

Wilderness Therapy Symposium Research Preconference 2018
Changing the Way We Work: Putting Research to Use
Thursday 8/23/18
9am - 3:00pm

Ellen Behrens, PhD, Licensed Psychologist
 Steven DeMille, LMHC, PhD
 Lee Gillis, PhD, Licensed Psychologist
 Brett Talbot, PhD, Licensed Psychologist
 Tony Alvarez, LMSW

Derek Daley, SUDC
 Michael Gass, PhD, LMFT
 Joanna Bettmann Schaefer, PhD, LCSW
 Anita R. Tucker, PhD, LICSW
 Philip Bryan, student presenter

SCHEDULE

Time	Title	Presenter
9:00-9:20 am	Welcome and Introduction	Anita Tucker & Tony Alvarez
9:20-9:40 am	Overview of Outdoor Behavioral Healthcare	Dr. Michael Gass
9:40-10:00 am	The Role of the Natural World and Mindfulness in the Treatment Outcomes of Wilderness Therapy	Dr. Steven DeMille
10:00-10:20 am	How Adolescents View the Role of the Wilderness in Wilderness Therapy: A Qualitative Analysis	Dr. Anita Tucker & Philip Bryan
10:20 -10:50am	Activity & Discussion, Break	Tony Alvarez
10:50-11:10 am	Parent Y-OQ Data over Four Points of Time: What Impacts Improvement	Dr. Brett Talbot
11:10-11:30am	Exploring the Trajectory of Change over Time in Residential Programs and Its Connection to OBH	Dr. Ellen Behrens
11:30-12:00pm	Activity & Discussion	Tony Alvarez
12:00-1:15 pm	Lunchbreak	Join us outdoors for a lovely lunch in the sunshine!
1:30-1:50 pm	Therapeutic Adventure for Military Veterans with Mental Illness: A Conceptual Model	Dr. Joanna Bettmann Schaefer
1:50-2:10 pm	Adventure Therapy and Experience Scale 5.0: An Update on Its Usage and Availability to Everyone	Dr. Lee Gillis & Dr Keith Russell (in absentia)
2:10-2:30pm	Leading the Message: Taking the OBH Message to a Public that is Increasingly Embracing the Wilderness	Derek Daley
2:30-3:00pm	Activity & Closing	Tony Alvarez & Anita Tucker

The Role of the Natural World and Mindfulness in the Treatment Outcomes of Wilderness Therapy

Dr. Steven DeMille

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Mindfulness has seen growth in popularity as a viable treatment option for mental health disorders. Interest in this concept has grown exponentially in the media and literature over the last two decades. Mindfulness has gone from being a fringe topic of scientific investigation to a psychotherapy model, tool for corporate well-being, widely implemented educational practice and a tool to “building more resilient soldiers” (van Dam et al., 2018). This study explores the impact a wilderness therapy experience can have on a struggling adolescents’ overall mindfulness. Previous studies have identified increased insight and self-awareness as an outcome of participation in wilderness therapy (Reamer & Siegel, 2008). Additionally, a pilot study by Russell, Gillis, and Heppner (2015) found significant improvements in mindfulness scores as measured by the Five-Facet Mindfulness Questionnaire (FFMQ) from participants in an adventure-based substance abuse treatment program for adults. Scores on the FFMQ were strongly correlated with treatment outcome scores in this study. This study explores the impact of a wilderness therapy program on a participant’s level of mindfulness. This study examined the following research question: what is the impact of a wilderness therapy experience on participant’s mindfulness as measured by the FFMQ? Specifically, what is the change in mindfulness scores between admissions and discharge and then between discharge and 6 months post treatment as measured by the full-scale score and 5 subscales.

Methods

Participant in this study were 246 adolescent who participated in an OBH program. Participants in the group received treatment as usual (TAU) with no specific mindfulness activities or practices during treatment. Participants completed the usual wilderness therapy course of treatment at this OBH program. Of the 246 participants full data sets were gathered on 95 participants or 39% of participants. Data for this study was gathered at admission, discharge, and 6 months post discharge. Data for this study was gathered using the Five-Facet Mindfulness Questionnaire (FFMQ).

Analysis

To answer the research question, a one-way repeated measured analysis of variance (ANOVA) was run for each of the subscales and the full-scale score on the FFMQ. A total of 6 ANOVAs were conducted to the full-scale score and for each of the subscales.

Results

The results of the ANOVA indicated a significant time effect, Wilks’ Lambda = .724 $F(2, 93) = 17.745, p < .001, \eta^2 = .278$. Thus, there is significant evidence to suggest a change between time intervals for the full-scale score on the FFMQ. A follow-up pairwise comparison was also conducted on the data. There was a statistically significant increase in FFMQ score between admission and discharge, $p < .001$; and between admission and 6 months post treatment, $p < .001$. There not a significant difference between discharge and 6 months post treatment.

Measure	Admission (SD)	Discharge (SD)	6 Months (SD)	F(p value)
Observe	23.37 (6.14)	24.35 (6.63)	24.87 (6.94)	2.584 (.081)
Describe	25.59 (7.38)	28.19 (5.72)	28.41 (5.25)	7.883 (.001)
Act with Awareness	25.44 (6.32)	27.25 (5.56)	25.86 (6.03)	6.173 (.003)
Nonjudge	27.40 (7.08)	30.22 (5.98)	29.47 (6.75)	9.004 (< .001)
Nonreact	19.35 (4.95)	22.06 (4.37)	23.04 (4.78)	15.571 (< .001)
Full Scale	121.15 (18.07)	132.07 (15.36)	131.66 (17.66)	17.745 (< .001)

Discussion

The FFMQ was used to assess the relative change in mindfulness skills as a result of participation in a wilderness therapy program. Results from this study indicate that mindfulness scores improve from admission to discharge and are maintained 6 months post treatment on the full-scale item. This same pattern was found for the Describe, Act of Awareness, Nonjudge, and Nonreact subscale. No significant difference was found for the Observe subscale. These findings suggest that participation in a wilderness therapy program can provide significant impact on mindfulness skills even when there is not a specific focus on mindfulness skills or practices in the wilderness therapy program.

How Adolescents View the Role of the Wilderness in Wilderness Therapy: A Qualitative Analysis

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The University of New Hampshire

Several wilderness therapy (WT) studies identify the unique elements of wilderness therapy programs, examining how they contribute to the modality's successful outcomes. What has not been clearly determined is the role of the wilderness in a wilderness therapy program for struggling adolescents. The purpose of this study was to conduct an in-depth examination of how adolescent participants in a WT program view the role of the wilderness in their wilderness treatment process.

Methods

To explore how adolescent participants in a WT program perceive the role of the wilderness in their wilderness treatment process a phenomenological research design was used. Phenomenological research is uniquely fashioned to investigate human experiences and behaviors (Wertz, 2005). Phenomenology is used to better understand several individuals experience with a specific phenomenon and lead to generalizations of what an experience is like from an insider's perspective (Leedy & Ormrod, 2010). This method attempts to describe a person's perceptions of a specific experience and leads to a deeper understanding of the features and practices relating to the phenomenon (Creswell, 2009). Levine and Zimmerman (1996) suggest that focus groups with youth acknowledges the participants as the expert in the study and minimize some of the power dynamics present in one-on-one interviews. The aim of the group is to explore the youth's perspective as the expert and is thus likely to have high face validity.

The participants of this study were individuals between the ages of 13 and 17 years who completed treatment at a WT program from June of 2016 to September 2016. Participants were referred for treatment for emotional, behavioral and substance use disorders. There was a total of 25 of participants in the focus groups. A total of 5 focus groups were conducted, each focus group with 4-6 participants. Each focus group took 50-90 minutes with the interview being audio recorded. The interview focused on three main components (a) gain a general understanding of the participants and their experience in this WT program, (b) gain a general understanding of the participants change process while in treatment, (c) explore the wilderness and therapeutic factors that impacted their change and the specific role of the wilderness environment. Each interview was transcribed and deidentified and analyzed by five different individuals involved in the project.

Findings

Specifically looking at the role of the wilderness in their treatment four themes emerged from the analysis of youth's reflections. The first theme expressed by eight of the youth was around how being in the wilderness provided the *Removal from their Home and Distractions*. One youth explained that outside of the wilderness program "there is always a distraction to get your mind off of things. Out here you are faced with those thoughts and emotions and you have to learn to deal with them and challenge yourself with them".

The second them revealed by youth focused on *the physical nature of hiking and getting to the peak of mountains* was a healing experience for them both physically and emotionally. Four of the youth stressed how important this process was for them. One youth shared how hard

it was to climb a mountain, but at the top he reflected how he “wrote a poem and it was a big changing moment for me”. Another youth shared,

“Coming out here, as much as I dislike hiking, hiking was very therapeutic to me because you would start hiking and go through a thought process and when you were done thinking you would be still hiking... Out here I had to work out really hard things and experience hard things and it is the calmness of never being in the same place twice and always moving. It helped me to move forward and not get stuck in one place with hiking or being in a new place and not knowing everything out here, as frustrating as that was for me, I realized that all I need to be concerned about is moving forward and progressing throughout my stay here.”

The third theme shared by 10 of the youth (40%) involved how the wilderness for them provided a *novel environment outside of their comfort zones* was an important part of their healing process. One participant explained how wilderness is “so uncomfortable for me and so different, I guess the feeling of having to adapt made a difference [in me]”. Another youth shared “There is no way to escape the wilderness, and not necessarily running, but if it is windy you can’t go inside a house and be fine. You have to sit there while your tarp rips apart and the fire burns your face off. There is no escaping the snow, you have to deal with that. There is something really healing about being out in the wilderness”.

The final theme shared by eight youth in this study revolved around their *Appreciation for Nature* and now nature itself can be healing. One youth shared how being outdoors in nature taught him “a lot of things, taught me how to be grateful for things, how to use what is available”. Another participant explained how

“I could not imagine inside. All aspects of being outdoors, hiking, sitting on ground, seeing sunrise and sunset and mountains. It all makes you grateful for every part of the earth and you see how beautiful it is. It takes you away from thoughts of the past or future and makes you live in the present and realize the things around you that are beautiful. The people around you. It is all calming”.

Discussion

This study builds upon previous research looking at the key factors of wilderness therapy but goes more in depth at the specific role of the wilderness which has been overlooked or undervalued. With the rise in the overuse of technology and social media by youth, our findings highlight how placing youth in the wilderness provides a context of healing that may not be possible at home. In addition, just being in the wilderness appears to provide youth with a new appreciation of themselves and the beauty of the outdoors, supporting previous theories of the restorative nature of the wilderness. Finally, the novel environment of the wilderness including the changing terrain and weather provide a backdrop that may force youth to work hard both physically and emotionally towards becoming a better version of themselves, as one youth put it “you have to deal with it”. Based on our findings it seems that in the wilderness, youth are given opportunities inherently to increase their self-sufficiency and independence as well their understanding of themselves. Outcomes they may not receive at home in their communities.

Parent Y-OQ Data over Four Points of Time: Consistent Matched Data sets

Dr. Brett Talbot, Redcliff Ascent

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Outdoor Behavioral Healthcare (OBH) has arisen to fill a gap in mental health treatment. Emphasis and the need for collecting longitudinal data have increased for both self-report as well as for informant reports. However, difficulties have arisen getting consistent matched data sets between admit and discharge, and even more difficult for post-discharge follow-ups. The parent report warrants specific attention given their level of observation of the client post-discharge in order to assess meaningful change over time.

Objective

This preliminary analysis sought to identify completion rates of parent report Y-OQ 2.01 at admit, discharge, 6-month, and 12-month post-discharge follow-ups. Further, to identify potential contributors to the successful collection of matched datasets of four data points. Also, a preliminary analysis of Y-OQ 2.01 change scores over time was conducted.

Methods

Parents of students at one OBH program were asked to complete Y-OQ scores at four times, admit, discharge, 6-month and 12-month follow-up. Complete datasets were gathered on 223 participants. A one-way repeated measure analysis of variance (ANOVA) was conducted on the null hypothesis that there is no change in participants' Y-OQ 2.01 scores when measured at the four data points.

Results

A one-way repeated measure analysis of variance (ANOVA) was conducted on the null hypothesis that there is no change in participants' Y-OQ 2.01 scores when measured at admission, discharge, and at two points post discharge from an Outdoor Behavioral Healthcare program (n=223). The results of the ANOVA indicated a significant time effect, Wilks' Lambda = .234 $F(3, 220) = 240.339$, $p < .000$, $h^2 = .766$. Thus, there is significant evidence to reject the null hypothesis.

Follow-up comparisons indicate that not all the pairwise difference was significant. There was a clinically and statistically significant decrease in Y-OQ 2.01 score between admission and all three other data points, discharge, 6 months post treatment, and 12 months post treatment, $p < .000$. There was also a statistically but not clinically significant change between discharge and the two post treatment data points, $p < .05$. There was no clinical or statistical difference between the 6 months and 12 months data point.

Conclusions

This study provides further evidence that participants in an OBH program make significant gains during treatment and that the clinical improvements are maintained after they complete treatment. Also, this study provides evidence that a relationship-based data collection approach influences ability to collect higher rates of matched data sets over longer periods of time.

Therapeutic Adventure for Military Veterans with Mental Illness: A Conceptual Model

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In recent decades, the need for veterans' mental health treatment has risen dramatically. Nearly 26% of all VA primary care clients screen positive for at least one mental health diagnosis (Trivedi et al., 2015). The number of veterans who received VA services for Posttraumatic Stress Disorder (PTSD) rose nearly 300% from 1999 to 2010 (Sayer et al., 2011). Of the concerns noted by veterans, depression was the most prevalent (13.5%), followed by PTSD (9.3%) (Trivedi et al., 2015). Other studies place the rate of depression among veterans even higher: between 15%-20% (Mustillo et al., 2015; Seal et al., 2009). One recent study found a PTSD prevalence of 13.5% among veterans (Dursa, Rienhard, Barth, & Schneiderman, 2014). In addition, veterans of Operation Iraqi Freedom and Operation Enduring Freedom exhibit suicide risk nearly double that of the general population (Bruce, 2010; Ilgen et al., 2012).

While utilization of VA services has risen, a large portion of veterans who could benefit from services are not accessing them (Brown & Bruce, 2016). One study of veterans found that of those who met criteria for depression, anxiety, or PTSD, only 20% sought treatment for their condition (Brown & Bruce, 2016). Perceived stigma around mental health care is commonly identified as a reason for not seeking treatment (Brown & Bruce, 2016; Crawford et al., 2013). A 2013 study found that 16% of veterans with PTSD identified stigma as the primary barrier for treatment utilization (Stecker, Shiner, Watts, Jones & Connor, 2013). Fear of stigma is disproportionately higher among veterans who most need mental health care (Hoge et al., 2004).

Attrition is another major concern: studies show that the majority of veterans who initiate services do not complete the recommended treatment (Monson et al., 2006; Seal et al., 2010). A study reviewing VA services concluded that two-thirds of veterans with PTSD who initiate treatment drop out before treatment completion (Harpaz-Rotem & Rosenheck, 2011).

Given veterans' reluctance to engage in traditional modalities of treatment, the mental health and psychological benefits of nature and adventure-based interventions are of particular interest as a way to address veteran mental health needs. Despite evidence of positive outcomes for veteran participants in therapeutic adventure, research has not explored the mechanisms by which therapeutic adventure impacts veteran's mental health (Ewert, Frankl, Van Puymbroeck, & Luo, 2010; Harper et al., 2014). This presentation presents a conceptual model for how therapeutic adventure may impact veterans' mental health issues.

Adventure Therapy and Experience Scale 5.0: An Update on Its Usage and Availability to Everyone

Dr. Lee Gillis, George College & (Dr. Keith Russell in absentia).
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Despite an increase in research and evaluation in recent years examining the relative effectiveness of AT for youth and young adults, little is known about the AT process. This brief presentation will highlight the history and current status of the Adventure Therapy Experience Scale (ATES) and its potential use in identifying unique factors that are theoretically reasoned to be inherent in an AT experience. The ATES is available at <https://atescale.info>

Research suggest the ATES is an appropriate instrument to use to assess how seven factors (Helpfulness of adventure activity with treatment goals, Mindfulness of treatment goals while on the adventure, Self-Interpersonal, Self-Intrapersonal, Reflection, Nature, and Challenge) effectuate outcome, especially when used in conjunction with the routine outcome monitoring of treatment progress.

Russell, K. C. & Gillis, H. L. (2017). The adventure therapy experience scale: The psychometric properties of a scale to measure the unique factors moderating an adventure therapy experience. *Journal of Experiential Education*, 40(2), 135-152.

Leading the Message: Taking the OBH Message to a Public that is Increasingly Embracing the Wilderness

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Wilderness therapy, also known as Outdoor Behavioral Healthcare (OBH), is the prescriptive use of wilderness experiences by licensed mental health professionals to meet the therapeutic needs of clients (obhcouncil.com). The OBH industry has evolved and the public is ready to embrace this as a widely accepted form of prevention and treatment.

OBH tracks industry data and trend analyses that can be helpful in informing others the current state of the OBH industry, as well as improving collaboration between OBH and NATSAP programs. With a greater understanding, we will be able to communicate to a public that is increasingly embracing wilderness, nature and adventure based activity as a means for health.

This presentation will focus on current trends in the OBH industry and creating enthusiasm to share this powerful form of treatment with professionals and the public. Following the latest research and industry data shared with participants. Participants will engage in discussion regarding the future goals of OBH and collaboration with professionals across the country.