

**WTS Preconference**  
**Closing the Gap: Creating an Evidence Base for OBH**  
**Thursday 8/25/16**  
**9am-12pm, 1:15-2:30 pm**

Steven DeMille, LMHC, PhD  
Joanna Bettmann Schaefer, PhD, LCSW  
Matt Hoag, PhD  
Keith C. Russell, PhD  
H. Lee Gillis, PhD, Licensed Psychologist  
Ellen Behrens, PhD, Licensed Psychologist

Leah Madamba, MS, NCC, LPC  
Jennifer Tibbits, BA  
Anita R. Tucker, PhD, LICSW  
Laura Mills, PhD  
Christine Lynn Norton, PhD, LCSW  
Michael Gass, PhD, LMFT

The purpose of this workshop is to present the latest critical developments in the research on Outdoor Behavioral Healthcare while engaging the audience in meaningful dialogue around research. The workshop will begin with a quick introduction, followed by two separate groups of five minute presentations on new developments in research. Each group of 5, five minute presentations will be followed by a fishbowl discussion between the researchers in which they as well as the participants will be able to critique and discuss the research and its application to the field.

During the session, simple polling technology will be used to gather data from the participants about their own areas of interest. Along with text polling options, pre-conference attendees will have a post-it pad of paper and markers at each table on which they will comment or ask questions after each 5-minute presentation in order to interact with one another and stay engaged.

In the afternoon, the overall focus will be to create a cohesive OBH community in which practitioners and researchers can network and brainstorm next steps to increasing the evidence base of OBH. We will hang the post-it pad that tables have written on around the room, and invite participants to get up out of their seats and interact with the content on the post-it pads. Dr. Christine Norton will facilitate an experiential activity called Pecha Kucha (Japanese for “Chatter” or “Chit chat”) and end with a large group closing utilizing an Energy Stick to demonstrate how we are all interconnected (see: <http://www.sciencealive.co.nz/scienceshop/sci-fi-tube>)

By presenting research, engaging in a fishbowl dialogue and engaging participants in interactive, reflective conversations, the aim of this pre-conference is to highlight both research informed practice as well as practice informed research.

<i>Time</i>		<i>Presenter</i>	<i>Research Title</i>
9:00-9:30	<b>Welcome and Overview to OBH Research Preconference</b>	<b>Neal Christensen</b> , Chair, OBH Research Committee <b>Anita Tucker</b> , OBH Center	
9:30 – 10:10	<b>Hot Topics #1: OBH Outcomes</b>	<b>Joanna Bettmann Schaefer</b> , PhD, LCSW Associate Professor, University of Utah, School of Social Work	Changes in older adolescents and young adults' attachment, separation, and mental health during wilderness therapy
		<b>Steven DeMille</b> , LCMHC, PhD; Research Director, Redcliff Ascent	Treatment Outcomes in an Outdoor Behavioral Healthcare Program: A Control Group Study
		<b>Matt Hoag</b> , PhD, Clinical Director, Evoke Wilderness Therapy at Entrada	Does Change Last Following OBH? A Three Year Follow up
		<b>H. Lee Gillis</b> , PhD, Licensed Psychologist; Professor, Georgia College and State University, Department of Psychology <b>Keith C. Russell</b> , PhD; Professor, Western Washington University, Coordinator of Outdoor Recreation.	Current status of the ENVIROS' Shunda Creek evaluation process including alumni feedback
		<b>Keith C. Russell &amp; H. Lee Gillis</b>	Feedback informed treatment at ENVIROS' Basecamp
10:15-10:30	<b>Fishbowl Discussion of Hot Topics #1</b>	<b>Moderator: Ellen Behrens</b>	
10:30-10:45	<b>Break</b>		
10:45-11:25	<b>Hot Topics #2: Family &amp; Continuum of Care</b>	<b>Leah Madamba</b> , MS, NCC, LPC, Interchange <b>Jennifer Tibbets</b> , BA, Outcomes and Project Manager, Interchange	It Takes a Village: Analysis of How Previous Placement Affects Client Success
		<b>Anita R. Tucker</b> , PhD, LICSW; Associate Professor, The University of New Hampshire	OBH: Its impact on family functioning
		<b>Laura Mills</b> , PhD, Director of Research and Evaluation, Pine River Institute	The Benefits of Family Therapy in Parallel to Youth Treatment
		<b>Christine Lynn Norton</b> , PhD, LCSW, Associate Professor of Social Work, Texas State University – San Marcos	Examining Family Involvement and Outcomes in Outdoor Behavioral Healthcare: A Systematic Narrative Review of the Literature
		<b>Michael Gass</b> , PhD, LMFT; Professor, The University of New Hampshire, Department of Kinesiology, Outdoor Education Program. Director; OBH Center at UNH	Play for Peace as a violence prevention model: Achieving <i>Voluntad y Convivencia</i>
11:25-12:00	<b>Fishbowl Discussion of Hot Topics #2</b>	<b>Moderator: Ellen Behrens</b>	
12:00-1:00	<b>Keynote Presentation</b>	<b>Ellen Behrens</b> , PhD, Licensed Psychologist, Westminster College	Research informed practice, practice informed research and the evidence base. What are they and why bother?
1:00-1:15	Break		
1:15-2:30	<b>Applications of Research</b>	<b>Christine Lynn Norton &amp; all the presenters</b>	Experiential Activity and Dialogue through Pecha Kucha

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**Bettmann, J.E., Tucker, A., Behrens, E., & Vanderloo, M. (Under review). Changes in older adolescents and young adults' attachment, separation, and mental health during wilderness therapy. *Journal of Child and Family Studies*.**

Late adolescence is a time of remarkable change, especially noteworthy for fundamental shifts in primary relationships. Developmental theorists note that a hallmark shift takes place in the bond between the parent and the late adolescent; that bond changes in service of the adolescent's need to form new primary relationships outside the family and construct an independent life (Blos, 1962; Erikson, 1959; Sullivan, 1953). However, a critical mass of research suggests that strong attachment to parents during late adolescence may provide the optimal context within which late adolescents can negotiate healthy separation from parents. This healthy separation may create the strongest conditions to meet the developmental tasks of late adolescence and young adulthood (Bartholomew & Thompson, 1995; Bolwby, 1988; Josselson, 1988; Kenny, 1987; Lapsley & Edgerton, 2002; Levy, Ellison, Scott, & Bernecker, 2011; Mattanah, Hancock, & Brand, 2004; Rice, Cole, & Lapsley, 1990; Rice, Fitzgerald, Whaley, & Gibbs, 1995; Schultheiss & Blustein, 1994).

The study explored changes in young adults' mental health, attachment, and separation from parents during a seven-week wilderness therapy program. Utilizing a longitudinal one-group design, the study examined outcomes of 157 young adults in one wilderness therapy program. This study utilized the Adult Attachment Scale (Collins & Read, 1990), the Outcome Questionnaire-45 (Vermeersch, Lambert, & Burlingame, 2000), and the Psychological Separation Inventory (Hoffman, 1984). Data analysis utilized paired sample t-tests with Bonferroni corrections and linear regression analyses to answer the research questions.

From pre to post treatment, participants reported significant improvement in mental health symptoms and interpersonal relationships, as well as increases in the belief that others can be depended upon. Participants reported less resentment and anger towards mothers from pre to post treatment, but an increase in their needs for approval from fathers. The study details a link between young adults' attachment, independence from parents, and improvement in mental health, suggesting that treatment which targets these links may provide more effective intervention.

Contact Dr. Schaefer if you want a copy of the full manuscript or a list of references at [Joanna.Schaefer@socwk.utah.edu](mailto:Joanna.Schaefer@socwk.utah.edu)

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**Treatment Outcomes in an Outdoor Behavioral Healthcare Program:  
A Control Group Study**

**Steven M. DeMille, Stephen E. Javorski, Anita R. Tucker, & Michael A. Gass**

**Rationale**

Outdoor Behavioral Healthcare (OBH) is growing as a viable treatment option for adolescent struggling with emotional and behavioral problems (Russell, Gillis, Lewis, 2008; Reamer & Siegel, 2008). OBH has been described as the “the prescriptive use of wilderness experiences by licensed mental health professionals to meet the therapeutic needs of clients” that involves outdoor settings and counseling interventions to assess, diagnosis, and treat clients (Gass, et al., 2014, p.1). Research is growing demonstrating that OBH can be effective with struggling adolescents (Bettmann, Russell, & Parry, 2012; Clark, Marmol, Cooley, & Gathercoal, 2004; Lewis, 2013; Magle-Haberek, Tucker, & Gass, 2012; Norton, 2008; 2010a; 2010b; Russell, 2003; 2005a; 2005b; 2008; Russell & Farnum, 2004; Russell, & Sibthorp, 2004; Tucker, Smith, & Gass, 2014; Tucker, Zelov, & Young, 2011; Zelov, Tucker, & Javorski, 2013). However, one of the major critiques of the growing body of OBH literature is the lack of a comparison group (Reamer & Siegel, 2008). This control group outcome study attempts to fill in this gap by following-up on treatment outcome one-year post treatment.

**Methods**

The treatment group (TG) in this study received treatment at an accredited OBH program. Participants in the comparison group (CG) were individuals who inquired into OBH treatment for an adolescent; however, decided to provide clinical services in a community setting (i.e. outpatient therapy, medication management, short-term psychiatric hospitalization). Participants in each condition completed the Youth-Outcome Questionnaire 2.01 (Y-OQ 2.01) at admission and one year later. In addition, participants completed a questionnaire to gather demographic information at one year.

The study sample included 147 adolescent clients in the TG and 60 adolescents in the CG. Participants were between the ages of 13 and 17 ( $M = 103.6$ ,  $SD = 29.2$ ) who enrolled in an OBH treatment program between January 2012 and December 2015. A majority of the clients were male (65.7%) and Caucasian (86.2%). The average length of stay for participants was 79.8 days ( $SD = 24.2$ ).

**Findings**

Because randomization was not possible with the treatment and comparison group, an Ordinary Least Square (OLS) regression model was created to estimate YOQ 2.01 score at 1 year follow-up controlling for admin Y-OQ scores, age at admission, ethnicity, and gender. Three of the four criteria were not significantly difference between the treatment and control group (admins Y-OQ scores, ethnicity and gender). There were not significant differences between treatment and control groups on gender ( $X^2(1)=.210$ ,  $p=.647$ ), ethnicity ( $X^2(1)=2.57$ ,  $p=.11$ ), or symptom severity at intake/contact significant ( $t(205)=-1.04$ ,  $p=.301$ ). While there was a significant difference of 1.4 years in mean age at treatment intake/initial contact ( $t(205)=7.62$ ,  $p<.001$ ), the estimated effect of this difference was clinically insignificant.

The multiple regression model was significant ( $F(5, 186) = 14.921$ ,  $p < .001$ ). Gender, ethnicity, and age at intake/contact were not significant predictors of YOQ 2.01 scores at 1 year follow up, controlling for all other variables in the model. On average, clients with higher YOQ

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scores at intake were estimated to have higher YOQ scores at one year follow up ( $B=.49, p<.001$ ) controlling for ethnicity, age, gender, and treatment condition. On average, participating in OBH treatment was associated with a one year follow up YOQ score that was about 36 points less than the non-OBH control group ( $B=-36.05, p<.001$ ) controlling for all other variables in the model. This difference was clinically and statistically significant.

**Summary**

This study is an important contribution to the growing body of literature on the effectiveness of OBH. The result of this study show that participants who received treatment in an OBH program are reporting at one year follow-up, significantly lower levels of distress than those who received treatment in a community treatment setting. Further replication of this study is needed; however, this study is an important contribution to the effective research on OBH programs.

References can be obtained from Dr. DeMille at [steved@redcliffascent.com](mailto:steved@redcliffascent.com)

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**Does Change Last Following OBH? A Three Year Follow up**

**Matt Hoag, Ph.D.**

Research in Outdoor Behavioral Healthcare (OBH) has been building momentum and has demonstrated consistent outcome over the last twenty years (Combs et al., 2015; Russell, 2003, 2005; Tucker et al., 2011). However, studies examining longer-term follow up have been infrequent and often suffered from challenges of attrition (Russell et al, 2008). This study sought to correct several challenges in past research by doing a longer follow up of 3 years and improving attrition rates. We examined outcome with adolescents, young adults, and their parents following treatment in a wilderness program (Combs et al, 2015; Hoag et al., 2013). We continued to use the Youth Outcome Questionnaire<sup>®</sup> 2.01 (Burlingame et al., 2001), Youth Outcome Questionnaire<sup>®</sup>-Self Report 2.0 (Wells et al., 2003), and the Outcome Questionnaire<sup>®</sup>-45.2 (Lambert et al., 2004) as our outcome measures; measures that are brief, sensitive to change over time, and demonstrate reliability and validity.

We completed a random sample of participants for our 3 year follow up and were able to obtain decent attrition rates. Outcome demonstrated that adolescents (N = 90) remained in the “normal” range of functioning as measured by the Y-OQ<sup>®</sup> - SR (average score of 42) consistent with 6 and 18 month follow up data. Similar results were found with young adults (N = 62, OQ<sup>®</sup> = 49) and from parent report (N = 175, Y-OQ<sup>®</sup> = 45).

This presentation will review these results in detail, discuss the relevance of this outcome data for the field of OBH, and provide suggestions for improving outcome research in wilderness therapy. Few researchers in OBH have provided long-term follow up data, and the importance of additional follow up data in building the foundation of research in this field will be discussed.

You can contact Dr. Hoag about his research at [matt@evoketherapy.com](mailto:matt@evoketherapy.com)

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**CURRENT STATUS OF THE ENVIROS' SHUNDA CREEK EVALUATION PROCESS INCLUDING  
ALUMNI FEEDBACK**

**H.L. (Lee) Gillis and Keith C. Russell**

This document serves as a progress report for Drug Treatment Funding Program (DTFP) funded by Health Canada, and through continued support from Alberta Health Services. An introduction provides a broad overview of the context of the current project. The report addresses progress made on the aims of the project and presents year-one results that seeks to address the following questions:

- 1) What aspects of the Shunda Creek Program (Shunda) experience contribute to longer term post treatment outcomes?
- 2) What is the role of the community culture of Shunda in post-treatment harm reduction and/or sobriety?
- 3) How might gains in mindfulness resulting from the adventure experiences during Shunda Creek's programming contribute to harm reduction and/or sobriety?
- 4) What are the added benefits of "booster shot" alumni programs in supporting sobriety?

Alberta Health Services and Enviros are committed to adhering to evidence supported practice. The critical nature of this evaluation is to ensure that the Shunda Alumni program is meeting the needs of our post-treatment clients and to gain a greater understanding of post-treatment issues that compromise client sobriety for the long term. Through our partnership with Alberta Health Services we are able to work together in inviting past clients to participate in the evaluation wherever they live in the province.

The Shunda Creek program, one of several programs offered by Enviros, is an adventure-based addiction treatment program located 200 miles north of Calgary outside of Rocky Mountain House, Alberta, Canada. The program is funded through the Government of Alberta Safe Communities Initiative and is a partnership with Alberta Health Services (AHS). AHS staff screen and assess young adult clients and provide transition and after care outpatient services. AHS also provides coordination, program development support and links with the overall (provincial) Safe Communities Young Adult Treatment Program. This ten-bed program serves males ages 18-24 and focuses on substance use disorders (SUDs) and co-occurring SUD and mental health issues that require residential treatment and support as determined by Alberta Health Services. Where possible, Shunda involves the family system in its addiction treatment process. The goals of the program are to increase client's levels of self-awareness regarding addiction and issues underlying, increase and strengthen client's personal volition and self-determination and, to support clients in building supports for a healthy recovery (including within family and with community systems). The program accomplishes these goals through the use of experiential learning, outdoor education and community-based experiences.

The 32 clients who have been contacted and the results support the following conclusions that can be used as a framework to guide future data collection as well as practice in working with clients after they leave Shunda Creek.

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1. Clients are doing well at the time of follow-up, but have had their challenges readjusting to their daily lives and in their struggles with substance use and misuse. This is supported by their numerical ratings on how well they feel they are doing, qualitative comments provided in the assessment, and validated by their OQ scores which do not statistically differ from their discharge scores, suggesting maintenance of the progress they have made during treatment.
2. By self-report, the transition period went fairly well for 24/32 clients (75%), and not well for 8/32 clients (25%). Of particular interest and a result that needs to be examined more critically, is the time when the relapses have occurred to be better positioned to offer support services during this high risk window. The reasons for this and the subsequent factors surrounding why this is so will be important to track to look for patterns and themes especially as they relate to employment and relationships after leaving Shunda Creek..
3. Given the yes/no nature of the relapse question we posed to alumni, they do report relapsing after they leave Shunda Creek and are handling in different ways. Given that this assessment averaged over 1.5 years posttreatment, this finding is not surprising. As the database gets larger, we will be able to see trends and patterns and develop strategies to help clients understand triggers and situations that place them at greater risk of a more serious relapse. This is one of the primary aims of this project.
4. Client ratings of their overall health varied, but a trend was emerging in that they are struggling with relationships with peers and significant others and in using their leisure time more beneficially. This may be an important area to explore in the creation of aftercare plans.

For more information on this project you can email Lee Gillis at [lee.gillis@gcsu.edu](mailto:lee.gillis@gcsu.edu) or Keith Russell at [Keith.Russell@wwu.edu](mailto:Keith.Russell@wwu.edu)

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**FEEDBACK INFORMED TREATMENT AT ENVIROS' BASECAMP**

Keith C. Russell & H. L. (Lee) Gillis

This data comes from the 2015 fiscal year-end report for the Base Camp (BC) Progress and Outcome Monitoring Project in conjunction with the Drug Treatment Funding Program (DTFP) funded by Health Canada, with continued support from Alberta Health Services and ENVIROS-Base Camp Program. Alberta Health Services and ENVIROS are committed to adhering to evidence supported practice. Though in operation for decades, Base Camp was newly redesigned and in August of 2005 began operating as an adventure therapy-based addiction treatment program for youth and their families. The program works with up to ten youth and their families, for a period of three months, to support the youth in their addictions, and the family in healing as a unit.

Base Camp staff and the evaluators and authors of this report met on three occasions to begin the process of developing relationships with the key stakeholders and to establish rapport with program leadership and staff. This also afforded the evaluators to learn more about the program structure and framework and to facilitate discussions on appropriate evaluation protocol and instrumentation. From these discussions emerged a methodological approach unique to BC and utilization-focused tools and instruments that could be used to track key process and outcome variables given this program architecture, treatment approach, and intended outcomes. This approach was implemented in December of 2015 with support and guidance from the evaluators checking in with the Program Director and key staff on regular video conferences.

The preliminary finds from this evaluation project suggest:

1. Clients are entering treatment with significant psychological and emotional symptoms that warrant treatment, including substance use and misuse that is extensive and should be the focus of treatment.
2. Clients are showing statistically, clinically, and practically significant improvement, with large effect sizes reported as a result of treatment. These positive outcomes are identified as early as the third week of treatment, which are then maintained and further developed throughout the course of treatment, where clients are discharging below the clinical cut score of normalized populations of adolescents.
3. Clients are developing mindfulness skills as a result of the treatment experience at BC, which are reasoned to be related to this symptom reduction, and which could be the focus of further analysis as the database develops to examine a statistical relationship between this skill development and treatment outcome.
4. Client self-report assessments of programmatic elements also shows consistent and positive improvement and could also be the focus of future analysis to identify how these programmatic elements change through time, and which ones are differentially more important than others.

Future research and evaluation will focus on tracking treatment outcome posttreatment for the clients contained in this database and in identifying and establishing relationships between program elements and symptom change and reduction.

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**It Takes a Village: Analysis of How Previous Placement Affects Client Success**

Leah Madamba and Jennifer Tibbitts

**Background and Purpose**

While wilderness attendance occurs prior to some residential treatment centers and therapeutic boarding school placements, there exist a smaller percentage of clients who are completing only wilderness prior to these placements. This study will analyze data from five different long-term residential facilities to better understand the continuum of care clients experience. This study will focus on the combined impact of wilderness, inpatient, and outpatient therapies on program completion and length of stay at residential settings.

**Methods**

The authors will utilize a two-year span of data for five long-term residential treatment facilities, which are part of one parent organization. This study will utilize the NATSAP Parent Questionnaire, which is completed at the time of admission from 98% of parents. The NATSAP Questionnaire collects demographic data, including information on previous placement types the family utilized prior to admitting their child into residential treatment.

This potential sample size includes over 900 parent responses. Authors plan to isolate two independent variables: “Type of Placement” and “Number of Previous Placement Types Used.” It is important to note that this study will not focus on the *number of times* the clients are placed within certain treatment options, rather on the *number of types* of treatment that families used before choosing a residential treatment option for their children. The authors propose using a subset-variable of “Type of Placement” called “Non-Attendee versus Attendee” to begin to examine the individual strength and influence of treatment types upon program completion. The authors hope to correlate the length of stay in residential treatment with these two independent variables and the subset variable.

To avoid the problem of subjectivity which commonly occurs when using “program completion” as the dependent variable, the authors propose a “program completion” length of stay of greater than 180 days based on the information that the average program length of stay across all five programs is 270 days. This means that the sample sizes will include only those clients who have completed the program and and that any clients who are found in the dataset that are currently enrolled in residential treatment will be ruled-out when determining program completion.

**Discussion and Implications**

The intent of the study is to disprove the hypothesis that the type of placement or the number of previous placements show significant impact on a client's ability to successfully complete a residential program. This analysis may provide insight into the limited efficacy of the healthcare continuum. It may also bring to light more granular questions about the details of which types of treatment impact a client's individual treatment successes. At a minimum, the authors want to use this data and analysis to spark a discussion around the idea that it is the family's combined treatment continuum that impacts a family's treatment success, and not just one individual type of program. Going forward, this study could help shift the entire field's focus more on the concept of an industry-wide treatment team, rather than concentrating on the efficacy of any one particular type of treatment.

For more information on this research you can contact Leah Madamba at [leahm@interchange.com](mailto:leahm@interchange.com) and Jennifer Tibbets at [jennifert@interchange.com](mailto:jennifert@interchange.com)

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**Outdoor Behavioral Healthcare: Its Impact on Family Functioning  
Anita R. Tucker, Meg Paul, Jessa Hobson, Maggie Karoff, & Michael Gass**

The use of Outdoor Behavioral Healthcare (OBH) as a viable treatment modality for adolescents with behavioral, emotional, and substance use issues has been gaining increased attention. This research builds upon the literature by utilizing a longitudinal study to explore clinical changes, measured using the Youth Outcome Questionnaire (YOQ), and changes in family functioning as measured by the general functioning scale of the Family Assessment Device (FAD). Both clinical and statistical significant positive results with youth, mothers, and fathers at points of intake, discharge, and six months post discharge were found however parent and youth reports differed especially at six months post discharge.

In addition, regression analyses showed that mothers and youth were more aligned than fathers in their perceptions of changes in family functioning post OBH treatment. This research fills a gap in the behavioral healthcare literature concerning the outcomes of using wilderness therapy and their association with family involvement in maintaining clinical change and improved family functioning.

Article Reference:

Tucker, A., Paul, M., Hobson, J., Karoff, M., & Gass, M. (2016). Outdoor Behavioral Healthcare: Its impact on family functioning. *Journal of Therapeutic Schools and Programs*, 8, 21-40. doi: 10.19157/JTSP.issue.08.01.05

A copy of this article is available at:

[https://www.natsap.org/Public/Events\\_News/News\\_Media/NATSAP\\_Journals.aspx](https://www.natsap.org/Public/Events_News/News_Media/NATSAP_Journals.aspx)

For more information about this research contact Anita Tucker at [anita.tucker@unh.edu](mailto:anita.tucker@unh.edu)

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**Examining Family Involvement and Outcomes in Outdoor Behavioral Healthcare: A  
Systematic Narrative Review of the Literature**

**Christine Lynn Norton, PhD, LCSW**

**Objective:** To perform a systematic narrative review of the current state of family involvement and outcomes in outdoor behavioral healthcare (OBH).

**Rationale:** The family system is an integral part of adolescents' "social, emotional and behavioral well-being" (Harper and Cooley, 2007, p. 393). The health and functioning of the family system can play an important role in an adolescent's development into adulthood (Coady and Lehmann, 2008). According to Diamond and Josephson (2005), "engaging parents in the treatment process and reducing the toxicity of a negative family environment can contribute to better treatment engagement, retention, compliance, effectiveness, and maintenance of gains" (p. 872). Though early OBH research showed that youth who participated in outdoor behavioral healthcare programs reported improved family relationships (Russell, 2000), it was originally thought that these programs only treated the adolescent who attended the wilderness program (Harper and Cooley, 2007). However, current research on OBH programs has begun to show the need for "more intentional and direct involvement of families in the change process...to help families address issues preventing effective family functioning" (Harper et al., 2007, p.126). Likewise, Becker (2010) called for family involvement in wilderness treatment as an ethical component of best practices. Therefore, a review of current research on family involvement and outcomes in outdoor behavioral healthcare was deemed relevant.

**Research Question:** Earlier research has asked the question how can OBH enhance relationships between family members when the treatment is residential, resulting in a separation between the adolescent and the parents (Bettmann and Karikari, 2012). By examining the literature on family involvement and outcomes in OBH, this systematic narrative review seeks to consider clinical applications and best practices in order to answer this important question.

**Methods:** The study was based on a narrative synthesis approach. Studies were systematically searched through the electronic databases PsycINFO, ERIC, Scopus and Google Scholar. The keywords family, adventure therapy, adventure-based counseling and outdoor behavioral healthcare were searched. Results were limited to Scholarly (Peer Reviewed) Journal articles between 2001-2016. Results included qualitative, quantitative, mixed methods, case study and theoretical studies. The articles were grouped into four main categories: 1) family involvement in adolescent treatment in OBH (N=11); 2) impact of OBH on family functioning (N=); 3) family adventure therapy and multi-family group adventure therapy (N=4), which returned 23 studies in total.

**Results:** Preliminary analysis of the three major categories of family-based OBH research yielded different themes and results.

**Family Involvement in Adolescent Treatment:** Upon further analysis, the articles reviewed in this category were broken into three sub-categories: prevalence; parent perspectives on adolescent severity and outcomes; and practice considerations.

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**Prevalence:** Based on a follow up survey of OBH programs by Russell, Gillis & Lewis (2008), the prevalence of family involvement in OBH adolescent treatment actually went down from their original survey in 2001. Interestingly, so did the amount of financial assistance provided to families to offset the cost of OBH. Rates have not been calculated in this same way since.

**Parent Perspectives on Severity and Outcomes:** It is important to know what the research shows about how parents perceive their child's severity at intake, as well as their perceptions regarding OBH treatment outcomes. Not surprisingly, parents of transported youth report higher severity at intake (Tucker et al, 2015). Combs et al's (2016) study examining parent perspectives showed that parent intake scores and attachment disorders were predictive of in-treatment change. The study also showed that parent perceptions of treatment gains and adoption status were significant predictors of functioning post-discharge. Overall, Gillis et al's meta-analysis (2016) showed that parent Y-OQ effect sizes were higher for wilderness programs, compared to adolescent Y-OQ effect sizes which were higher for non-wilderness programs.

**Clinical Considerations:** Several articles demonstrated the importance of the family's therapeutic process in order to support adolescent clinical growth (Bolt, 2016). Norton's (2010) case study research on adolescent depression and wilderness therapy focused on the importance of family dynamics, and she referred to wilderness therapy as a holistic intervention involving multiple systems, most importantly the family. Research in this area has also examined effective practice models for engaging parents in the treatment process, as well as aftercare. Narrative family therapy approaches (DeMille & Montgomery, 2016) and family sculpting and reflecting (Faddis & Cobb, 2016) have been shown to be promising practices for engaging families and facilitating systemic change. Furthermore, participatory action research provided insight into the entire treatment journey from initial referrals to treatment to aftercare from the parent perspective (Cohen & Zeitz, 2016), which showed the importance of a collaborative and efficient continuum of care for youth in OBH and residential programs. Bolt's research reaffirmed this finding and made the case for the therapeutic value of longer-term, residential therapeutic schools and programs upon discharge.

**Impact of OBH on Family Functioning:** Harper et al's (2007) study showed significant positive changes assessed 2-months post-OBH treatment in family functioning, with minor deterioration 12-months post-treatment. Harper and Russell's (2008) mixed methods study provided evidence that OBH provides youth and families with a meaningful separation that creates distance from negative family and social relationships, which can aid in the adolescent treatment process. Several studies have also looked at the impact of OBH on attachment relationships, finding improvements in anger reduction and emotional connection, yet a decrease in trust and communication (Bettmann & Tucker, 2011). This deterioration in trust was reaffirmed in later qualitative research that delved deeply into adolescent feelings towards their parents during the OBH treatment process (Bettmann, Olson-Morrison, & Jaspersen, 2011). However, recent research has shown that wilderness programs can have a positive impact on family relationships, especially in the realm of improved family communication (Liermann & Norton, 2016). This seems to be related to providing parents with the same direct skill-building tools and experiences that adolescent clients receive. Tucker et al's (2016a) research also shows that when families engage in experiential learning together, new learning and growth results from these shared experiences. Finally, the most definitive study to date shows that youth in OBH report significant improvements in family functioning after participating in OBH, with changes sustained 6-months post-treatment (Tucker et al, 2016b).

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**Family Adventure Therapy and Multi-Family Adventure-Based Group Work:** The research in this area focuses mainly on the use of adventure therapy with families either as adjunctive or primary treatment. Case study research has shown adventure family therapy to be a viable primary practice model in outpatient treatment (Bandoroff, 2003; Lung, et al, 2015). Quasi-experimental research has also shown family adventure therapy to be an effective adjunctive treatment modality, often implemented through family camps, to promote family efficacy, adaptability and cohesion, as well as reduce child behavior problems, when compared to family therapy alone (Wells, Widmer & McCoy, 2004; McLendon, et al, 2009). Swank & Daire (2010) provided a theoretical rationale for the therapeutic benefits of integrating multi-family group therapy and adventure-based counseling. Interestingly, though most OBH programs target the adolescent or young adult as the identified client, Tucker et al (2016) call for an integrated model of family therapy and OBH and more family adventure therapy programming.

**Implications for OBH:** This review of the research shows that family involvement is a critical area of programming that OBH programs must include. Engaging the family in OBH treatment may help resolve potential conflicts between parents and youth by finding common treatment goals, which may have utility in increasing treatment retention (Gopalan, et al, 2010). Improvements in family functioning lead to more sustained treatment outcomes (Schleider, et al, 2014). Therefore, OBH programs need to find direct ways for families to be involved in the treatment process, and promote opportunities for family adventure therapy to help parents and children experientially practice new skills together. This may help address the negative impact on aspects of the attachment relationship, and promote more relational interventions in OBH, as called for in earlier research (Bettmann, Olson-Morrison & Jaspersen). Finally, this systematic narrative review demonstrates the need for a collaborative and efficient continuum of care for youth and families in OBH and residential programs.

**Limitations:** It is important to note that findings from a systematic narrative review lack the rigor of a formal meta-analysis. According to Green, Johnson & Adams (2006), “one of the cautions that one must consider with literature reviews is the bias that is often associated with them;” however, this researcher utilized appropriate research techniques to minimize bias to increase objectivity such as reviewing the literature with the help of a graduate research assistant in order to establish inter-rater reliability. However, this study lacks standardization and verification of the validity of the criteria for the articles included; however, this researcher followed minimum acceptable criteria for narrative overviews per Green, Johnson and Adams’ guidelines. As such, the findings from this study are not generalizable, but still provide a context and a rationale for future research in this area.

**Areas for Future Research:** Future research is needed to assess the impact that OBH has on family functioning on a larger scale from the parent perspective. Furthermore, given the facts that adoptive youth are disproportionately represented in OBH and other residential programs and that adoption status is a significant predictor of functioning post-discharge, OBH needs to focus more on the treatment needs and outcomes of adopted families (Bettmann, Freeman, & Parry, 2015; Combs, et al, 2016). There is also a need for additional research to explore other aspects of OBH beyond family functioning, including family adventure therapy practice models, and the use of multi-family group work in OBH.

**References can be acquired from Dr. Norton at [cn19@txstate.edu](mailto:cn19@txstate.edu)**

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**The Benefits of Family Therapy in Parallel to Youth Treatment**

**Laura Mills**

At Pine River Institute, we aim to improve the physical, mental, relationship, and behavioural health of our clients. For our youths, we foster the maturity required to face everyday challenges, academic hurdles, and future endeavors. The families of our youths are also expected to engage in therapeutic work that parallels the efforts of their child. Our whole-family approach encourages communication, understanding, trust, amicable decision-making, and healthy boundaries. These systemic changes are designed to make room for immediate and sustained therapeutic impact.

We have long believed in the benefits of our family program, and have recently started to examine some data to explore our beliefs. Specifically, we used multiple regression to learn whether parental attendance and engagement impact youth treatment outcomes across internalizing and externalizing problems. We did these analyses, controlling for factors we have long known to impact treatment success (i.e., treatment progression, sex, and age).

We found that treatment completion is a key catalyst for improvements across internalizing and externalizing problems; that younger youths experience more reduction on internalizing problems than older youths; and that parental engagement in the therapeutic process was a predictor of improvements on internalizing problem, over and above simple attendance at family group sessions.

We consider these findings preliminary and have just begun dialogue on how this information can be used to optimize treatment for all youths. That said, we feel that this information indeed validates our investment in our formal and structured family program.

For more information about this research email Laura Mills at [laura@lauramillsconsulting.com](mailto:laura@lauramillsconsulting.com)

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**Play for Peace as a violence prevention model: Achieving Voluntad y Convivencia**

**Michael A. Gass**

Violence prevention is a key focus for many intervention programs, yet little is known about how or why certain programs are able to successfully produce effective prevention efforts. The purpose of this study was to identify the essential elements of the Play for Peace (PFP) program, how it creates change in participants, and how it is successfully implemented in communities. Using an intrinsic case study research design (Stake, 1995), data was collected from participant observation and interviews and systematically sorted and triangulated to identify patterns and generalizations (Yazan, 2014). Based on these findings, a multi-level experiential learning model emerged. This model focused on empowering individuals to be actively contributing and civically responsible citizens, striving with a strong will to achieve and maintain the peaceful coexistence of a nonviolent community (i.e., a culture of “*voluntad y convivencia*”). Recommendations on how to expand the positive effects of the PFP program are discussed

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