Exploring How the Wilderness Therapy Process Relates to Outcomes

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Wilderness therapy is seen as a treatment option for seriously troubled adolescents not being reached by traditional forms of treatment. The research shows that wilderness therapy can improve self-perceptions, increase social adjustment, and reduce recidivism of adolescent participants. However, research on wilderness therapy has not been specific in describing how presenting problems are assessed by wilderness therapy and how therapeutic approaches relate to target outcomes. This article examines the wilderness therapy process in context to illustrate how the process related to specific outcomes for four client case studies in four wilderness therapy programs. Trends emerged from qualitative data analysis illustrating the importance of alone time and opportunity for reflection and a non-confrontive and caring approach that helped clients establish a trusting relationship with staff. Three outcomes were common across all four client case studies in the form of proposed changes: (a) a better relationship with their family, (b) abstinence from drugs and alcohol, and (c) a desire to try harder and complete school. Four-month follow-up interviews revealed clients doing well, though three had used drugs and alcohol to varying degrees, which underlines the importance of structured aftercare services.

Introduction

Adolescents in the United States are more at-risk in recent years due to the influence of profound cultural change, including unstructured home environments in which both parents are working, an increase in the number of single-parent families and one-parent families, and a media culture that bombards adolescents with images of sex, violence, and excitement. During the years 1991-1997, the percentage of adolescents who used tobacco and drugs, and were involved in risky sexual behaviors, steadily rose, whereas the percentage of adolescents who engaged in healthy physical activity steadily declined (Centers for Disease Control, 1998). To an increasing degree, wilderness therapy is being used by parents as a last-resort treatment option for seriously troubled adolescents not being reached by traditional therapeutic interventions (Cooley, 1998; Russell & Hendee, 1999). Despite research interest in the past and the increasing popularity of wilderness therapy, few research efforts have addressed how the wilderness therapy process works and how the process specifically relates to outcomes. This article does so by exploring the wilderness therapy process in context through interviews with clients and their parents, and through participant-observation of client case studies while at four established wilderness therapy programs.

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Defining Wilderness Therapy

Wilderness therapy evolved from outdoor- and wilderness-based treatment programs for adolescents with problem behaviors, which have been referred to in the literature as wilderness therapy (Davis-Berman & Berman, 1994), therapeutic wilderness camping (Loughmiller, 1965), adventure therapy (Gass, 1993), wilderness adventure therapy (Bandoroff, 1989), wilderness treatment programs (Kimball, 1983), and wilderness experience programs (Winterdyk & Griffiths, 1984).

The following definition of wilderness therapy is suggested to define wilderness therapy: The use of traditional therapy techniques, especially group therapy techniques, in a wilderness setting, when the wilderness is approached with therapeutic intent (Powch, 1994). The careful selection of potential candidates should be based on a clinical assessment and should include the creation of an individual treatment plan for each participant (Davis-Berman & Berman, 1994, p. 13). Wilderness therapy utilizes outdoor adventure pursuits and other activities, such as primitive skills and reflection, to enhance personal and interpersonal growth (Kimball & Bacon, 1993). The provision of individual

and group psychotherapy should be facilitated by qualified professionals, with an evaluation of individuals' progress being a critical component of the program. Typically, base-camping and expedition-based models are employed (Crisp, 1997).

Wilderness Therapy Outcomes

Several reviews of the literature have examined outcomes associated with wilderness therapy and related programs (Bandoroff, 1989; Burton, 1981; Cason & Gillis, 1994; Easley, Passineau, & Driver, 1990; Ewert, 1983, 1987; Friese, Pittman, & Hendee, 1995; Gibson, 1979; Gillis, 1992; Gillis & Thomsen, 1996; Hattie, Marsh, Neill, & Richards, 1997; Levitt, 1982; Moote & Wadarski, 1997; Russell, 1999; Winterdyk & Griffiths, 1984). These reviews tend to focus on two primary effects on participants: (a) effects on the self-concept of participants, and (b) effects on developing appropriate and adaptive social skills. Research indicates that wilderness therapy has been shown to have positive effects on self-concept and enhances the development of appropriate and adaptive social skills. The purpose of this article is not to review past studies on the effectiveness of wilderness therapy, but rather, to point out that there has been considerable research conducted on wilderness therapy, and that the majority of that research has focused on outcomes.

Despite claims of effectiveness evidenced by the above reviewers of studies, little is known about the process by which wilderness therapy promotes change in problem behaviors of adolescents. Mulvey, Arthur, and Repucci (1993) conclude in their review of research on wilderness therapy effectiveness that the "nature, extent, and conditions under which positive outcomes occur is unknown" (p. 154). Gillis (1992) adds to this and recommends that research move from deductive, experimental approaches to more inductive studies of descriptive research.

The goal of this article was to examine the wilderness therapy process at four wilderness therapy programs fitting the definition presented above to illustrate how the wilderness therapy process works and what outcomes emerged from the intervention. This article addressed questions being asked by researchers, the mental health profession, insurance companies, national accreditation agencies, juvenile authorities, school officials, and parents of potential clients: How does wilderness therapy work, and with what specific resulting outcomes?

Research Methods

In order to effectively assess the wilderness therapy process and its relation to outcomes in context, qualitative research methods were employed. Four wilderness therapy programs were selected based on their involvement in the Outdoor Behavioral Health Care Industry Council (OBHIC), an association formed to generate certain industry standards. These four programs in no way constitute a representative sample of wilderness therapy. Rather, they provide a starting point to examine common elements of theory and process, and, how each relate to outcomes for their clients. Each program has clinically trained staff and is supervised by licensed psychologists and certified drug and alcohol counselors (CADC). Master's-level therapists or social workers accompany or provide at least weekly visits to the field to carry out individual treatment plans. The four wilderness therapy programs in this study were: Anasazi, in Mesa, Arizona (52-days), Aspen Achievement Academy in Loa, Utah (52-days) (Aspen), Catherine Freer Wilderness Therapy Expeditions, in Albany, Oregon (21-days) (Freer), and SUWS, in Shoshone, Idaho (21-days).

Two visits were made to each program; the first one to conduct interviews and focus groups with key staff; and the second one to spend a period of at least seven days in the field observing the wilderness therapy process in context and interviewing clients, parents, and staff responsible for the participants' primary care. One case study at each program (n = 4) was selected based on admittance date, and included the family of the client involved in treatment. Case studies would be tracked for four months post-treatment. Daily notes were taken during seven-day participant observation periods that examined the interaction between client case studies and staff. Wilderness guides and the therapists responsible for the clients' care were also formally interviewed, and the focus group process was again employed at the conclusion of the clients' experience to explore process and outcomes from their perspective. Finally, clients were interviewed immediately after and clients and parents four months after the wilderness therapy experience to discuss their perceptions of outcomes. Subjectivity of the researcher was an invaluable tool in gaining confidence of research subjects while in the field, and in the qualitative tradition, was embraced. All interviews and focus groups were recorded and transcribed. Data were analyzed using the theory-building program for qualitative data, NUD•IST (non-numerical unstructured data indexing, searching, and theorizing) (Richards & Richards, 1994).

Results

Through open and pattern coding of the data, a list of descriptive codes was developed and "clustered" into pattern codes that were consistent across all four client case studies. Emergent pattern codes addressed: (a) client presenting issues, (b) wilderness therapy process applied to these presenting issues, (c) reported effects and proposed client changes, and (d) four-month follow-up interviews to assess long-term effects. Clients are referred to as Bobby (Anasazi), Johnny (Aspen), Billy (Freer), and Ricky (SUWS).

Client Case Studies' Presenting Issues

Bobby, Johnny, and Billy entered wilderness therapy with diagnoses of substance abuse dependence and oppositional defiant disorder (ODD). Ricky struggled with depression and severe emotional disorder, and was diagnosed with attention deficit disorder (ADD) and dysthymic disorder. Though no empirical data exists, program staff believed that approximately 75% of their clients have drug and alcohol issues. For these four clients, the wilderness therapy process was going to be, at least to some degree, focused on assessing and beginning treatment for issues associated with drugs and alcohol.

How Wilderness Therapy Process Worked

Each client case study was asked in an interview to reflect on his wilderness therapy experience. Four important findings emerged. First, each spoke of his unique experience as "difficult to put in words." They seemed eager to speak of changes they wanted to make in their lives with parents and staff. However, why wilderness therapy worked was more difficult for them to describe. Rapport was established through time spent in the wilderness and did not appear to be a limiting factor in easing this communication. Second, three of the four responses emphasized the importance of solo time and opportunity for reflection. Ricky was the only client who did not mention time alone as a process factor. Third, all cases noted the importance of a non-confrontive and caring approach which helped clients establish a trusting relationship with staff. Finally, wilderness factors related to outcomes were also referenced by clients.

Importance of Time Alone and Opportunity to Reflect

The solo is used as a tool in many wilderness experience programs, including Outward Bound and many college wilderness orientations programs. When combined with a group process that leads up to it and therapeutic curricula (readings, writing assignments, letters to parents expressing regret), the solo becomes a powerful tool to help clients think about questions and have the time and patience look for answers. Bobby, Johnny, and Billy all referenced that their experience gave them an opportunity to spend time alone in wilderness to reflect on their life.

Bobby stated, "It was really peaceful being on solo, it helped me find out who I am and what I've done wrong." Reflecting on how the process worked, Johnny simply stated, "Just sitting alone and reflecting on my life really." I was acting as participant-as-observer on day 12 of the 21-day trek when Billy returned from a three-day solo. In my field notes I wrote:

> They came in from SOLO quietly and sat in silence waiting for the other members of the group to take their camps down and join the circle. They took turns (2) going around the circle sharing with the group what they had learned on SOLO or any insights they might have had.... He [Billy] says he will do whatever it takes to quit using drugs and alcohol. He has a huge smile on his face and he can't take it off. Appears relieved and says that he needs to change and wants to change. Wants to be a normal kid.

When Billy reflected on his experience he stated, "I liked the solo, I got to be alone and internalize a lot stuff and think about what I was doing, you know. At [drug and alcohol treatment center] you're always with other people and you know, you weren't doing all of the stuff like this."

Ricky did not specifically note a benefit from the solo and thought that his time might have been better spent interacting with the other clients and staff. This is an interesting finding and may be of interest to researchers—the relationship between depression and time alone on solo. Should solo be used for some clients (oppositional defiant disorder, substance abuse) and not others (depression)?

Importance of a Non-confrontive and Caring Approach

This factor reflects fundamental core conditions of change that have been empirically documented to be necessary, but not sufficient, to facilitate change in a therapeutic process (Rogers, 1961). Core conditions are genuineness on the part of the therapist, unconditional positive regard toward the client, empathy on the part of the therapist, and concreteness of the therapist (Rogers). It is interesting to note the similarity in comments made by case studies with these four core conditions of change. All four clients similarly referenced the relationship that each had established with the therapist and staff while in the field, and how that relationship helped them speak openly of their issues. The relationship was established, they said, through a caring and non-confrontive approach by program staff.

When asked how the process had worked for Bobby, he stated, "He [wilderness therapist] didn't tell me things I had to do, he said think about it, in a way of maybe you could do this. Other counselors were kind of, you need to do this in order to have this happen. Like, he gave me an option." Ricky, in describing talks with his therapist stated, "That was probably the most knowledgeable experience for me in my life, because she helped me just totally lift this huge weight off my shoulders. It was really cool." Johnny was asked to elaborate on a statement made about staff being a key factor in helping him. He stated, "They were like friends, definitely. They were cool, they cared a lot about the kids and you can tell they like being out here with us, otherwise they wouldn't come back."

Here, Johnny is referencing the group and wilderness living dynamic between clients and staff in wilderness therapy. Staff sleep under the same tarps, eat the same foods, and hike in the same rain as the clients.

Johnny mentioned they were like friends, perhaps referencing a relationship built from the shared experiences and hardships that wilderness living can harbor. Billy also spoke of this dynamic and noted it helped him in wanting to share in group.

> I was a lot more willing to share. At my other places I'd be with them and we'd be war storying and we would get in group and no one would say anything and we would mess around. Out here, everybody was just wanting to share their experiences and I liked that.

Role of Wilderness

When asked how the process worked, clients made subtle references to nature and wilderness. They spoke of the physical difficulty of hiking, time alone, and the scenery. Billy stated, "Yeah and you know, people have been telling me that for a long time and I guess I really needed to be uncomfortable to sort of change, you know, I needed to be uncomfortable and this is what I really needed." Bobby stated, "The times when we got to be by ourselves and think and the environment, the nice scenery." Ricky also made a subtle reference to nature when he stated, "Just the nature part of it. I had always looked at it pessimistically. After talking with [wilderness therapist] and after not being depressed anymore, I looked at it optimistically. I mean, I just hadn't noticed the real beauty of it." Finally, Johnny stated, "Hiking, I mean that just boosted my self-confidence even more. It was hell at the time but I mean, towards the end I really got used to it and started to enjoy it."

Wilderness Therapy Outcomes

Research on wilderness therapy outcomes typically focuses on measures of self-concept, interpersonal skills, and recidivism in wilderness treatment. This study sought a different approach and wanted to address questions such as: Did the adolescent want to change upon completion of treatment, and if so, how? Was abstinence from drugs and alcohol even a verbalized goal? How does enhanced self-concept for an adolescent relate to relationships, environments, and decisions they need to make in their future? Each client was asked to describe what benefits they had received from the experience, and, if appropriate, to elaborate as to how benefits would relate to changes in their life. The goal of the process was twofold. First, how well, if at all, could participants describe the benefits, effects, or desired behavioral changes resulting from treatment. Second, their descriptions were to be used as a set of baseline outcomes that would be used as a guide four months following treatment when they would again be interviewed to determine their well-being.

Three major findings emerged. First, each had a unique "set" of outcomes from treatment. These unique outcomes were primarily based on presenting issues and their relationship with their families. These "sets" of outcomes served as a useful guide for follow-up assessment. Second, each client completed treatment with a list of goals that they were able to articulate. Three of those goals were common across all four client case studies: (a) a better relationship with their family, (b) abstinence from drugs and alcohol, and (c) a desire to try harder and complete school. The interesting finding is not that these outcomes are significant and immediately achievable. Rather, clients with presenting issues that were destructive and dysfunctional and resistant to change and treatment at the onset, were now talking about making changes in their lives. Whether they actually made those changes is addressed in the next section of the article. Finally, each client verbalized their future goals to varying degrees. Some spoke meaningfully and articulately about their changes and how they would make them. Others made short and rather cursory statements.

A Set of Reported Outcomes

Each client had a set of unique reported effects and changes they would like to make as a result of treatment. For Billy, the set is comprised of changes that will help him remain sober, illustrated in the codes: Identifying Real Friends, No Friends Who Use Drugs and Alcohol, and Talk About Feelings. For Ricky, his "outcomes" addressed his battle with depression: Change Music Listen To, Drop Old Friends, Have Self-Confidence. For Johnny, he felt he was more "mature and wise," perhaps referencing his noted manipulative and defiant behavior, especially in relation to authority. Finally, Bobby, in describing his desire to communicate with his father, identified the following goals: Have Goals, Respect Others, Better Person, Better Relationship with Family.

Common Outcomes and Depth of Meaning

Three common outcomes that emerged referenced Better Relationship With Family, No Drugs and Alcohol, and Finish School. The adolescents all speak of wanting to try harder in school and do not elaborate any further on this proposed change. The Better Relationship with Parents and Family code contains a range of responses with varied "depths" of meaning. Bobby and Billy reflect a desire to reconnect with parents and establish lines of communication with comments that appeared to be sincere. Bobby stated, "I can tell it is going to be different in a better way." He even articulates a way in which he plans to communicate with his father when he stated, "Try to tell him what you feel and then listen to what he has to say without interrupting and getting angry." Billy stated, "Now I see how my parents feel about me and they didn't, they never experimented with drugs or anything and I couldn't stand watching my kids do it." There is a subtle feeling of empathy captured in these responses, which adds "depth" to their

meaning. The opposite can be said for Johnny and Ricky. Though they speak of wanting to establish relationships with their parents, the responses are short and lack depth.

The same can be said for the No Drugs and Alcohol code. Billy goes into detail about his desire to lead a sober life. This was obviously a focus of treatment for him, and it seems logical that his outcomes would focus on sobriety. He also had a history of drug and alcohol treatment. Was he just good at walking the walk, and talking the talk? The combination of his meaning with his set of outcomes makes this an interesting question. Ricky addresses sobriety and makes a clear statement as to that fact. Johnny makes a cursory statement and would not elaborate, and Bobby simply stated that he had quit smoking, though his individual treatment plan revealed a marijuana and alcohol dependence diagnosis. There are obvious levels of commitment captured in the meaning behind their words. Each "set" of outcomes developed was used as a guide in the four-month follow-up interview to assess the client's status.

Four-Month Follow-up Interview

Each client was located and calls were made to conduct a brief interview over the phone. Parents were also contacted to identify their perspective, and they were asked the same set of questions. Each client is briefly reviewed.

Bobby. Bobby was living at home with his father and older brother and attending a local high school. He believed wilderness therapy gave him a fresh start to begin building his relationship with his father. He also stated they were communicating better. He felt good about the progress he had made and wanted to spend more time with his father "just doing stuff." Bobby spoke of a relapse with drinking and smoking, and said he made a dumb choice and had gotten in trouble. The difference for him this time was that he talked to his father about it openly and honestly and felt good about that. He has had to change some friends because "all they did was smoke," but has kept most of his old friends who were "understanding about him wanting to change." He said that he thought about the program all the time, about the hiking and the scenery and was glad he went through the process.

Bobby's father stated that he was regularly attending school and now understood the consequences of his actions. There had been no violent outbursts, where before there were many. Although there were "typical teenage incidents," the father believed that open lines of communication established as a result of wilderness therapy made handling the situations easier. Given Bobby's past drug and alcohol use, the father was concerned about the relapse, but felt good that he and Bobby had talked about the incident in a productive and open manner.

Johnny. Upon completion of wilderness therapy, Johnny enrolled in a structured living environment and attended a public school a short distance away because his therapist and parents believed he needed a structured environment to effectively implement proposed changes. Johnny stated that he was doing really well and was learning to take things more seriously as a result of his experiences in wilderness therapy and at the therapeutic boarding school. Johnny was caught "snorting chopped up ibuprofen," which was treated as a relapse. He stated that other than the "one stupid relapse," he was doing fine with drugs and alcohol. He did not like the lack of freedom, but felt that he was prepared for the structured environment because everything was a "piece of cake" compared to wilderness therapy.

Johnny's father stated that he was doing well in the therapeutic boarding school environment, and was receiving favorable reports from counselors and staff responsible for his primary care. The father believed that wilderness was the first step in the personal growth process and the aftercare facility was definitely needed to ensure Johnny's continued growth. At the end of the interview, the father said, "He is simply not the same kid."

Johnny's counselor was also interviewed. She reported that Johnny was doing quite well with his drug and alcohol issues, and aside from the one relapse, there had been no incidences. He was tested on this issue daily attending a public high school, and seemed to be able to handle the negative peer and environmental influences. The relapse was actually viewed as a positive experience because of the lessons learned and how the counselor, parents, and client processed the event. He was involved in individual and group drug and alcohol counseling twice a week. The experience had served as a wake-up call and he had had to deal with his future and begin to think of his life beyond his family.

Billy. Billy went home to live with his parents despite recommendations from the program that he enter a long-term residential treatment center. In the four-month interview, Billy was excited to report that he had not relapsed and attributed his success to a few key factors. He stated the difference this time was that he was not just saying he wanted to quit, but that he was willing to quit. He was still fearful of relapse, and had to continue to stay away from negative influences and not let his guard down. Billy was going to school regularly and getting good grades (A's and B's, with the only problems being in Spanish class). He was also involved in weekly groups with Narcotics Anonymous (NA) and believed meetings helped him stay sober. He said he had learned to express his feelings and knew when he was getting out of control. He felt as though he owed his family a debt of gratitude for the trouble he had caused and expressed remorse for the things he had done.

Billy's father stated that he had not relapsed and was very pleased with Billy's progress. Billy's father was

involved in group counseling three times a week and was seeing a psychiatrist every other week for behavioral counseling. He had worries about some of Billy's friends. Overall, the father was pleased that Billy had not relapsed and was proud of him for the progress he had made.

Ricky. Phone calls were made to Ricky and his parents regarding his status in making the transition and implementing the proposed changes. Ricky's father was reached by telephone and responded to the interview questions. Ricky had been in a 24-hour lock-down therapeutic facility for about three months and had not had any home visits since his stay began. Ricky's father could only say that he believed he was doing better.

Ricky was finally reached by phone and stated that he was doing fine and that the experience at the aftercare facility was very hard and demanding. He stated that wilderness therapy brought up issues for the first time and that counseling at the aftercare facility was helping him work on understanding them. He brought up the death of his sister and how it triggered childhood behavior, such as killing small animals and chemical abuse. Ricky recalled the events after wilderness therapy that led to him being admitted to the aftercare facility. The fourth night after returning home he relapsed on alcohol and three weeks after that he began smoking marijuana heavily. School was out, he wasn't working, and he started feeling depressed. Soon after, he came down with mononucleosis and became even more depressed. He started smoking marijuana two times a day and stole money from his parents. He is now working with the psychiatrist to identify why he relapsed and how he can prevent it in the future. He was noticeably shaken when talking about his experiences.

Conclusion

This paper presented common elements of the wilderness therapy process that helped four client case studies want to change their past behaviors: (a) alone time providing an opportunity for clients to reflect on their lives, (b) a non-confrontive and caring approach by program and staff, and (c) the role of wilderness in providing physical exercise (hiking), time alone, and scenic beauty. These common elements led to common outcomes of changes which proposed: (a) better relationship with parents, (b) no drugs and alcohol, and (c) a desire to try harder in school.

By examining client responses in the form of outcomes four months posttreatment, it was possible to explore how the meaning behind coded responses referenced proposed behavioral changes. This exploratory process yielded interesting results. Three of the four client case studies relapsed, although to varying degrees. Ricky relapsed to a severe degree, requiring hospitalization, and Bobby and Johnny each used on one occasion. Billy, with seemingly genuine intent upon completion of wilderness therapy, did not relapse. An interesting finding is the degree to which information of this nature can be used in the development of aftercare plans for clients. Though sobriety was a perceived outcome from Bobby's treatment (as noted in his individual treatment plan and aftercare plan), he never verbalized this in his posttreatment interview.

The situation with Ricky warrants special consideration. It appeared as though the level of his depression and severity of his personal issues required serious psychiatric care. The degree to which a short-term wilderness therapy program can effect change with a severely emotionally disturbed client is questionable. The role wilderness therapy seemed to play was one of identifying issues that perpetuated Ricky's depression. In Ricky's own words, "[wilderness therapy] brought issues up for the first time and my experience at the aftercare facility was allowing me to continue that work." This case illustrated the role of wilderness therapy as an initial assessment tool and the critical role aftercare services play in maintaining progress clients have made.

One aspect of this study that was not addressed in this article, but is a critical issue in wilderness therapy, is length of treatment. Two programs in this study were 21 days long (short-term) and the other two were 52 days long (long-term). An interesting area for further research will be duration of treatment and its relation to outcomes.

Wilderness therapy offered a unique treatment and set of outcomes for each client based on his presenting issues. The challenge for researchers is to develop evaluation measures that effectively capture the uniqueness of the wilderness therapy experience for each client, while assessing outcomes that appear to be common. Replication of these findings could utilize similar and consistent definitions of wilderness therapy and an approach that combines qualitative and quantitative methods to both capture its uniqueness and empirically validate links between common process elements and outcomes. Findings from future research in this area can help mental health professionals and families better understand for which types of adolescent clients wilderness therapy may be most and least appropriate.

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