

# Two Years Later: A Qualitative Assessment of Youth Well-Being and the Role of Aftercare in Outdoor Behavioral Healthcare Treatment

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**ABSTRACT:** This study evaluated youth well-being 24-months after the conclusion of outdoor behavioral healthcare (OBH) treatment and explored how youth transition to a variety of post-treatment settings. OBH treatment involves integrating clinical treatment approaches with wilderness expeditions that average over 50 days. Transition from OBH treatment often requires that youth and family utilize aftercare services, which are typically: (a) outpatient services, which are comprised of individualized, group or family therapy, or (b) residential services, which are comprised of residential treatment centers, therapeutic boarding schools, and others. The results suggest that 80% of parents and 95% of youths perceived OBH treatment as effective, the majority of clients were doing well in school, and family communication had improved. Aftercare was utilized by 85% of the youths and was perceived as a crucial component in facilitating the transition from an intensive wilderness experience to family, peer and school environments. Results also indicated that many continued to use alcohol and/or drugs to varying degrees, had legal problems, and still had issues forming friendships with peers. OBH treatment was perceived as being a necessary and effective step in helping youths address, and eventually overcome, emotional and psychological issues that were driving destructive behavior prior to OBH treatment.

**KEY WORDS:** adolescent treatment; wilderness therapy; outcome; aftercare services.

## Introduction

Outdoor behavioral healthcare (OBH) treatment programs are an alternative treatment choice for parents, mental health practitioners and school counselors searching for ways to reach troubled youth exhibiting problem behaviors. OBH programs use extended wilderness expeditions that are integrated with a clinical treatment model. Common program elements include healthy exercise and diet through hiking and physical activity, psycho-educational curricula, solo and reflection, and individual and group therapy sessions that facilitate a

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form of therapeutic alliance among youth, therapists and wilderness leaders that is unique in mental health practice (Russell, 2002). Studies have reported two types of outcomes from participation in OBH programs that have been corroborated in meta-analyses: (a) personal development, including enhanced dimensions of self-concept and a more internalized locus of control (Hans, 2000; Hattie, Marsh, Neill, & Richards, 1997), and (b) interpersonal development and the development of appropriate and adaptive social skills (Hattie et al., 1997).

Though OBH programs have in the past reported positive outcomes at discharge from treatment (see Bendoroff & Scherer, 1994; Bennett, Cardone, & Jarczyk, 1998; Castellano, 1992; Russell, 2003), questions remain as to how these outcomes manifest in family, peer and school environments (Hattie et al., 1997; Winterdyk & Griffiths, 1984). Also, follow-up procedures and aftercare services are rarely reported in longitudinal studies, making it difficult to interpret how and to what degree these services facilitate post-treatment outcomes. This is especially important because aftercare services have been identified in several studies in residential and OBH treatment as critical to the maintenance of outcomes (Edgmon, 2002; Harmon Lantinga, & Costella, 1982; Lash & Blosser, 1999). Aftercare services are defined in this study as: (a) residential aftercare facilities, which include therapeutic boarding schools, group homes, or residential treatment facilities, and (b) outpatient aftercare services, which include individual and group outpatient counseling, Alcoholics Anonymous or Narcotics Anonymous meetings, or school-based interventions.

Youth participants on average showed significant reductions in behavioral and emotional symptoms in a recent longitudinal study of treatment outcomes using the Youth-Outcome Questionnaire (Y-OQ) (Russell, 2003). Follow-up assessments showed study participants maintained outcomes 12 months after the completion of treatment. Results also indicated no statistical differences in scores at 12-months between youths that had utilized residential aftercare services<sup>1</sup> and those that had returned home (Russell, 2003, p. 376). These findings were interpreted with caution because data available at the 12-month assessment period were based on projections made at discharge that categorized youths as having *planned* to attend aftercare or return home. These recommendations were based on post-treatment evaluations made by therapeutic staff and parents at

<sup>1</sup> Aftercare was defined as enrolling in or being placed in a: (a) residential treatment facility, (b) inpatient hospitalization, (c) therapeutic boarding school, or (d) halfway house outside of the primary care givers residence.

each program. Two issues emerged from interpreting the findings of this study: (a) the extent to which youths who had planned on attending aftercare *actually* utilized these services, and (b) the extent to which youths who returned home may have participated in aftercare services, such as outpatient counseling or Alcoholics Anonymous (AA) meetings.

The purpose of this study was to address these issues by examining more carefully the aftercare process of youths who participated in the study conducted by Russell (2003). The primary goals were to: (a) assess youth well-being 24-months post-treatment using interviews with parents, and where possible, youth contact, focusing inquiry into general well-being, school performance, communication and interaction within the family, substance use and legal troubles, and youth activities and peer relations; (b) assess parent and youth perceptions of how effective OBH treatment was for their child through reflection on the process, and (c) assess the role of aftercare in facilitating youth well-being throughout the 24-months post-treatment. It is proposed that this qualitative inquiry may lead to an increased understanding of how outcomes identified through quantitative assessment are manifest in post-treatment environments. This may in turn lead to a better understanding of the transition process between OBH treatment and residential or outpatient aftercare services.

### Method

A naturalistic research design using a case study approach guided the study of the aftercare process of adolescent youths and their parents who completed OBH treatment (Erlandson, Harris, Skipper, & Allen, 1993; Yin, 1993). The study population included 144 adolescents, and their parents, who were enrolled in OBH treatment between May 1, 2000 and December 1, 2000 that had completed Y-OQ assessments at admission, discharge, and the 12-month follow-up period. Y-OQ scores were used in this study to further analyze differences across groups that emerged from the findings in the follow-up phone interviews.

Parents were first contacted using the last known phone number provided by programs. A total of 88 parents agreed to participate in the study, yielding a response rate of 61%. Four parents refused to participate. The remaining 52 parents could not be reached because their past phone numbers were no longer in service and current phone numbers could not be located. Seventy-eight parents gave us consent to contact their children and we were able to interview 47 of these 78

youth (60%). (Seven refused to participate, and 24 were not reachable.) Youth demographics for this sample appear in Table 1, which also show Y-OQ scores at admission, discharge, and 12-month follow-up reported by Russell (2003).

#### Procedures

Two graduate students with clinical training and experience working with adolescents conducted the interviews. Interviews were designed to be short (15–20 minutes) so as not to burden respondents. Clearly specified questions using quantitative formats were used to elicit short evaluative responses that were easily and accurately recorded by the interviewers. Parents were asked to describe the current well-being of their child and their use of aftercare services in the previous 24 months. (See Table 2 for examples of themes and associated questions). Youths were asked the same questions as parents, but focused on their perspective of each of the themes. Ten practice

**Table 1**  
Y-OQ Scores at Admission, Discharge, and 12-months for  
Parents and Their Child Interviewed for the Study at  
24 months

Variable	Frequency	M	SD
Age	88	16.1	1.02
Gender			
Male	59 (67.0%)		
Female	29 (33.0%)		
Y-OQ Scores—Parent			
Admission	88	98.04	28.9
Discharge	88	41.39	33.4
12-month	88	45.79	38.1
Y-OQ Scores—Youth			
Admission	47	69.59	29.1
Discharge	47	48.09	34.4
12-month	47	41.04	29.1

Note: Y-OQ = Youth Outcome Questionnaire (Burlingame, Wells, & Lambert, 1995).

**Table 2**  
Themes, Example Questions, and Example Responses from Interviews of Parents and Youths at  
the 24-month Follow-up Period

Themes	Example question	Example response
Youth well-being	In your opinion, how is your child currently doing?	<i>He is doing fine right now</i>
OBH effectiveness	Was OBH treatment effective for your child?	<i>Yes, I believe it was</i>
Aftercare	Did your child utilize aftercare after OBH?	<i>Yes, he did. He spent 9 months at an alternative school immediately after he completed [program]</i>
Aftercare effectiveness	Was aftercare effective for your child? Why or why not?	<i>Yes, it was effective. He needed more structure and he needed to continue the work that he started at [program]</i>
Family communication	How is communication in the family right now?	<i>It's ok, we are still having some issues with [youth]</i>
School	How is your child doing in school right now?	<i>He is doing OK. He graduated from high school but is not currently in college, he is just working</i>
Scaled OBH treatment effectiveness	On a scale of 1–10, with 1 being lowest, how effective do you think OBH was for your child?	<i>About an 8</i>

interviews were conducted with parents to determine if respondent meaning could be accurately captured and consistent with other studies using similar methods (Grilo & Shiffman, 1994; Kerns, Aspelmeier, Gentzler, & Grabill, 2001). The meanings captured by the interviewers were consistent with respondent member checks. Responses were transcribed into text documents that could be imported into a data base to be analyzed using qualitative data analysis techniques consistent with naturalistic designs. In instances of corresponding youth and parent interviews, it was possible to cross-validate youth responses with their parent assessments increasing the trustworthiness of the study.

Data analysis began by organizing data files and conducting initial reviews of each interview, where notes were written in the margins of transcripts and a reflective notebook was maintained. A constant comparative method was used to identify constructs associated with each interview theme (Glaser & Strauss, 1967). Data were stored and analyzed using the theory-building program for qualitative data non-numerical unstructured data indexing, searching, and theorizing (NUD•IST) (Richards & Richards, 1994). This program allows for: (a) storing and organizing document files, (b) searching for themes, (c) diagramming, and (d) analyzing and reporting data (Creswell, 1998).

Open and pattern coding of data was driven by questions related to the themes presented in Table 2 (Miles & Huberman, 1994). Parent interviews were analyzed first and were considered independently of others. A consistent coding procedure was used to maintain credibility of data. Next data gathered from youth interviews were merged with the parent data set in order to identify common themes and patterns across the data. By this process, the "building blocks" of analysis were variables and their relationships, rather than the individual cases (Miles & Huberman, 1994). The goal of this approach was to develop more sophisticated descriptions and, thus, more powerful descriptions of youth well-being, aftercare utilization, and parent and youth perspectives on OBH treatment two years after discharge. Various search techniques in NUD•IST were used to identify common patterns across these descriptions.

Several strategies were used to establish trustworthiness in the data collection and analysis process. To establish credibility in the study's findings, the interview process contained a strategy that repeated back to the respondent what the interviewer had recorded. Credibility refers to the ability to communicate the various constructions of reality in a setting back to the persons who hold them in a form that will be affirmed by them (Erlandson et al., 1993). An

example would be, "So what you are saying is the communication in the family right now is just ok, and the primary reason for this is because there are still some trust issues that are being worked out between you and your child?" Colleagues familiar with qualitative research methods also reviewed the coded definitions and associated text to verify that the meanings inherent in the responses were reflected in the code. A new code was established if alternative meanings were uncovered and were not described by an existing code. These strategies increased the credibility and richness of the data analysis process by confirming, and in places refuting, any interpretations the researcher may have made in the data to more accurately reflect the meaning embedded in the responses given by study participants.

Study implications need to be considered within the paradigm of qualitative inquiry, which limits generalizations to parents and youths involved in the study. These "analytical generalizations" are used to expand on existing theory associated with OBH treatment and wilderness therapy (Guba & Lincoln, 1993). The results should also be interpreted with caution due to limitations in the study. Several interesting themes emerged from the results of this qualitative study that could be important issues for future practice and research in OBH treatment and related residential programs.

## Results

A rich description of a single case study is presented to frame the interview results that follow (Merriam, 1988). The case of "Mark" illustrates his aftercare experience after completion of OBH treatment and provides a description of his well-being at 24 months. Mark represents a "typical case" in that his aftercare experience and outcomes reflect the "typical" experience of youth who make this transition from a long-term OBH program to home, school, and peer environments (Creswell, 1998).

### *Mark's Transitional Experience*

Mark, then 16-years old, entered a 52-day OBH treatment program with a score on the Y-OQ that indicated significant psychological, behavioral, and emotional symptoms. His Y-OQ score of 102 reflected those clients that utilize in-patient treatment services (see Burlingame et al. 1996 for description of normative samples). At the

conclusion of treatment, Mark's Y-OQ score had dropped to 65 indicating that many of his presenting symptoms had significantly improved. Mark's key treatment issues were an increasing use of drugs and alcohol and anger management problems stemming from a strained relationship with his mother and step father (who lived with Mark) and his father (who lived in another state and had also remarried). It was decided by Mark, OBH staff and Mark's mother that though Mark had made improvement as a result of OBH treatment, aftercare services would create necessary structure and support to help him maintain this progress. His mother had identified an alternative school where Mark could continue his education, participate in group sessions with other youth, and live at home. Mark returned home and enrolled in the school and began his transition. At 12-months post-treatment, a quantitative assessment of Mark's well-being using the Y-OQ indicated that he was continuing to do well (Y-OQ score of 57). This score reflected an average score reported by Russell (2003) for all youth at the 12-month follow-up period.

Mark's mother ("Susan") was contacted at 24 months and agreed to answer questions as to Mark's experience in aftercare and offer her perceptions as to his well-being. Mark had received his GED and was working part time and attending classes at a community college in the area. Mark, now almost 19 years old, still lived with his mother and step father, but was in the process of trying to move to his own apartment. Susan indicated that Mark was doing "well," though she had a few concerns. When asked about the transition process from OBH treatment, she stated that the alternative school and regular group sessions had provided a supportive environment to help Mark work on his aftercare plan developed by Mark and the treatment team at the OBH program. She noted that Mark did not necessarily like his counselor at the alternative school, but enjoyed the group process. She also said Mark did not feel singled out at this school for participating in groups because it was not "looked down on by other students." She also thought it was important to have him living back home so they could "get their lives back to normal as soon as possible." Mark attended the school and group sessions for 6-months and received his GED. She indicated that he had not seen a counselor in the last year, and that he spent most of his time working part time at a restaurant and attending a local community college to improve his chances of getting into a university. Susan also indicated that she had been seeing a counselor since Mark entered treatment, and that the process had helped her to understand better about her relationship with her son.

When asked about her relationship with Mark and the communication within the family, she rated their communication as a "7" on a 10-point scale and said that it was still difficult but "much better than before." She felt like it was not as open and honest as directly after the OBH process, and that in the last few months it had become especially strained. She was worried about a few of Mark's friends, but liked his girlfriend. She specifically addressed the issue of Mark's anger management problem and noted that it was much better and "nothing like before." She noted there were no significant outbursts since OBH treatment, just "normal teenage stuff." When asked about his use of drugs and alcohol, she indicated that it did not "seem to be a problem," but that she knew Mark drank socially and may occasionally smoke marijuana, but that he seemed to have it "under control." Her concerns for Mark included not wanting him to "slip back into old patterns" and a desire for Mark to "find what it is he wants to do with his life." Finally she noted that OBH treatment was an important first step for Mark and believed that "nothing else would have worked" at the time, but that the process was too short and there were too many things going on in Mark's life to have them fixed by a 52-day program. She also noted that she wished there was more follow-up from the OBH program, though they did help her find the placement with the alternative school.

Mark was also contacted and corroborated many of his mother's assessments as to his aftercare experience in the alternative school and his well-being. He thought the alternative school was good for him because he could not "be around his old friends." The other kids at the school understood some of things he had gone through and that he felt "like it was a good fit." Mark also pointed out that he had attended an AA meeting as well as the group sessions at school based on the suggestion from his therapist at the OBH program, but did not like the experience at all. He said it was "depressing" and "just wasn't what I needed." He declined to elaborate. He also felt like his communication with his mother was strained as of late, and blamed his mother for not trusting him and not liking any of his friends, which was starting "to get old." Reflecting back on his OBH treatment experience, he stated that it was "one of the most important experiences in his life," and that he was "just now beginning to understand what it all meant," and that "he hated it at the time." He said the experience helped him to understand why he was so angry and that he now talks about what is bothering him to his mother and father, when he sees him, which was not very often. His concerns for the future centered on trying to "just be happy," "maybe go to college" and "figure out what he wants to do with his life."

## Youth Perspectives

Youth perspectives are presented first and followed by parent reflections on the two-year process of restoring their lives after the decision to enter OBH treatment. Youth respondents offered uniquely different perspectives than that of their parents in their reflections on the OBH treatment process, the need for and effectiveness of aftercare, issues around establishing friends, and substance use. Coded responses from these topics offer insight into: (a) what aspects of the OBH process remain salient to them two-years after treatment, (b) the aftercare process itself, and what they thought of the experience, (c) their struggles and successes with establishing friends, and (d) issues surrounding substance use. It was very difficult to contact youths; several did not return phone calls ( $N = 24$ ) or refused to participate in the study ( $N = 7$ ). Despite these difficulties, 47 youths were reached and participated in the interview. The overwhelming majority of youths stated they were doing well (87%). It is noted here that these 47 youth most likely represent a subset that were doing well and thus, may have been more likely to participate in the study.

When asked if they believed treatment was effective for them, 45 of the 47 said that the process was indeed effective. Two youths stated "not really, it just wasn't the right environment" (004-74ch) and "not really, I was only 14 at the time and it was just too scary" (900-039ca). These respondents were aged 14 and 15, respectively, at the time of treatment and highlight the importance of determining whether or not the maturity level of the youth is appropriate for OBH treatment. The first youth also added "I needed to deal with my issues in the environment it was happening, not in the middle of nowhere" (004-74ch).

Reasons given for why treatment was effective were coded into six pattern codes: (a) Being Away, (b) Group Peers, (c) Nature Primitive, (d) Program, (e) Sense of Self, and (f) Staff Approach (see Table 3). The Staff Approach and the Sense of Self pattern codes were the most consistently mentioned. Youth spoke of both members of the treatment team, which included wilderness leaders and the therapists, and referenced their ability to connect with them and talk about their issues. One youth said "They made it easy to talk and sort out stuff, it wasn't hard, it just kind of came out naturally" (044-48ca). This speaks to the fact that staff and youths are in wilderness living together, where myriad opportunities to talk about troubling issues are present in day-to-day interaction. Adding to this idea a youth stated, "I just really bonded with them because they were out there with us living it, you know, enduring it with us" (044-108ch).

**Table 3**  
Youth Responses to the Question, "Why do you believe OBH treatment was effective for you" Presented by Descriptive and Pattern codes Including Example Responses

Pattern Codes (Why Release?)	Descriptive codes	Example response
Being away	Get away Out and open No stress or worries Time reflect Appreciation	<i>Opened my eyes to what I had in life and taught me to appreciate things, my family, even little things</i>
Group peers	Friends peers Communication skills	<i>Just talking every night, it helped to hear stuff back from peers</i>
Nature primitive	Reflective hiking Fire Primitive living	<i>Sitting around the campfire and just being outside all of the time</i>
Program	Therapeutic Process Structure	<i>The order and structure they had, the events and phases of the process</i>
Sense of self	Leadership in group Accomplishment Appreciation Confidence and esteem Being alone Solo Journal	<i>I am grateful to the program for giving me sense of ability, like I can do it, you know esteem</i>
Staff	Patience Support and Kindness	<i>Staff were open and honest, they shared their personal experiences and it really helped</i>

Each respondent was asked about their aftercare process and to evaluate the experience on whether it was useful and or appropriate

for them after OBH treatment. For these youths, 40 of the 47 had utilized some type of aftercare services, ranging from AA meetings to structured residential environments. Thirty-three of the 47 youth believed aftercare was effective for them. Most spoke of a supportive environment with people who genuinely cared about them and felt that it was important for the family as a whole. One female youth said it was more important because it eased the anxiety of her mother. Of particular interest was 14 respondents who said they did not feel like aftercare was effective for them and spoke negatively of the experience. The majority of these youths simply did not want to be there. Many spoke negatively of AA and Narcotics Anonymous (NA) meetings and felt like the meetings neither helped nor were appropriate for them. One youth stated, "not at all, it was just a bunch of old guys sitting around in dark room smoking cigarettes wishing they could do drugs again, I hated it" (0880-04ch). Youths in more structured residential environments also had negative impressions of the experience, "I didn't like the school, they just had bad policies and it was too strict, didn't like it at all" (300-57ca). The transition to such a different environment was difficult to make for many, and they could not help but relate the aftercare to OBH treatment. One youth said, "it was just so different, I liked being in nature, the environment, and how it was so different than everyday life" (300-112ca).

Youth were also asked if they discharged with an aftercare plan, something tangible that they needed to work on in order to make the transition successful. Of the 47 youths interviewed, 24 said they did *not* have a plan, 14 said they did, and 9 could not remember. Given the importance of the transition and aftercare phase of OBH treatment, this appears to be a critical issue for OBH treatment delivery. One youth stated "[program] just left it open as a fresh start, it was up to me to make a plan" (001-1593ch). Many could not remember a plan. For those that said they did have a plan of action, it was said to be helpful at the time. These included setting personal goals for how to deal with old friends and establishing new peer groups, making contracts with parents regarding behavior and consequences, and finding ways to recreate without using drugs and alcohol.

When asked about how things were going in establishing friendships, 38 of the 47 said they have good friends, while the other nine were having considerable difficulties. When asked to elaborate on the process, most spoke of the transitional experience (first six months after OBH treatment) being extremely difficult because they felt like they were starting over. One youth stated, "I have a few good friends now but it has take me a long time to figure out who my friends were

or how I should be with them. It definitely has not been easy" (044-145ch). For those who stated they did not have close friends and were having trouble establishing friendships, all the comments were short and the youth did not care to elaborate. Examples included, "not really," "don't have any good friends," "its been hard" and "not around here lately."

Finally, youths talked about their struggles with substance use after OBH treatment. A total of 28 of the 47 respondents self-reported that they were still using substances at the 24-month follow-up period (60%). They cited two main reasons for this: (a) that expectations of peer groups were just too great and (b) that they liked to party and socialize. Many stated that they were indeed "remaining sober," but they only "drank alcohol and smoked a little weed." When asked to elaborate on these quizzical comments, they addressed a reduction in the amount, frequency, and severity of substances used prior to OBH treatment. Other reasons for continued substance use cited were because of depression, personal problems, and what five respondents said was "self medication" from stress and other issues in their lives. For those that were abstaining from substance use ( $N = 17/48$ ), a wide range of reasons were cited. These included friends and family support, maturity, getting tired of it, counseling, court charges, and wanting a better life. Two clients stated that it was never a problem and was not the focus of treatment.

#### *Patterns from Parent Responses on Aftercare Experience and Youth-Well-Being*

Parent responses to the open ended question "How is your child currently doing?" indicated that most believed their children were doing well at the 24-month time period (see Table 4). By collapsing two themes, 51 of 88 youth were doing well or very well. Almost a one-third ( $N = 25$ ) were either struggling or had experienced struggles throughout the 24-month time period. All youth that had dropped out of school or were "doing nothing" were described by parents as "not doing well." The majority of youth were either in secondary school or college ( $N = 59/88$ ). The remaining youth had: (a) graduated high school and were working ( $N = 17$ ), (b) had graduated high school and were living on their own and "doing nothing" ( $N = 6$ ), or (c) had *not* graduated high school and were living at home and working or "doing nothing" ( $N = 6$ ). Finally one youth was in the military and one was in prison. Therefore, 87% of youths were either enrolled in school or working according to their parents at 24-months post-treatment.

**Table 4**  
**Percentage of parent Respondents to the Open ended-question: How is your Child doing Right Now?**

Response	Frequency	Percentage	Example Response
Child doing very well	23	26.1	<i>She is doing wonderfully</i>
Child doing well	28	31.8	<i>He is doing well</i>
Child is okay	12	13.6	<i>He is both bad and good</i>
Child is better than before	7	8.0	<i>He is doing much better, and some of that is because he is older</i>
Child better now	3	3.4	<i>Feel like he is just starting to turn the corner</i>
Child is struggling	15	17.0	<i>Not in school, he just works, and is involved in petty theft</i>
Total	88	100.0	

The majority of parents believed that OBH treatment was effective for their child ( $N = 71/88$ ). Ten noted that it was not (11%) and seven parents said that it was partially effective or they did not know (8%). Parents were also asked to rate the effectiveness of OBH treatment on a 10-point scale, with one being not effective, to ten being very effective. The average rating was 7.5 ( $SD = 2.24$ ). When asked why, a range of descriptive codes emerged that were placed into the following themes: (a) development of self, (b) staff program, and c) positive nature (see Table 5).

The 20% ( $N = 18$ ) of parents who stated that OBH treatment was not effective for their child cited staffing concerns, questioned the long-term effects, or believed the program had negative impacts on their child. These parents cited issues such as staff being too young or inexperienced or they believed their child needed to spend more time with "qualified staff" instead of with younger wilderness leaders (qualified staff were referred to as therapists and counselors). This comment reflects differences in how treatment team approaches are used by OBH programs. Continuous flow models have younger wilderness leaders living with youths 24 hours a day and therapists spending time with the youths individually and in groups during

**Table 5**  
**Pattern Codes from Responses to the Question of Why Parents Believed Outdoor Behavioral Healthcare Treatment was Effective for their Child?**

Pattern code	Descriptive codes	Open codes	Example response
Development of self	Responsible self	Made impact Got attention Accept responsibility Attitude change Motivation	<i>I think it got her attention, which she definitely needed</i>
	Positive self	Accomplishment Self esteem Self confidence Do things own Remember fondly	<i>It did wonders for his confidence</i>
	Emotional self	Reflect life Developed compassion Calm down Help mature Humbling Learn self	<i>It calmed him down and allowed him to do some thinking</i>
Skills cognitive	Learned lots	Helped her deal with anger that was built up in her Coping skills Anger management Goal oriented Learned boundaries	
	Interpersonal self	Saw other behaviors Peer interaction Communication peers	<i>Being with his peers in that situation and talking with them</i>

Table 5 (Continued)

Pattern code	Descriptive codes	Open codes	Example response
Positive family	Family needed It Communication with parent	Parent seminar and education Parent esteem	<i>The family needed it as much as [child] did, we were all hurting</i>
Positive nature	Clean living Natural consequences	Healing nature New environment	<i>I think the wilderness living in the clean environment helped her, she needed it to take care of herself</i>
Staff and program	Staff patience Good counseling Assessment process	Staff patience Good counseling Assessment process	<i>He really looked up to his counselor and was able to connect with their staff</i>
	Program philosophy Solo Process No Drugs		

periodic visits (see Russell, 2003 for description of OBH models). Other parents believed the impact of the experience wore off too quickly, the program lacked sufficient post-program support, or that aftercare recommendations were not appropriate for their child. Still other parents stated that the program just did not work for their child because it gave them too much sense of self, placed them in a situation where they were interacting with negative peers, or that it further alienated them from their parents.

When parents were asked to describe how well their children were doing in school ( $N = 58$  were still in school), 50% indicated they were doing "well," 14% stated they were doing "alright," and 26% were doing "poorly." Nine parents did not really know because their child was away in college. Parents elaborated on how difficult school experiences were because academics had been disrupted by pre-treatment behavior

and then enrollment in OBH treatment and subsequent aftercare services. The lines between aftercare and school are often blurred; many adolescents ( $N = 15$ ) had enrolled in therapeutic boarding schools which blend residential treatment services with school based curriculum. Additionally, 13 parents mentioned their child attended an alternative school because they needed a "fresh start."

Parents were asked to scale and describe the quality of communication between them and their child. Almost 60% of parents described communication as going "well" ( $N = 51/88$ ), which was also reflected in the average of scaled responses ( $M = 7.7$ ,  $SD = 1.98$ ). An example of a coded response was "communication is very good, its like we are friends now, way better than before (03-71ph)."<sup>2</sup> A central reason parents believed this was their reference to communication as Open and Honest. An example of a response is, "he tells us everything now, well not everything, he is as open and honest as a 20-year old can be." The remaining 37 parents, described communication as bad ( $N = 16$ ), just alright ( $N = 12$ ), and better than before ( $N = 9$ ). Parents who believed communication was not going well with their child described it as, "after she hit puberty, it was terrible. My husband is a horrible communicator and she is a clone, she doesn't offer any information" (009-53pa). Parents who were coded in the Better than Before code reflected this comment, "Way better than before, I think it taught me more than it taught her, things like 'don't let kids define you, don't worry about what other people think,' definitely changed me more than her" (010-1594ph).

When parents were asked to describe how their child was doing in establishing healthy friendships, mixed results were reported. Slightly more than half of all parents (51%) stated that they thought good friendships were being established and they liked their child's friends. The other half of respondents (49%) said either they did not like their friends or that their child did not have any friends, and that this was a primary concern. Parents spoke of the difficulty of trying to establish new identities and friends given how difficult this is for "normal teenagers," let alone their children who were still wrestling with difficult issues in their lives. One parent said it succinctly, describing her child's experiences in making new friends, "the fact that she is trying to turn her life around, make new friends, and go to a new school makes it very difficult for her, she feels very isolated from peer groups" (088-28pa).

The majority of youths in OBH treatment are struggling with substance use (defined as any illicit drug and/or alcohol) issues making

<sup>2</sup> Youths that did not enroll in aftercare facilities were categorized as returning home to their family environment.

reduced use or abstinence a central focus of treatment outcome and aftercare strategies (Russell, 2003). Parents had a hard time assessing the degree to which the use of substances post treatment was a "problem," they wrestled with responses to the following set of questions: (a) was substance use a significant focus of treatment for your child? (b) is your child still using illicit substances? and (c) if so, does it appear to be a problem in their life?

Responses to these questions indicated that almost 62% of the youths had used substances, or were still using them at the 24-month time period and that it was "an issue and focus in treatment" ( $N = 55$ ). Almost one-quarter responded that their child had abstained from all substance use during this time ( $N = 20$ ), and 15% indicated that substance use issues were not the focus of treatment ( $N = 13$ ). Parent ambivalence seemed to be related to the degree to which their child's use was affecting their lives, not whether they were using or not. One parent stated that "yes, I know that he is partying with his friends, but I really don't think it is a problem for him now, he seems to have it under control (040-143)." Parent comments reflecting concern for their child's substance use were coded into five pattern codes: (a) Depression and Sense of Self, (b) Peer Pressure, (c) Family Pressure, (d) Personality, and (e) Enjoys Party (See Table 6 for codes and example responses). For the youths that had abstained throughout the follow-up period, parents cited positive influences in their lives that helped them remain sober. These included: (a) what they had learned in the program, (b) the family and peer support system created, (c) an enhanced sense of self that reflected increased sense of responsibility, and (d) skills to process issues surrounding their substance use.

Parents also responded to questions surrounding legal troubles in the 24-month period following treatment. Almost 40% of parents said that their child had experienced legal troubles ( $N = 34$ ) while almost 60% said they did not ( $N = 54$ ). Examples of legal issues were minors in possession of alcohol or illicit drugs ( $N = 14$ ), driving under the influence ( $N = 5$ ), car accidents or speeding ( $N = 4$ ) and other or would not specify ( $N = 11$ ). A parent reflected on the experience one youth had with the law, and suggested that the experience helped their son hit "rock bottom." He stated "Yes, he was in jail for two weeks for driving under the influence. The aftercare program [following his arrest] really helped to provide needed structure for him" (900-112ph).

#### Assessing the Role of Aftercare

The majority of youths (84%) used some type of aftercare service for various lengths of time (see Table 7). There are two primary types

**Table 6**  
Number of Youths Who are Still Using Substances, are not Using Substances, and was not a Major Focus of Treatment and Descriptive and Pattern Codes Developed from the Question: Why do You Believe Your Child is Struggling with Substance Use Issues

Response	Frequency	Percentage	Example response
Still using substances	55	62.6	Absolutely not, he smokes pot and drinks
Not using any substances	20	22.7	Yes, he was tested about a month ago and was clean
Not focus of treatment	13	14.7	Was not a problem prior to treatment
Total	88	100	

  

Pattern Codes (Why still using?)	Descriptive codes	Example response
Depression/ and self esteem	Depression Hit Rock bottom Lack maturity Never committed Self esteem	There is this big empty hole that [youth] tries to fill with substances
Family issues	Self medication Parent bad role model Lack Parent boundaries Sibling pressure	Family patterns, he wanted to be closer to his brother but his brother is an alcoholic. Mom is also into drugs, actually his sister is too
Likes party	Likes to party	He participates in all these fraternity drinking parties, I don't believe he is out of control, I don't know. He just likes to party
Peer influence	Peer pressure	He gets bored, he is very popular with his friends and he uses with them

Table 6 (Continued)

Pattern Codes (Why still using?)	Descriptive codes	Example response
Personality	Personal issues	<i>Diagnosed with profound ADHD. His his personality, he just craves it. I believe he is an addict</i>

Note: Substance are broadly defined as any illicit drugs and/or alcohol being consumed by the youth.

**Table 7**  
**The Types of aftercare and Length of time that OBH Youths  
 Utilized Aftercare Services at the Conclusion of OBH  
 Treatment**

Type of Aftercare	Frequency	Percent
Inpatient hospitalization	1	1.1
Therapeutic boarding school	23	26.1
Residential treatment center	10	11.4
Outpatient treatment	37	27.1
Alcoholics anonymous	3	2.3
No aftercare	14	17.0
Total	88	100
<i>Length</i>		
1-3 Months	19	25.7
4-6 Months	23	31.1
7-12 Months	11	14.8
Greater than 12 months	21	28.4
Total	74	100

of aftercare services: (a) outpatient services, where a youth lives at home and attends group or individual sessions with qualified professionals or AA or NA meetings and (b) residential services, where the youth lives away from home and is in the protective care of the aftercare facility. Only 17% of the sample did not use any aftercare services ( $N = 14$ ). Outpatient services were most frequently cited ( $N = 40$ ), while slightly less enrolled in some type of residential care ( $N = 34$ ). The types of outpatient services included individual therapy, group therapy, family therapy, or NA/AA meetings. Parents perceived family therapy as being highly effective to bring the family back together and help the youth make the transition into the home environment (a total 14 parents of the 40 who utilized outpatient services were involved in family therapy). For those clients that used residential services, therapeutic boarding schools ( $N = 23$ ) were most frequent, followed by residential treatment ( $N = 10$ ) and one inpatient hospitalization. The length of time spent in aftercare varied for each youth ranging from less than 3 months, to greater than 12-months (see Table 7).

Actual aftercare use statistics provided an opportunity to examine if their use had an effect on youth well-being at the quantitative assessment conducted at 12 months. An independent sample *t*-test was conducted on Y-OQ scores that compared groups classified as using either (a) residential or (b) outpatient aftercare services. The hypothesis tested was that those youth who had attended residential services may have had significantly lower Y-OQ scores due to a more structured environment. While there was a real difference in mean Y-OQ scores at 12-months post-treatment ( $M = 33.88$  for residential and  $M = 47.03$  for outpatient), scores were not statistically different ( $t(66) = -1.583, p = .118$ ). An Analysis of Variance (ANOVA) was also conducted to determine if length of time in aftercare indicated significant differences in mean Y-OQ scores at 12-months. Again, real mean differences were found across groups that showed a gradual decrease in scores (meaning higher well-being) as the length of time increased. However, these differences were not statistically significant across the four groups ( $F(4,78) = 1.264, p = .291$ ). This means that real scores were higher for outpatient clients by more than 11 points at this time period, and for those that used aftercare services for shorter periods of time, suggesting that outpatient clients were not fairing as well as residential clients. Due to small sample sizes in each category of aftercare use and duration, statistical differences were not found, lending these results inconclusive (see Table 8).

Parents spoke of OBH treatment as a necessary beginning to a longer process of recovery for their child when asked to describe the

**Table 8**  
**Mean Y-OQ Scores at Twelve Months Grouped by Actual**  
**Aftercare use with Associated Statistical Tests and**  
**Significance levels**

Type of aftercare	Frequency	M Y-OQ Score (SD)	Significance level
Residential	32	33.88 (31.87)	.118*.1
Outpatient	36	47.03 (36.33)	
Length of time in aftercare			
1-3 Months	18	50.33 (38.46)	.291*.2
4-6 Months	22	47.68 (35.70)	
7-12 Months	9	30.00 (21.35)	
Greater than 12-Months	20	29.50 (31.10)	

<sup>1</sup> Independent sample *t*-test was not significant at the  $p < .05$  level.

<sup>2</sup> Analysis of variance (ANOVA) was not significant at the  $p < .05$  level.

need for aftercare. Several codes emerged in these responses that reflected parent's anxiety and worry for their child, but were coupled with cautious enthusiasm at the prospects for a fresh start. Many also said that OBH treatment, while effective, was simply too short. One parent stated "One does not change their life in 51-days, it was a band aid on a wound that still needed care" (030-114ph). Another key concern for parents was ensuring that the youth not return to the same environment and group of friends, where peer pressure would be too overwhelming for their child. A parent stated, "the peer pressure and the old habits would be just too strong to overcome. He was the leader of his group and they expect things of him" (099-63pa). In parents' minds, aftercare was a logical extension of the OBH process. The majority of parents whose child attended residential facilities responded that it was effective ( $N = 26/34$ ). There were several reasons provided that were coded into six pattern codes (see Table 9).

**Table 9**  
**The Reasons Provided by Parents for Why Residential Aftercare was Effective for their Child**  
**including descriptive codes grouped into pattern codes**

Pattern codes (Why Relapse?)	Descriptive codes	Example response
Family	Family focus	<i>Helped the family come together and for him to be closer to the family</i>
Self responsibility	Learn about self Self confidence	<i>Seemed like he learned a lot about himself and his emotions and feelings</i>
Staff	Staff caring	<i>People were very friendly, tough but loving</i>
Working on issues	No distractions Deeper issues Behavior management	<i>Absolutely, he still had an inability to control anger and confrontation</i>
Structure	Discipline Responsibility Structure	<i>Needed a lot of structure and could carry out consequences in a systematic way</i>
Sober and safe	12-Step Process Sober Environment Safe Environment	<i>[youth] did not have access to drugs</i>

specific skills developed through OBH that could be practiced and strengthened, any agreed upon understandings between parent and child, and the integration of coursework and school. This requires post-treatment communication between parents, the OBH program and potential aftercare programs. Having a clear aftercare plan could help to facilitate this process and make the transition easier. Many parents cited a lack or absence of any plans and felt the OBH programs had more of a responsibility to prepare their families for transition and post-treatment care. Several parents and youths could not recall an aftercare plan and specifically stated that they had wished they had been more able to contact program staff after treatment was completed. Parents that did have clear plans and resources for aftercare believed this was crucial for their child. Establishing aftercare programs for parents that are affordable and accessible appears to be crucial for OBH program effectiveness. It is evident from this study that OBH treatment is being used to make an initial impact and to assess youth who are in serious trouble.

Finally, it appears that there is a source of potential conflict between parents and their child when communicating post-treatment strategies. Many parents said that aftercare was critical, while youth were more ambivalent as to the benefits of the extended care. This issue reflects the complexity of emotions that are involved in this transitional process. Parents are communicating with OBH program staff throughout treatment and want to do what is right for their child. If aftercare is recommended, even though parents would like to have their child return home and begin restoring family functioning, most parents heed the advice of the treatment team at the OBH program. This can be very frustrating for the youth, and may set back their progress during this phase. Keeping communication lines open between parents, youth, and OBH staff appears to be critical to make this transition smooth. The danger comes in further alienating the youth by making decisions without their input that can set back their treatment progress.

Qualitative assessments and scaled responses also seem to suggest that youths are doing well in some areas, and not so well in others. One important finding was the consistent responses of good to satisfactory communication between parent and youths, with parents and youths stating that the OBH process helped to resolve differences and reopen lines of communication. Parents reported mixed results when asked to evaluate their child's ability to make friends and form friendships, with almost half citing this as a primary concern. This finding highlights the difficulties faced by youths who have gone through treatment of any kind and attempt to establish identities,

friendships, and lifestyles that are radically different than they were pre-treatment. Many youths spoke of the difficulty of being in peer social settings, especially in the first six months after treatment. Most believed they were just beginning to be able to establish real friends and spoke of a desire to "just blend in" with their peers. During the 12-month period following treatment, parents and youths also spoke of many ups and downs, which also typify this developmental phase for youth in general. Their stories highlighted how difficult this process is for youth who are also struggling with mental, emotional or psychological disorders which initiated their need for treatment.

Regarding legal troubles and issues surrounding substance use, respondents suggested youths were not doing as well. Over 60% of the youths continue to use illicit substances to various degrees; also of note, the majority of the legal problems were associated with substance use (possession and driving under the influence). This is despite the fact that 84% of all youths utilized aftercare services, which have been identified as a successful predictor of abstinence in follow-up studies of substance abusing youth (Blanz & Schmidt, 2000; Lash & Blosser, 1999). These same studies also report relapse rates for adolescents in substance treatment at or near 50-60%. Though some parents reported that substance use was still a significant problem, they were in the minority ( $N = 11$ ). Many comments by parents and youths suggested that using was not perceived to be detrimental to well-being, and that use was more controlled and moderated. One parent stated "he participates in all these parties, drinking parties, but there is no evidence that he is out of control" (044-02ph). A youth, asked if he was remaining sober after stating that substance use was a focus of treatment said "yes, I am sober, I just drink beer occasionally on weekends but I am careful not to drink too much" (300-036ch). This finding highlights the difficulty in gauging appropriate treatment strategies for youths deemed to have substance use issues and how difficult it is to predict in adolescence who will carry substance use issues into adulthood (Winters, 1999). A six-stage model is suggested by the American Association of Pediatrics (1996) to help diagnose youth to better applying treatment strategies. They are: (a) abstinence, (b) experimental, (c) early abuse, (d) abuse, (e) dependence, and (e) recovery. It is not clear the degree to which these classifications are applied by the OBH programs involved in this study and whether they would help to better understand post-treatment substance use patterns which appear to be: (a) complete abstinence based on previous abuse, (b) continued social and experimental use, and (c) problem use. Some researchers in substance use treatment claim a "harm reduction model" may be more appropriate when working with

adolescents, reflecting attitudes the majority of parents and youths in this study seem to have. This approach may be more aligned to OBH treatment philosophy as well. Harm reduction understands that addiction/substance use is a complex phenomenon and recognizes that many clients do not respond well to traditional models of treatment in which goals are predetermined by the therapist (authority figure). This is also reasoned to negatively affect the therapeutic relationship, a significant predictor in treatment outcome (Martin, Garske, & Davis, 2000). Research has shown that starting at the client's level (i.e., appreciating what changes he or she might be willing or wanting to make) may be more effective in alleviating or eradicating addictive behaviors (Tatarsky, 2002).

Several parents and clients also said that OBH treatment was not effective for their child, which is also an important consideration for OBH program practice. Two youths contacted, one aged 14 and the other having just turned 15, believed the experience was, in their words, simply "too scary" and "too much." Assessing when a youth is appropriate for OBH treatment challenges admissions personnel, clinical staff, and parents to accurately screen out younger youths who are not emotionally and physically mature enough to gain from treatment. The ten youths for whom parents indicated that OBH treatment was not effective all stated that the effects "did not last." Eight out of the ten youths did utilize either outpatient or residential aftercare services. Y-OQ scores for these ten youth also showed positive and significant improvement for all but two youth, who both showed severe reductions in well-being at the 12-month follow-up period. These findings are interesting, in that parents may perceive the program as having not been effective, but 8/10 of these clients still showed significant improvement suggested by self-report and parent assessments.

There are also several implications for research into OBH treatment and wilderness therapy process and its effects that may help address methodological issues reported in the literature, such as "post program euphoria," and the lack of observed application of knowledge and skills in post-treatment environments (see Hatlie et al., 1997; Winteryk & Griffiths, 1984). It is clear that longitudinal research assessing program effectiveness needs to assess and account for post-treatment services utilized. It is very difficult to determine with accuracy if outcomes measured at follow-up periods (i.e., 6-12 months) are due to the initial wilderness experience or due to aftercare services. Research could examine more closely the role OBH plays in preparing youths for aftercare services, be they residential or outpatient, and begin to utilize aftercare environments and staff to observe

behavior and track therapeutic progress. For clients that return home and utilize outpatient aftercare services, communication within the family and family cohesion could be assessed to provide empirical support of improved parent-child communication, which has been suggested in this study.

Given that clients in OBH programs utilize a variety of aftercare services, it will continue to be difficult to establish sample sizes large enough to conduct statistical analyses with significant power. In this study, four types of aftercare were reported with varying lengths of stay, which made between group comparisons at follow-up appropriate for *t*-tests and ANOVA difficult. One way to address these issues could be to assess differences in client transitional success in different environments by establishing sufficient sample sizes that allow for comparison of youths who return home from OBH treatment with those that go onto residential care using random assignment to aftercare environments.

Finally, research on the effectiveness of OBH treatment on substance use requires instrumentation and assessment that is sensitive to relative change in use and the behaviors surrounding substance use. This study found that the majority of youths continued to use substances, but were perceived as "doing much better." Both parents and youths who stated they were still using often accompanied the assessment with the belief that the use was "not a problem," and it was "nothing like before." Because of this, recidivism studies that utilize binary definitions of relapse (1 = relapse, 0 = no relapse) may be missing more subtle changes in behaviors and use patterns. One such instrument available to researchers and widely reported in the literature is the Personal Experience Inventory (PEI). The PEI is a self-report inventory that documents the onset, nature, degree, and duration of chemical involvement in 12-18-year-olds (Winters, Latimer, Stinchfield, & Henley, 1999). Because issues that surround substance use in youths are so complex, assessments of psychosocial and risk factors may help researchers better understand the role OBH treatment may play in helping youths better understand their substance use, and the reasons that underlie such use.

In conclusion, this study suggests that OBH treatment was perceived as effective by parents and youths 24 months after the completion of OBH treatment. The majority of youth had also enrolled in some type of aftercare that averaged just over 6 months. The majority were doing well in school and communication in the family was said to be improved. However, they also continued to struggle with substance use, had gotten into trouble with the law, and had experienced difficulties in forming friendships. OBH treatment was

perceived by parents and youths as being a necessary and effective step in helping their child and family address, and eventually, overcome emotional and psychological issues that were driving destructive behavior.

## References

- Bandoroff, S., & Scherer, D. G. (1994). Wilderness family therapy: An innovative treatment approach for problem youth. *Journal of Child and Family Studies*, 3(2), 175-191.
- Bennett, L., Cardone, S., & Jarczyk, K. (1998). Effects of a therapeutic camping program on addiction recovery: The Algonquin Haymarket relapse prevention program. *Journal of Substance Abuse Treatment*, 15(5), 469-474.
- Blanz, B., & Schmidt, M. H. (2000). Preconditions and outcome of inpatient treatment in child and adolescent psychiatry. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 41(6), 703-712.
- Burlingame, G. M., Wells, M. G., Hoag, M. J., Hopp, C. A., Nebeker, R. S., Konkel, K., et al. (1996). Manual for youth outcome questionnaire (Y-OQ). Stevenson, MD: American Professional Credentialing Services.
- Castellano, T. C. S. (1992). Therapeutic wilderness programs and juvenile recidivism: a program evaluation. *Journal of Offender Rehabilitation*, 17(3/4), 19-46.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Edgmon, K. J. (2002). Therapeutic benefits of a wilderness therapy program and a therapeutic community program for troubled adolescents. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 62(10), 4781-4966.
- Erlanson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry—A guide to methods*. Newbury Park, CA: Sage Publications.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Grilo, C. M., & Shiffman, S. (1994). Longitudinal investigation of the abstinence violation effect in binge eaters. *Journal of Consulting and Clinical Psychology*, 62(3), 611-619.
- Guba, E., & Lincoln, Y. (1993). Competing paradigms in qualitative research. In Denzin N. & Lincoln Y. (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Hans, T. A. (2000). A meta-analysis of the effects of adventure programming on locus of control. *Journal of Contemporary Psychotherapy*, 30(1), 33-60.
- Hannon, S., Lantinga, L., and Costello, R. (1982). Aftercare in chemical dependence treatment. *Substance Abuse*, 1, 107-109.
- Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67(1), 43-87.
- Kerns, K. A., Aspelmeier, J. E., Gentzler, A. L., & Grabill, C. M. (2001). Parent-child attachment and monitoring in middle childhood. *Journal of Family Psychology*, 15(1), 69-81.
- Lash, S., & Blosser, S. (1999). Increasing adherence to substance abuse aftercare therapy. *Journal of Substance Abuse Treatment*, 16(1), 55-61.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438-450.
- Merriman, S. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook for new methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Pediatrics, A. A. O. (1996). *The classification of child and adolescent mental diagnoses in primary care (DSM-PC)*. Elk Grove Village, IL: American Academy of Pediatrics.
- Richards, T., & Richards, L. (1994). Using computers in qualitative analysis. In Denzin N. & Lincoln Y. (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Russell, K. C. (2003). An assessment of outcomes in outdoor behavioral healthcare treatment. *Child and Youth Care Forum*, 32(6), 355-381.
- Russell, K. C., & Dianne, P.-M. (2002). Perspectives on the wilderness therapy process and its relation to outcome. *Child and Youth Care Forum*, 31(6), 415-437.
- Tatarsky, A. (2002). *Harm reduction psychotherapy: A new treatment for drug and alcohol problems*. Northvale, NJ: Jason Aronson.
- Winterdyk, J., & Griffiths, C. (1984). Wilderness experience programs: reforming delinquents or beating around the bush? *Juvenile and Family Court Journal*, Fall, 35-44.
- Winters, K. C. (1999). Treating adolescents with substance use disorders: An overview of practice issues and outcomes. *Substance Abuse*, 20(4), 203-225.
- Winters, K. C., Lattimer, W. W., Sunchfeld, R., & Henley, G. A. (1999). Examining psychosocial correlates of drug involvement in clinic-referred youth. *Journal of Child and Adolescent Substance Abuse*, 9(1), 1-17.
- Yin, R. K. (1993). *Applications of Case Study Research*. Thousand Oaks, CA: Sage.