russell, 2001).

The second factor, *the physical self*, refers to the physical mobilization and the various tasks and challenges inherent to wilderness therapy. Outdoor activities offer opportunities for experiential learning, personal growth and mastery (Russell & Farnum, 2004), for instance through managing the changing conditions and physical demands whilst hiking (Caulkins, White, & Russell, 2006). The importance of frequently assessing each participant's physical

and emotional safety and wellbeing has been reiterated throughout the wilderness therapy literature (Davis-Berman & Berman, 2002; Gabrielsen, Harper, & Fernee, 2019).

The third core element, *the psychosocial self*, refers to the opportunities for developing self-insight, along with fostering a sense of belonging and connection over time, to peers, the therapists, and to nature. In wilderness therapy, facilitators are to approach the therapeutic relationship in a nurturing, caring, and empathetic way (Russell, 2001). Wilderness living demands cooperation and communication, where participants have the chance to help others and to practice altruism (Norton, 2011), although exchanges of support can be intricate and not necessarily straightforward to navigate at all times (Fernee, Mesel, Andersen, & Gabrielsen, 2019).

Description of Techniques

Beyond the simple life outdoors and the intentional use of structured individual- and group-based therapy, other techniques include experiential exercises where nature is often an integrated part. Examples include, for instance, the use of natural elements as therapeutic metaphors. The natural consequences experienced by participants can symbolize the random occurrence of real-life events, which challenges youth to develop and make use of a variety of skill sets according to the changing conditions (Russell, 2006). Facilitated quiet time can encourage states of introspection and contemplation, where journal assignments can assist the reflection process (Norton, 2011). Outdoor activities provide opportunities for concrete accomplishments and mastery, whether it involves catching a fish, building a camp fire, or managing without acces to social media, through which participants may come to realize previously “hidden” abilities, resources, and alternative coping mechanisms.

Philosophical Underpinnings of Wilderness Therapy

Wilderness therapy takes place in nature, and arguably the more "wild" this nature is – meaning unaltered by, and distant from humans – the better. The predominant explanation for nature's role in wilderness therapy is biological (Selhub & Logan, 2012). Humans have evolved in outdoor environments and survived as a species through our ability to adapt to it. Nature is *who we are* and this understanding of humans as non-dichotomous to nature lies at the core of philosophical approaches, such as deep ecology (Drengson & Devall, 2008) and ecosophy (Naess & Rothenberg, 1989), which in turn inform ecopsychology (Roszak, Gomes, & Kanner, 1995). Ecopsychological perspectives were explored in Chapter 3. All these approaches argue that the health and wellbeing of the natural world is intrinsically interwoven with the health and wellbeing of humans. This understanding permeates wilderness therapy as well. As most people in the industrialized world live in urban environments, we endure lifestyles that may be socially and culturally expected of us, but that we are not biologically adapted to. This, Louv (2008) proposed, may lead to conditions of increased alienation and meaninglessness, heightening the risk of physical and emotional struggles. The antidote for this maladaptation or *dis-ease* being obvious; more time spent in contact with the natural world (Gabrielsen & Harper, 2018).

Theory, Research and Efficacy

Outcome Studies

Although research within the field of wilderness therapy has improved over the last two decades and outcome studies have begun to provide evidence of efficacy, there remain limitations in terms of scope, depth and methodological sophistication (Hoag et al., 2014). Overall, empirical publications on wilderness therapy support the notion of effectiveness in treatment of a broad range of social, emotional and substance use issues (Harper, 2017).

Reductions in clinical symptomatology, along with improvements in life effectiveness, self-esteem, locus of control, and interpersonal skills have been reported (Bettmann, Gillis, Speelman, Parry, & Case, 2016; Dobud & Harper, 2018; Hoag, Massey, Roberts, & Logan, 2013; Pryor, 2018), and positive outcomes are suggested to be sustained over time (Bowen & Neill, 2013; Combs, Hoag, Javorski, & Roberts, 2016).

Despite promising results, outcome studies typically include relatively small sample sizes, which limit the possibilities for statistical explorations, such as investigating comparison or subgroups. Furthermore, wilderness therapy programs vary with regards to populations served, duration, content, and outcome goals (Becker & Russell, 2016). Therefore, we should be cautious when generalizing findings from single studies onto the field at large.

A clearer understanding of how positive changes come about has been requested (Hoag et al., 2014), whereby researchers are encouraged to dig deeper to investigate why, how, and for whom wilderness therapy treatment appears to be helpful (Bettmann, Russell, & Parry, 2013).

Qualitative Understandings

In order to arrive at a more in-depth understanding and conceptualization of the wilderness therapy process, qualitative work often makes use of participant observation and interviews to investigate treatment experiences and perceived outcomes. Being in nature has been found to invoke reflexivity, improve moods, and clearing the mind, while reducing rumination (Conlon, Wilson, Gaffney, & Stoker, 2018; McIver, Senior, & Francis, 2018). Through time spent in nature, participants are proposed to gain "a more holistic perspective of who they are and what they can achieve, beyond preconceived notions and self-imposed labels" (McIver et al., 2018, p. 398). Wilderness therapy may open more avenues for mental health work, where

participants feel freer, less confined, less “crazy” and “in treatment” when compared to more conventional treatment settings (Conlon et al., 2018; Fernee et al., 2019).

In an Irish study, McIver and colleagues (2018) described what seemed to be an unfolding mind-body connection emerging out of the physicality of the treatment process. The experiential nature of wilderness therapy appears to provide a pathway from surface to deep knowledge (McIver et al., 2018), where new insights may enable self-awareness and self-regulation to emerge over time (Fernee, 2019).

In an Australian study, Conlon and colleagues (2018) reiterated the importance of the adolescent participants experiencing choice and control over their own situation in the wilderness. Feeling heard, valued and cared for by the wilderness leaders conditioned participant engagement. This element of perceived influence was suggested to predispose the adolescents to not rebel from the program, but instead to remain open, interested, and grateful for the opportunity to participate in a nature-based group treatment and what they deemed to be a fun and novel experience.

Wilderness therapy involves opportunities for connecting with one´s self, with others and with nature. Relational experiences may be restructured or strengthened in nature as the participants and facilitators spend time together in a wilderness context, endure the same conditions, share meals, and get to know each other. Such relational dynamics appear to be at the core of the healing process (Norton, 2011).

A number of these aspects come into play in the story of a young boy, here called Espen, who participated in a Norwegian wilderness therapy program called *friluftsterapi*, or “therapy in

the open air" (Fernee et al., 2015). This outdoor group treatment seemed to provide the time and space Espen needed in order to reconnect with his emotions and begin a process of grief, which appeared to be supported by the alliances that arose in the outdoors.

Case Vignette: The Time and Space to Heal Naturally

Espen was a tall and lean 17-year-old boy. His long blond hair was kept in place beneath a colorful beanie. His handshake was firm and he came across as a polite, considerate and overall very likeable person. He was however struggling immensely, ever since his father passed away two years earlier. Overnight, 15-year-old Espen took on increased responsibilities in the household that now consisted of only himself and his grieving mother. Over time, he developed symptoms of depression, accompanied by low self-esteem and self-worth. His motivation and school performance declined rapidly. Bullying increased and added to the load he was already carrying on his young shoulders, Espen remained in bed most days. A tragedy of two youngsters from Espen's school committing suicide only a few days apart in the nearby forest area, quickly accelerated the concern as Espen had expressed suicidal ideation to a friend of the family. Espen agreed to be referred to mental health services at the local hospital, upon which he was informed of available treatment options; one of them being wilderness therapy.

At the time, five aspects of an outdoor treatment seemed to be particularly well aligned with Espen's situation and preferences. First, he proclaimed that there was "no chance in hell" that he would sit in an office and talk about his struggles. Second, while living in an urban suburb the latter years, Espen grew up in the countryside and nature was his playground. The fondest memories of his deceased father were the many outdoor activities they had shared. Third, Espen could use some time away from his home environment. He felt like a burden on his

mother and hated school. Fourth, his low self-worth made him question his social abilities and he had become skeptical towards peers and adults alike. Although he dreaded it, Espen realized the need to relate to people his age and felt like the outdoors were the safest milieu to do it in. Finally, the slow pace of the wilderness therapy approach (friluftsterapi) allowed for relational and emotional processes to evolve naturally, whilst initial insecurity could subside over time.

In many ways Espen was a typical wilderness therapy participant. Despite feeling mentally and physically fatigued at the onset of the intervention, the simple life outdoors was perceived to be an engaging environment. Espen's resourcefulness manifested quickly. However, when group therapy sessions were initiated, the long hair would partially cover his face and his remarks remained equally unrevealing. After spending three days together in an outdoor camp to learn skills, a basic level of trust was established within the group. Espen told us in retrospect, he had realized that the other youth and therapists were prepared to accompany him into, metaphorically speaking, more demanding terrain.

Wilderness therapy can be an unpredictable and dynamic approach to treatment, where unplanned moments can turn out to be the most significant moments of change. On the second overnight trip, coincidences led Espen and one of the male therapists to hike separately from the rest of the group for a couple of hours. The route was demanding and the therapist had filled his backpack to the rim with equipment needed for transitioning between campsites. By now, Espen had strengthened his physical stamina, striding seemingly effortlessly like a moose on his long legs through the wet and soggy forest terrain. The therapist, on the other hand, was not comfortable with Espen's pace and during a break seized the opportunity inherent in the situation and admitted, "Espen, I'm not having my best of days, would you

mind helping me by taking some of the load from my backpack?" Espen immediately responded by taking a tent and some of the food from the therapist's to his own backpack.

This simple act initiated an alliance that was further developed as the two of them cooperated on navigating by map and compass en route to the campsite by the lake mid-forest. The hike became more than a transit from one campsite to the next.

The two shared stories of past times spent in the outdoors, and equally important moments in silence. Espen had a keen eye for details and at one point spotted a nest of grouse eggs. Gently approaching the nest he quietly uttered, "I found a nest of eggs, much like this one, with my father not so long ago." Espen did not cry, but looked the therapist firmly in the eyes and the significance of this moment shared between the two somewhere mid-forest was inevitable. The discovery seemed to ignite a more proactive stance from Espen, as if this was the sign he had been waiting for in order to devote himself wholeheartedly to the process.

As the two of them arrived at the campsite in the late afternoon, the shimmering surface of the forest lake faded as the sun descended behind the pine trees in the horizon. The tents were pitched, firewood gathered and dinner was prepared. As the cool Nordic night shortly engulfed the group, they gathered closely around the campfire. Jokes and laughter were as frequent as existential reflections and soul searching questions. Espen kept the fire going until late that night. Too late some would argue. While others gradually resigned to their sleeping bags, Espen and Anne, two youngsters who both had experienced their unfair share of hardship in life, remained under the star sign of Cassiopeia. The flickering lights from the campfire played on the canvas of the tents that surrounded them, accompanied by the calm voices in the night as the two shared their stories unfiltered and uninterrupted.

Reflecting back on his experiences of treatment, Espen recalled this particular day and night as forever memorable. He emphasized how he gradually came to see the therapists and the peers as persons he could confide in, who could support him onto a path towards a life that felt worth living. The story of Espen reminds us of what can be the essence of wilderness therapy: the multitude of connections that can arise, the resources that can emerge, and the stories that can be shared, adjusted and co-created when provided the time and space to grow naturally.

Discussion

Wilderness therapy is practiced across the globe on Canadian rivers, Israeli deserts, Finnish forests, Icelandic mountains, and in the Australian bush. The variations that are deemed to be found across contexts are in principle of great value, however may also require us to dialogue on those times where our cultures and traditions may cause us to view matters differently. Such conversations can be demanding and at times upsetting; yet willingness to engage in collaborative professional and ethical reflections are important and necessary if we want to continue down a common path moving forward.

In our opinion there are presently two major challenges that the field of wilderness therapy must navigate on this path moving forward: the environmental crisis and what we call relational dignity. One of these challenges is unfortunately not something we as a field will be able to resolve, but that we should still respond proactively to.

Environmental Crisis

As an outdoor therapy, we must come to understand that all practitioners affiliated with wilderness therapy should acknowledge our environmental responsibility. This stance is not

only moral in itself, but also serves as logical consequence of the human–nature reciprocal relationship. We live in an epoch labeled the Anthropocene in which humans are dramatically transforming the planet. We should take it upon ourselves to be nature's guardians and spokespersons, where immediate implications should be to conduct our work and lead our lives with as little environmental impact as possible. In addition, strive to raise environmental awareness wherever we go. This discussion is continued in Part 3 of this book.

Relational Dignity

The second challenge is the standing of the wilderness therapy field if we do not uphold a standard of *relational dignity* in all facets of our practice. Moving forward, in-depth conversations could entail how we can understand, and in all situations attempt to uphold, the concept of relational dignity or equivalent terms. What does this entail across contexts and how does it hold up against the end justifies the means argument? To what extent are we as a field ready to consider whether everything that is practiced en route to, or in, wilderness therapy today foster feelings of autonomy, empowerment and self-worth in our participants? This topic is of utmost importance, not only for afflicted vulnerable youth but also for the standing of our field in the eyes of the public.

A topic that ties closely to relational dignity is the prevalence of coercion in some wilderness therapy programs (Harper, 2017; Tucker et al., 2018). Compulsory treatment may at times be warranted, but we have to ask ourselves, particularly due to the context of wilderness therapy and working where no one can see us, how we can possibly ensure the highest ethical standard in our practice. Arguably, two programs, one where the participants cannot leave, the other where the client can terminate the treatment at any time he or she chooses, operate in

very different ways, particularly with regards to interpersonal, processual and contextual client–therapist relations. In plain, they are fundamentally different approaches to treatment.

If you are new to this field, working in the wild with the aim to support participants' recovery, development and growth can be a personally deeply rewarding experience. Being outdoors removes much of the control, predictability, and structures found in indoor environments, whereby practitioners who are happy to improvise as the intervention unfolds will not only be the most comfortable, but arguably also those providing the best care.

As with other treatment approaches, wilderness therapy should be purposeful, collaborative, and based on a thorough participant assessment and individualized treatment plan. Furthermore, each participant's level of comfort must be monitored, along with a consideration of which outdoor activities may serve their best interests, where the overall principle is to promote self-worth and life efficacy. Facilitators must ensure that they are mindful of practicing within their boundaries of competence. According to Reese (2016) "The more specific the activity, the more remote the location, and greater the physical or psychological risk, the more specific training and expertise the counselor must maintain to ensure client safety in outdoor contexts" (p. 350). When we, despite numerous both inherent and intentional challenges, feel fundamentally safe and genuinely cared for, we are likely to unconditionally share the inherent joy, peacefulness and gratitude as we connect at a deeper level. Provided the time and space to do so, we may restore our relationships with ourselves, with others, and with nature, whereby experiencing healing in a relational context as we venture together into the wild.

References

Becker, S. P., & Russell, K. C. (2016). Wilderness therapy. In R. J. R. Levesque (Ed.), *Encyclopedia of adolescence* (2nd ed.) (pp. 1–10). DOI: 10.1007/978-3-319-32132-5-_387-2

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.

Bettmann, J. E., Gillis, H. L., Speelman, E. A., Parry, K. J., & Case, J. M. (2016). A Meta-analysis of wilderness therapy outcomes for private pay clients. *Journal of Child and Family Studies, 25,* 2659–2673. DOI: 10.1007/s10826-016-0439-0

Bettman, J. E., Russell, K. C., & Parry, K. J. (2013). How substance abuse recovery skills, readiness to change and symptom reduction impact change processes in wilderness therapy participants. *Journal of Child and Family Studies*, *12,* 1039–1050. DOI: 10.1007/s10826-012-9665-2

Bowen, D. J, & Neill, J. T. (2013). A meta-analysis of adventure therapy outcomes and moderators. *The Open Psychology Journal, 6,* 28–53. DOI: 10.2174/1874350120130802001

Caukins, M. C., White, D. D., & Russell, K. C. (2006). The role of physical exercise in wilderness therapy for troubled adolescent women. *Journal of Experiential Education*, *29*, 18–37.

Combs, K. M., Hoag, M. J., Javorski, S., & Roberts, S. D. (2016). Adolescent self-assessment of an outdoor behavioral health program: Longitudinal outcomes and trajectories of change. *Journal of Child and Family Studies, 25*, 3322–3330.

Conlon, C. M., Wilson, C. E., Gaffney, P., & Stoker, M. (2018). Wilderness therapy intervention with adolescents: Exploring the process of change. *Journal of Adventure Education and Outdoor Learning, 18,* 353–366. DOI: 10.1080/14729679.2018.1474118

Davis-Berman, J., & Berman, D. S. (1994). *Wilderness therapy: Foundations, theory & research*. Dubuque, IA: Kendall/Hunt Publishing.

Davis-Berman, J., & Berman, D. (2002). Risk and anxiety in adventure programming. *Journal of Experiential Education, 25,* 305–310. DOI: 10.1177/105382590202500209.

Davis-Berman, J., & Berman, D. S. (2008). *The promise of wilderness therapy*. Boulder, CO: Association for Experiential Education.

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

Drengson, A., & Devall, B. (2008). The ecology of wisdom. Writings by Arne Naess. Berkeley: Publishers Group West.

Fernee, C. R. (2019). Into Nature. A Realist Exploration of Wilderness Therapy in Adolescent Mental Health Care in Norway. Doctoral Dissertation. Kristiansand: University of Agder.

Fernee, C. R., Gabrielsen, L. E., Andersen, A. J. W., & Mesel, T. (2015). Therapy in the open air: Introducing wilderness therapy to the adolescent mental health services in Scandinavia. *Scandinavian Psychologist, 2, e14.* DOI: 10.15714/scandpsychol.2.e14

Fernee, 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, 21,* 114–129. DOI: 10.1177/1049732316655776

Fernee, C. R., Mesel, T., Andersen, A. J. W., & Gabrielsen, L. E. (2019). Therapy the natural way: A realist exploration of the wilderness therapy treatment process in adolescent mental health care in Norway. *Qualitative Health Research, 29*, 1358–1377. DOI: 10.1177/1049732318816301

Gabrielsen, L. E., & Harper, N. J. (2018). The role of wilderness therapy in the face of global trends of urbanization and technification. *International Journal of Adolescence and Youth, 23*, 409–421. DOI: 10.1080/02673843.2017.1406379

Gabrielsen, L. E., Harper, N. J., & Fernee, C. R. (2019). What are constructive anxiety levels in wilderness therapy? An exploratory pilot study. *Complementary Therapies in Clinical Practice, 37*, 51–57. DOI: 10.1016/j.ctcp.2019.08.007

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

Harper, N. J., Gabrielsen, L. E., & Carpenter, C. (2018). Cross-cultural exploration of 'wild' in wilderness therapy: Canadian, Australian and Norwegian perspectives. *Journal of Adventure Education and Outdoor Learning*, *18*, 148-164. DOI: 10.1080/14729679.2017.1384743

Harper, N. J., Rose, K., & Segal, D. (2019). *Nature-based therapy. A practitioner's guide to working outdoors with children, youth, and families*. Gabriola Island: New Society Publishers.

Hill, N. R. (2007). Wilderness therapy as a treatment modality for at-risk youth: A primer for mental health counselors. *Journal of Mental Health Counseling, 29*, 338–349. DOI: 10.17744/mehc.29.4.c6121j162j143178

Hoag, M. J., Massey, K., & Roberts, S. D. (2014). Dissecting the wilderness therapy client: Examining clinical trends, findings, and patterns. *Journal of Experiential Education, 37*, 382–396. DOI: 10.1177/1053825914540837.

Hoag, M. J., Massey, K., Roberts, S. D., & Logan, P. (2013). Efficacy of wilderness therapy for young adults: A first look. *Residential Treatment for Children and Youth, 30*, 294–305. DOI: 10.1080/0886571X.2013.852452.

Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill: Algonquin Books.

McIver, S., Senior, E., & Francis, Z. (2018). Healing fears, conquering challenges: Narrative outcomes from a wilderness therapy program. *Journal of Creativity in Mental Health, 13*, 392–404. DOI: 10.1080/15401383.2018.1447415

Naess, A., & Rothenberg, D. (1989). *Ecology, community and lifestyle*. Cambridge: Cambridge University Press.

Norton, C. L. (2011). Wilderness therapy: Creating a context of hope. In Norton, C. L. (Ed.), *Innovative interventions in child and adolescent mental health*. New York: Routledge.

Norton, C. L., Carpenter, C., & Pryor, A. (Eds). (2015). *Adventure therapy around the globe: International perspectives and diverse approaches*. Champaign: Common Ground Publishing LLC.

Pryor, A. (2018). *Outdoor Adventure Interventions – Young people and adversity: a literature review*. Richmond: Berry Street Victoria Inc.

Reese, R. F. (2016). EcoWellness & guiding principles for the ethical integration of nature into counseling. *International Journal of Adventure Counselling, 38*, 345–357. DOI: 10.1007/s10447-016-9276-5

Roszak, T., Gomes, M. A., & Kanner, A. D. (1995). *Ecopsychology*. San Fransisco: Sierra Club Books.

Russell, K. C. (2001). What is wilderness therapy? *Journal of Experiential Education*, *24*, 70–79. DOI: 10.1177/105382590102400203

Russell, K. C. (2006). Brat camp, boot camp, or . . . ? Exploring wilderness therapy program theory. *Journal of Adventure Education and Outdoor Learning*, *6*, 51–68.

Russell, K. C., & Farnum, J. (2004). A concurrent model of the wilderness therapy process. *Journal of Adventure Education and Outdoor Learning*, *4*, 39–55. DOI: 10.1080/14729670485200411

Selhub, E. M., & Logan, A. C. (2012). *Your brain on nature. The science of nature's influence on your health, happiness, and vitality.* Mississauga: Wiley Canada.

Tucker, A. R., Combs, K. M., Bettmann, J. E., Chang, T-H., Graham, S., Hoag, M., & Tatum, C. (2018). Longitudinal outcomes for youth transported to wilderness therapy programs. *Research on Social Work Practice, 28*, 438–451. DOI: 10.1177/1049731516647486

Williams, B. (2000). The treatment of adolescent populations: An institutional vs. a wilderness setting. *Journal of Child and Adolescent Group Therapy*, *10*, 47–56. DOI: 10.1023/A:1009456511437