THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 1 of 13

# THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AND RESEARCH

H. L. (Lee) Gillis, Ph.D.

Georgia College Milledgeville, GA

**Project Adventure Covington, GA** 

Invited keynote presentation for the

Coalition for Education in the Outdoors Symposium

Bradford Woods, Indiana University, Martinsville, IN

January, 1992

# RUNNING HEAD: TherapeuticsTHERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AND RESEARCH

### Overview

One of the emerging theories of therapy that appeals to me as a psychologist has its roots in the work of Milton Erickson (1980) and is labeled 'utilization'. I believe the theory is very respectful of all persons whether they be patients or clients, normal or dysfunctional, acute or chronic, temporarily, or differently abled. The respect evolves from an attempt on the helpers part to co-create a treatment plan with the person who comes to the therapeutic situation in order to facilitate solutions to real or imagined problems. Such an approach might utilize a person's past exposure with therapy to find out what did or did not work and utilize that information in mapping a way to health. The therapist might also plan a strategy that involves paradoxical directives or absurd tasks to utilize a client's resistance. Whatever the strategy, the therapist is open to assessing what the person brings to the environment where therapy takes place in order for a co-creation to be successful.

My task is to utilize my knowledge of diagnosed populations who participate in outdoor learning experiences as part of a therapy prescription and identify some adequately documented key work as well as recurrent and forthcoming findings.

In a quest to "walk my talk" or "practice what I preach," I have attempted to utilize expertise from past writers on outdoor learning experiences in order to co-create with them a list of what we know and what we need to know about my topic. I chose not to bore you with an evaluation of past research attempts that suffer from a lack adequate control groups, follow-ups, sample sizes, or other threats to both internal and external validity. I believe writings by Bandoroff (1990), Burton, (1981), Ewert (1987, 1989), Levitt (1982), and Shore (1977) as well as others cover a substantial amount of information on research into outdoor pursuits that includes references to therapeutic populations. The writings of Bacon (1983, 1987, 1988; Bacon & Kimball, 1989), Chase (1981), Gass, (1991), Kimball (1983, 1991), Haussman (1984), Roland, (Roland, et al., 1987), Schoel, Prouty, & Radcliffe, 1988; Stich (1983; Stich & Gaylor, 1983), and Witman, 1989 have also contributed significantly to this field. These writings are highly recommended by those seeking such research evaluation. I have chosen to limit my review to the past decade including the reviews mentioned above and additional work drawn from recent (1980-1991) available abstracts, articles, and documents obtained from CD-ROM and DIALOG searches of ERIC, PsychLit, and Dissertation Abstracts International. I have also attempted to limit my search to empirical articles that specifically work with a population that would meet DSM-III-R (American Psychiatric Association, 1987) criteria or theoretical articles I judged to contribute to understanding or furthering the field of therapy in outdoor learning situations. I have also chosen to apply Kazdin's (1991) definition of

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 2 of 13

psychotherapy to my reading of our field. It states that

psychotherapy is ... an intervention to decrease distress, psychological symptoms, and maladaptive behavior or to improve adaptive and prosocial functioning. These ends are sought primarily through interpersonal sources of influence such as learning, persuasion, counseling, and discussion integrated into a specific treatment plan. The focus is on how clients feel (affect), think (cognition), and act (behavior). (p. 785)

As most of you know, comprehensive searching of this field is difficult and I apologize at this point for intentionally or unknowingly leaving out or including an article that you feel is worthy or unworthy. My aim is to be as inclusive as possible. This paper may be more global than you are wanting, but it is my goal to try to work within a realistic boundary. I also recognize that having realistic and clear boundaries is a goal many of us as therapists have with the clients and families with whom we practice. By defining my agenda, I hope to make a contribution to the field. (Have I covered all my bases?)

### **Research Critique**

The thrust of my article is to apply research critiques from the field of psychotherapy onto my topic area. For this I will make use of recent review work by Gelso and Fassinger (1990); Goldfried, Greenberg, and Marmar (1990); and Kazdin (1991). I wish to use selected recommendations they have made for research on psychotherapy as a guide to evaluate and advocate improvements in our field.

First, there are a variety of forms of what can be labeled as 'psychotherapy.' Our field also suffers from definition problems as others (Roland, Keene, Dubois & Lentini, 1988) have noted. The novice and experienced reader is faced with various terms such as adventure therapy (e.g., Gass, 1991; Stich & Senior, 1984), adventure-based counseling (Maizell, 1988; Shoel, Prouty, & Radcliffe, 1988), experiential-challenge (Roland, Summers, Freidman, Barton, & McCarthy, 1987), outdoor-adventure pursuits (Ewert, 1989), therapeutic adventure programs (Wichmann, 1991), therapeutic camping (Rice, 1988; Walton, 1985), wilderness therapy (e.g., Bacon & Kimball, 1989; Berman & Anton, 1988; Levitt, 1982), and wilderness-adventure therapy (e.g., Bandoroff, 1990) to name the primary labels attached to what many of us do. Our field also uses different environments (e.g., camps or wilderness settings) and activities (e.g., traditional residential camp activities, rock climbing, cross country skiing, and ropes courses). It is even difficult to limit this field to what takes place <u>only</u> in the out-of-doors, since many writers (myself included, i.e., Gillis & Bonney, 1986, 1989) are bringing activities from outdoor settings into traditional psychotherapy settings. But we should not be held up in settling on <u>one</u> name or label.

Ewert (1987, 1989) notes a "theme" of therapeutic intervention "subsumed" in research on outdoor pursuits. He, along with others, cites global findings such as improved self concept, social attitudes, and behavior along with reduced emotional problems as evidence of (implied therapeutic) effectiveness. However, there still does not appear to be one clearly defined and researched method of conducting psychotherapy in outdoor learning experiences, in wilderness adventure settings, or in using adventure-based activities that can be assessed for effectiveness. To correct this problem, we need specific treatment manuals, such as those required in training grants by the National Institute of Mental Health (NIMH) (Goldfried, Greenberg, and Marmar (1990), to provide protocols of psychotherapy. To gain respect in the research field and also provide practitioners with "how-to-guides", these protocols need to spell out exactly what is done in therapy. Such guides will allow for replication and can be assessed quantitatively for effectiveness. In addition qualitative evaluation can offer an understanding of <u>how</u> these programs work with homogeneous diagnostic populations while being compared with (a) no-treatment control groups, (b) traditional methods of working with similar populations, (c) alternative methods of doing the same thing, and (d) different personality types experience levels of leaders, including both formally and on-the-job trained. If such training manuals are developed, they need checks and balances to insure treatment integrity (through supervision and video-taped sessions) (Kazdin, 1991). Such specificity, coupled with research, may be able to (a) revitalize the experiential tradition of psychotherapy, which according to Goldfried, Greenberg, and Marmar (1990) is "either in danger of becoming extinct, or ... (of) being absorbed by other approaches" (p. 666), (b) gain more recognition and respect among traditional psychotherapy researchers and practitioners, and (c) contribute significantly to the advancement and integration of our field with traditional psychotherapy. It is difficult, however, to envision how such extensive training manuals will be developed and evaluated across populations and therapists unless some of our larger organizations (e.g., Outward Bound and Project Adventure) fund such an in-house endeavor or some person or team of persons is federally or privately grant funded to be able to afford the time and energy necessary to carry out such an enormous project.

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 3 of 13

Secondly, our field, like that of psychotherapy, has used (a) diverse measures (e.g., self-report and behavioral measures), (b) various environments (mentioned above) and activities (Rohnke, 1984, 1988, 1989, 1991), and (c) different levels of participant functioning (i.e., fully and differently abled (e.g., Ewert, 1989; McAvoy, Schatz, Stutz, Schleien, & Lais, 1989; Robb & Ewert, 1987; Roland, 1982); inpatient (e.g., Berman & Anton, 1988; Stich & Senior, 1984; Voight, 1988) and outpatient (Berman & Davis-Berman 1989), assessed at different times (pretest posttest, and follow-up) for different lengths of treatment (Bandoroff, 1990, Burton, 1981, Ewert, 1987, Levitt, 1982, and Shore, 1977). As Kazdin (1991) notes, the use of different and multiple measures, at different times, for different definitions results in alternative outcome criteria to decide what indeed does work.

Randomized clinical trials comparing treatment and control groups or alternative treatments on outcome measures have dominated the psychotherapy research. Such research has continued to be controversial due to "no-difference" findings which may be related to a lack of statistical power (i.e., small sample sizes and "weak" assessment instruments) (Kazdin, 1990) when assessing how findings among solicited clients in clinical laboratory settings at major research universities impact day-to day practitioners whose clients often solicit them (Goldfried, Greenberg, & Marmar, 1990). For traditional psychotherapy, the use of regression techniques for targeting treatment-relevant patient attributes instead of analysis-of-variance research designs is suggested to move beyond the "no-differences" findings. More field based research is also called for to make laboratory findings more practically relevant.

Due to cost, time consumption, comparable outcomes of various treatments, and internal and external validity issues, such outcome research is slowly giving way to the study of process as it relates to outcome in psychotherapy. Even global meta-analysis has fallen by the way in psychotherapy research and is being reserved only for specific populations or treatment approaches. A focus on significant change events in psychotherapy and a data base for collecting results of therapy (as Ewert, 1987, 1989 suggest a database for research in our field) across different therapists is currently seen as a more fruitful avenue for researchers to contribute to practitioners (Goldfried, Greenberg, & Marmar, 1990).

Another evaluation criteria we should consider is offered by Jacobson and Truax (1991). They coined the term "clinical significance" to describe the ability of an approach or model to impact an individual's level of functioning following treatment so that they would (a) fall outside of the range of dysfunction, (b) fall within the range of the normal population, and (c) be closer to the mean of the normal population than the dysfunctional one.

Research specifically on therapeutic populations in adventure-challenge-outdoor-wilderness programming is subject to many of the same criticism documented for other populations. These are the general lack of randomization, the use of non-equivalent control groups and "in-house" evaluations, and the lack of adequate follow-ups, resulting in generally positive but contradictory findings (e.g., changes in self-report measures but no-differences in behavioral measures) (Bandoroff, 1990; Burton, 1981; Ewert, 1987, 1989). It would however be difficult to criticize our research for lack of a field base since it appears nearly all of it is conducted within the natural (outdoor) environment. We, like our fellow sojourners in traditional group approaches to counseling (Gelso & Fassinger, 1990) could be criticized for a narrow focus on outcome measures and research designs that utilize t-test and ANOVA evaluations instead of regression models for predictors of success (Goldfried, Greenberg, & Marmar, 1990). Such models are beginning to emerg in recent dissertation work, (c.f., Rice, 1988; Wichmann, 1990) where relationships between predictors variables and dependent variables has yet to be firmly established (c.f., Gibson, 1981).

Our field could benefit from both a global and specific meta-analysis of existing research on diagnosed populations instead of the numerous annotated bibliographies mentioned by Ewert (1987, 1989). Such an analysis might add credibility to our field especially if augmented by Jacobson and Truax's (1991) clinical significance criteria. We could also benefit from using our randomized treatment versus placebo controlled studies to identify <u>how</u> an approach works instead of whether it is effective as noted by Parloff (cited in Goldfried, Greenberg, & Marmar, 1990).

Thirdly, and most related to the goal of this paper, Kazdin believes the real question for psychotherapy research is best summed by a quote from Paul (cited in Kazdin, 1991) who asks "What treatment, by whom, is most effective for this individual (group/family in many of our cases) with that specific problem, under which set of circumstances?" (p. 786) The what question is difficult to answer due to the definition problem mentioned above. With respect to Bacon (1983, 1987, 1988, Bacon & Kimball, 1989), Gass (1991), Project Adventure (Shoel, Prouty, & Radcliffe, 1988), Roland (Roland, et al. 1987) and Wichmann (1991) there still does not appear to be a clearly stated and consistently tested method of how to conduct psychotherapy in our field. Perhaps the models just mentioned might fit well into Bacon's

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 4 of 13

(1987) division of three different adventure programming models: (1) "mountain speak for themselves", (2) "Outward Bound Plus", and (3) "metaphoric". But, as mentioned earlier, comparisons among well documented models need to be tested. One wonders, however, even if treatment integrity is insured, if such comparisons will only reveal the same "no-difference" results (e.g., Gillis, 1986) found in psychotherapy research (Goldfried, Greenberg, & Marmar, 1990; Kazdin, 1991). Our focus should be on how they work and with whom.

The "by whom" question is also difficult since training manuals do not exist nor has any research been found that assesses therapist competency in our field by comparing experienced versus novice therapist or formally trained versus on-the-job/"naturally" trained therapist. My hypothesis, based on experience training traditional counselors and adventure-based counselors, is that our field would find (as does psychotherapy) that "some therapist are better than others - regardless of training" (Goldfried, Greenberg, & Marmar, 1990, p. 663). But we need to test this ourselves instead of just debating the needs and merits of traditional psychotherapy training as a prerequisite to doing psychotherapy outdoors.

The effectiveness for different individuals, groups, and even families with specific diagnosis, under different circumstances and environments is probably the most interesting (and most difficult) question to many of us. As seen in Table 1 there have been numerous studies with different diagnostic populations since 1980 although the preponderance of delinquent studies remains. We must note the addition of programs with couples and families in this table as well as diagnostic specific groups such as victims of rape and incest. The lack of repeated studies on similar populations is also obvious from viewing the table.

Insert Table 1 about here

Further reading will reveal that measurement continues to be focused on global outcome changes without looking specifically at the process of such change or the context in which the change occurred. As Ewert (1990) noted in "revisiting" self esteem in outdoor settings, rock climbers feelings of self esteem related to climbing skills did not transfer to more global feelings of valuing themselves. He feels the findings were mediated by feelings of competence in self. However the question remains whether global changes in self esteem or other commonly measured outcome attitudes in our field translate to specific therapeutic context of persons in various diagnostic categories, who may also be of different (e.g. in gender, race, class, or national origin) than has been the norm for our field.

More extensive and focused review studies are needed at the depth of Bandoroff's (1990) review of 42 studies on conduct disordered/delinquent populations. I would like to briefly touch on Bandoroff's major findings as an example of what can and needs to be done in this field. Consistent support was found for (1) changing self perception of participants to become more realistic, (2) changing social attitudes towards others to become more positive and increasing participant's sense of belonging, and (3) lowering recidivism rates despite definition problems among researchers as to just what constitutes recidivism. Secondly, Bandoroff noted inconsistent findings among variables such as locus of control, problem solving, behavior change, durability of change, and finding a group of delinquents for which adventure therapy works best (e.g., first offenders or repeat offenders). His review ends with many of the same recommendations made in this presentation including the need to know what is causing the therapeutic effects: program elements or instructor variables. I agree with Bandoroff that process evaluation of the delinquent/conduct disordered diagnostic category is sorely needed in this field. Hopefully more researchers will build on Bandoroff's analysis and recommendations for this population and expand their work into specific adult diagnostic groups as well as populations such as couples, families, and the elderly.

### Recommendations

My attempt at contributing has been to overlay criticism and forecasting in the field of psychotherapy onto our field. The results have been that although we may fall behind in sheer numbers of studies, many of the trends in psychotherapy research offer helpful suggestions to guide further research. My recommendations include the following:

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 5 of 13

- 1. Someone needs to conduct a meta-analysis on therapeutic aspect of adventure-challenge-outdoor-wilderness that includes the criteria of clinical significance along with traditional methods of effect size.
- 2. Instead of spending time agreeing on a particular term or phrase to describe what we do, let's put energy in writing specific how-to training manuals that can be shared, and tested using quantitative and qualitatively methods with research designs focused on multiple measures and predictor models. The models need to be tested on across numerous homogeneous diagnostic populations and in multicultural settings to better understand their strengths (when indicated) and limitations (when contraindicated).
- 3. As one or more models emerge that show some research promise, training issues can be addressed to better understand how to teach traditionally trained psychotherapist to do whatever it is we do and how to ethically train experientially based outdoor leaders and paraprofessionals to work in our powerful manner.
- 5. Finally we need to also focus on sharing what we do with traditional therapists in traditional psychotherapy journals and at the traditional therapists' regional and national conferences. Such sharing may lead to our theory, practice, and findings being cited more in traditional reviews of drug prevention (e.g., Tobler, 1986) and the treatment of juvenile offenders (Basta & Davidson, 1988).

## **Summary**

Following the presentation of ideas from this paper, a discussion ensued over my recommendation that someone write down exactly how they conduct adventure therapy in order for others to replicate that method. The term 'cookbook' was brought into the discussion to describe what some in the audience apparently perceived as being told <u>the</u> way to do adventure therapy as opposed to <u>a</u> way of conducting adventure therapy that could then be replicated in different parts of the country with different populations in order to test the efficacy of a model.

Building on the cookbook metaphor, some in the audience noted that a cook will closely follow a recipe until they are accomplished at what they do and then will deviate and experiment with ingredients to fit their particular preferences and taste. Others wanted to know just what level of detail would be included in an adventure therapy cookbook and how could one model be appropriate to the nuances of different populations under different situations with different dynamics. A suggestion made from the audience that I feel was very practical in helping the replication issue asked that writers in our filed, limited by journal editors to briefly describing their particular procedure, offer to provide the reader with a more detailed description of exactly what activities were done with the population and the type and nature of the group discussion that accompanied the activities or experiences.

Integrity, credibility, and reliability are the cornerstones for and effective therapeutic adventure program. It is my hope that this paper and the ensuing discussion will be "food for thought" (pun intended!) for more fruitful research and practice of adventure therapy.

### References

American Psychiatric Association, (1987). <u>Diagnostic and statistical manual of mental disorders</u> (3rd ed., revised) Washington, DC: Author.

Davis-Berman, J. & Berman, D. S. (1989). The wilderness therapy program: An empirical study of its effects with adolescents in an outpatient setting. <u>Journal of Contemporary Psychotherapy</u>, <u>19</u>(4) 271-281.

Bacon, S. (1983). <u>The conscious use of metaphor in Outward Bound</u>. Greenwich, Denver, CO: Outward Bound. (ERIC Document Reproduction Service No. ED296848).

- THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 6 of 13
- Bacon, S. B. (1987). <u>The evolution of the Outward Bound process</u>. Greenwich, CT: Outward Bound USA. (ERIC Document Reproduction Service No. ED295780).
- Bacon, S. (1988). Paradox and double binds in adventure-based education. Greenwich, CT: Outward Bound USA.
- Bacon, S. B. & Kimball, R. (1989). The wilderness challenge model. In R. D. Lyman, S. Prentice-Dunn, & S. Gabel (Eds.), Residential and inpatient treatment of children and adolescents, (pp. 115-144), NY: Plenum Press.
- Bandoroff, S. (1990). Wilderness-adventure therapy for delinquent and pre-delinquent youth: A review of the literature. Unpublished manuscript, University of South Carolina.
- Bandoroff, S. (1992). Wilderness family therapy: An innovative treatment approach for problem youth. (Doctoral dissertation, University of South Carolina, 1992).
- Banaka, W. H. & Young, D. W. (1985). Community coping skills enhanced by an adventure camp for adult chronic psychiatric patients. <u>Hospital and Community Psychiatry</u>; <u>36</u>(7) 746-748.
- Basta, J. M. & Davidson, W. S. (1988). Treatment of juvenile offenders: Study outcomes since 1980. Special Issue: Juvenile delinquency. Behavioral Sciences and the Law, 6(3), 355-384.
- Berman, D. S. & Anton, M. T. (1988). A wilderness therapy program as an alternative to adolescent psychiatric hospitalization. Residential Treatment for Children and Youth, 5(3), 41-53.
- Berman, D. S. & Davis-Berman, J. L. (1989). Wilderness therapy: A therapeutic adventure for adolescents. <u>Journal of Independent Social Work 3(3)</u>, 65-77.
- Boudette, R. D. (1989). The therapeutic effects of Outward Bound with juvenile offenders <u>Dissertation Abstracts</u> <u>International</u>, <u>50</u>/11-B, 5306. (University Microfilms No. AAD89-26357132).
- Burton, L. M. (1981). A critical analysis and review of the research on Outward Bound and related programs. (Doctoral dissertation, Rutgers: The State University of New Jersey, 1981). Dissertation Abstracts International, 42, 1581B.
- Callahan, R. C. (1989) Academic and therapeutic potential of the Sierra II process: An evaluation of an adapted Outward Bound diversion program for adjudicated juvenile delinquents <u>Dissertation Abstracts International</u>, <u>51</u>/03-A, 724. (University Microfilms No. AAD90-07084).
- Chase, N. K. (1981). <u>Outward Bound as an adjunct to therapy</u>. (ERIC Document Reproduction Service No. ED241204).
- Clagett, A. F. (1989). Effective therapeutic wilderness camp programs for rehabilitating emotionally disturbed, problem teenagers and delinquents. <u>Journal of Offender Counseling, Services and Rehabilitation</u>. <u>14(1)</u> 79-96.
- Clapp, C. & Rudolph, S. (1990). Adventure therapy with families: The Family Challenge Program. In R. Flor (Ed.) <u>Proceedings Journal of the 18th Annual AEE Conference</u>. Boulder, CO: Association for Experiential Education, (pp. 71-73).
- Creal, R. S. & Florio, N. (1986). The family wilderness program: A description of the project and its ethical concerns. In M. Gass & L. Buell (Eds.) <u>Proceedings Journal of the 14th Annual AEE Conference: The season of ingenuity: Ethics in Experiential Education</u>. Boulder, CO: Association for Experiential Education, pp. 47-55.
- Deal, G. (1983). Ropes and recovery. In T. F. Stitch (Ed.). <u>Outward Bound in alcohol treatment and mental health</u>. Greenwich, CT: Outward Bound, Inc, pp. 30-69.
- Duhaime, D. E. (1982). The effects of an outdoor affective education program on the self-concept, social adjustment, classroom behavior and affective behavior of learning disabled children. <u>Dissertation Abstracts International</u>, 43/03-A,

- THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 7 of 13 728. (University Microfilms No. AAD82-17111).
- Erickson, M. H. (1980). The collected papers of Milton H. Erickson on hypnosis. Volume I: The nature of hypnosis & suggestion; Volume II: Hypnotic alteration of sensory, perceptual & psychophysiological processes; Volume III: Hypnotic investigation of psychodynamic processes; Volume IV: Innovative hypnotherapy. Ernest L. Rossi (Ed.). New York: Irvington.
- Ewert, A. (1987). Research in outdoor adventure: Overview and analysis. <u>Bradford Papers Annual</u>, <u>2</u>, 15-28.
- Ewert, A. (1989). <u>Outdoor adventure pursuits: Foundations, models, and theories</u>. Worthington, OH: Publishing Horizons, Inc.
- Ewert, A. (1990). Revisiting the concept of self esteem through outdoor experiential activities. <u>Journal of Experiential Education</u>, 13(2), 56.
- Freed, D. F. (1991). Participation in an adventure-challenge program and behavior change in emotionally impaired students. <u>Dissertation Abstracts International</u>, <u>52</u>/02-A 428. (University Microfilms No. AAD91-20661)
- Freeman, R. W., Anderson, C., Kairey, I., Hunt, P. F. (1982). Evaluation of Camp Tortuga, a two week children's therapeutic day camp via Goal Attainment Scaling and locus of control. <u>Children and Youth Services Review</u>; <u>4</u>(4) 375 388.
- Gass, M. A. (1991). Enhancing metaphor development in adventure therapy programs. <u>Journal of Experiential Education</u>, 14(2), 8-13.
- Gass, M. A. & McPhee, P. J. (1990). Emerging for recovery: A descriptive analysis of adventure therapy for substance abusers. Journal of Experiential Education. 13 (2), 29-35.
- Gaus, C. (1981). Experiential education as an integral part of day treatment for adjudicated delinquent youth. (ERIC Document Reproduction Service No. ED269210).
- Gelso, C. J. & Fassinger, R. E. (1990). Counseling psychology: Theory and research on intervention. <u>Annual Review of Psychology</u>, 41, 355-386.
- Gerstein, J. & Rudolph, S. (1989). <u>Taking family adventure programming one step further: Utilizing a strategic perspective</u>. Paper presented at the Association for Experiential Education, Santa Fe, New Mexico.
- Gibson, P. M. (1981). The effects of, and the correlates of success in, a wilderness therapy program for problem youth. Dissertation Abstracts International, 42/01-A, 140. (University Microfilms No. AAD81-13511)
- Gillis, H. L. (1986). An exploratory study comparing the strategic use of metaphorical introductions with traditional introductions in a one-day, adventure workshop for couples enrichment. <u>Dissertation Abstracts International</u>, <u>47</u>/09-A 3312. (University Microfilms No. AAD86-28877).
- Gillis, H. L. & Bonney, W. C. (1986). Group counseling with couples or families: Adding adventure activities. <u>Journal for Specialists in Group Work</u>. 11(4), 213-219.
- Gillis, H. L. & Bonney, W. C. (1989). Utilizing adventure with intact groups: A sociodramatic systems approach to consultation. Journal of Mental health counseling, 11(4), 345-358.
- Goldfried, M. R., Greenberg, L. S. & Marmar, C. (1990). Individual psychotherapy: Process and outcome. <u>Annual Review of Psychology</u>, <u>41</u>, 659 688.
- Goodwin, J. M. & Talwar, N. (1989). Group psychotherapy for victims of incest. <u>Psychiatric Clinics of North America</u>. <u>12</u>(2) 279 293.
- file://E:\NEW\_AT\PDF\CEO92.htm

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 8 of 13

Gugino, H. A. S. (1987). A qualitative case study of delinquent adolescent males in a youth development center short term treatment program. <u>Dissertation Abstracts International</u>, <u>48</u>/11-A, 2985. (University Microfilms No. AAD88-00269).

- Haussmann, S. E. (1984). A qualitative study of year-round outdoor therapeutic camping programs. <u>Dissertation Abstracts International</u>, <u>45</u>/09-A, 2835. (University Microfilms No. AAD84-27540.
- Jacobson, N. S. and Truax, P. (1991). Clinical significance: A statistical approach to defining change in psychotherapy research. <u>Journal of Consulting and Clinical Psychology</u>, <u>59</u>, 12-19
- Kazdin, A. E. (1991). Effectiveness of psychotherapy with children and adolescents. <u>Journal of Consulting and Clinical Psychology</u>. <u>59</u>(6), 785-798.
- Kimball, R. O. (1983). The wilderness as therapy. Journal of Experiential Education. 5(3), 6-9.
- Kimball, R. O. (1990). Empowerment: How and why they work: Special report: challenging teens in treatment. Adolescent Counselor, 4(2), 24-29.
- Kirkpatrick, T. (1983). Outward Bound as an adjunct to family therapy in the treatment of alcoholism. In T. F. Stitch (Ed.). Outward Bound in alcohol treatment and mental health. Greenwich, CT: Outward Bound, Inc.
- Kjol, R. & Weber, J. (1990). The 4th fire: Adventure-based counseling with juvenile sex offenders. <u>Journal of</u> Experiential Education, 13(3), 18-22.
- Levitt, L. (1982). How effective is wilderness therapy: A critical review. In F.E. Bolteler (Ed.) <u>Proceedings: Wilderness</u> Psychology Group Third Annual Conference, 81-89.
- Maizell, R. S. (1988) Adventure-based counseling as a therapeutic intervention with court-involved adolescents. <u>Dissertation Abstracts International</u>, <u>50</u>/06-B, 2628. (University Microfilms No. AAD89-21901).
- Mason, M. J. (1980). Relationship enrichment: Evaluating the effects of a couples wilderness program. <u>Dissertation</u> Abstracts International, 42/01-B 161. (University Microfilms No. AAD81-09468).
- McAvoy, L. H., Schatz, F. C., Stutz, M. E. Schlein, S. J. and Lais, G. (1989). Integrated wilderness adventure: Effects on personal and lifestyle traits of persons with and without disabilities. <u>Therapeutic Recreation Journal</u>. 23(3), 50-64.
- McClung, S. B. (1984). A rock-climbing program as therapy for the chronically mentally ill. <u>Dissertation Abstracts</u> International, 45/04-B, 1292. (University Microfilms No. AAD84-16170).
- Minor, K. I. (1988). An evaluation of an intervention program for juvenile probationers. <u>Dissertation Abstracts</u> International, 49/10-A, 3166. (University Microfilms No. AAD88-27331)
- Nunley, G. L. (1983). The effects of a therapeutic outdoor program on the locus-of-control and self-concept of troubled youth. Dissertation Abstracts International, 44/07-B, 2230. (University Microfilms No. AAD83-25833)
- Nurenberg, S. J. G. (1985). Psychological development of borderline adolescents in wilderness therapy (Outward Bound, delinquent). Dissertation Abstracts International, 46/11-A 3488. (University Microfilms No. AAD85-25967).
- Pfirman, E. S. M. (1988). The effects of a wilderness challenge course on victims of rape in locus-of-control, self-concept, and fear. <u>Dissertation Abstracts International</u>, 49/07-B, 2870. (University Microfilms No. AAD88-18574).
- Rice, S. (1988). A study of the impact of long-term therapeutic camping on self-concept development among troubled youth. <u>Dissertation Abstracts International</u>, 49/07-A, 1706. (University Microfilms No. AAD88-19365).
- Robb, G. M. and Ewert, A. (1987). Risk recreation and persons with disabilities. Therapeutic Recreation Journal, 21(1),

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY AN... Page 9 of 13 58-69.

Rohnke, K. (1984). Silver bullets, Hamilton, MA: Project Adventure, Inc.

Rohnke, K. (1988). Bottomless bag, Dubuque, IA: Kendall Hunt, Inc

Rohnke, K. (1989). Cowstails and cobras II, Hamilton, MA: Project Adventure, Inc.

Rohnke, K. (1991). Bottomless baggie, Dubuque, IA: Kendall Hunt, Inc.

Roland, C. C. (1982). Adventure education with people who are disabled. The Bradford Papers, 2, 39-46.

Roland, C. & Hoyt, J. (1984). Family adventure programming. In Robb, G. M. & P. K. Hamilton. (Eds.). <u>The Bradford Papers: Proceedings from the 1983 Institute on Innovations in Camping and Outdoor Education with Persons who are Disabled</u>. IV. Martinsville, IN: Indiana University Bradford Woods. 19-28.

Roland, C., Summers, S. Freidman, M. Barton, G., & McCarthy, K. (1987). Creation of an experiential challenge program. Therapeutic Recreation Journal. 21(2), 54-63.

Roland, C., Keene, T., Dubois, M., Lentini, J. (1988). Experiential challenge program development in the mental health setting. The Bradford Papers Annual, Vol III. Martinsville, IN Bradford Woods Outdoor Center.

Sakofs, M (1991). Assessing the impact of an Outward Bound program for adjudicated youth. <u>Journal of Experiential</u> Education, 14(2), 49-50.

Schoel, J. Prouty, D. & Radcliffe, P. (1988). <u>Islands of healing: A guide to adventure-based counseling</u>, Hamilton, MA: Project Adventure, Inc.

Schwartz, P. D. (1983). Rainbow: A therapeutic residential summer camp mileau and its effects on 6-12 year-old emotionally disturbed children <u>Dissertation Abstracts International</u>, <u>44</u>/11-A, 3356. (University Microfilms No. AAD84-03281).

Shore, A. (1977). Outward Bound: A reference volume. Greenwich, CT: Outward Bound, Inc.

Stich, T. F. (1983). Experiential therapy. <u>Journal of Experiential Education</u>; <u>5</u>(3), 23-30.

Stich, T. F. & Gaylor, M. S. (1983). <u>Outward Bound: An innovative patient education program</u>. (ERIC Document Reproduction Service No. ED247047).

Stich, T. F. and Senior, N. (1984). Adventure therapy: An innovative treatment for psychiatric patients. In B. Pepper and H. Ryglewicz (Eds.) <u>Advances in training the young adult chronic patient</u>, New directions in mental health services <u>No. 21</u>, (pp. 103-108), San Francisco: Jossey-Bass. (ERIC Document Reproduction Service No. ED292928).

Stich, T. F. & Sussman, L. R. (1981). <u>Outward Bound An adjunctive psychiatric therapy: Preliminary research findings</u>. (ERIC Document Reproduction Service No. ED239791).

Tobler, S. (1986). Meta-analysis of 143 adolescent drug prevention programs: Quantitative outcome results of program participants compared to a control or comparison group. <u>Journal of Drug Issues</u>, <u>16</u>, 537-568.

Voight, A. (1988). The use of ropes course as a treatment modality for emotionally disturbed adolescents in hospitals. Therapeutic Recreation Journal, 22(2), 57-64.

Walton, R. A. (1985). Therapeutic camping with inpatient adolescents: A modality for training in interpersonal cognitive problem-solving skills (self-esteem residential treatment) <u>Dissertation Abstracts International</u>, <u>47</u>/08-B, 3549. (University Microfilms No. AAD86-28822).

file://E:\NEW\_AT\PDF\CEO92.htm

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY ... Page 10 of 13

Weeks, S. Z. (1985). The effects of Sierra II, an adventure probation program, upon selected behavioral variables of adolescent juvenile delinquents <u>Dissertation Abstracts International</u>, <u>46</u>/12-A, 3607. (University Microfilms No. AAD85-26895)

West, F. W. (1989). An evaluation of the effects of a systematic short-term therapeutic camping program on the behavior and problem solving skills of socially and emotionally disturbed children. <u>Dissertation Abstracts International</u>, 50/02-A, 351. (University Microfilms No. AAD89-0940110).

Wichmann, T. F. (1990) Interpersonal problem-solving and asocial behavior in a therapeutic wilderness program (adventure programs). <u>Dissertation Abstracts International</u>, 52/05-A. (University Microfilms No. AAD91-29891).

Wichmann, T. F. (1991). Of wilderness and circles: Evaluating a therapeutic model for wilderness adventure programs. Journal of Experiential Education, 14(2), 43-48.

Witman, J. P. (1989). Outcomes of adventure program participation by adolescents involved in psychiatric treatment. <u>Dissertation Abstracts International</u>, 50/01-B, 121. (University Microfilms No. AAD89-07355).

Wright, A. N. (1982). Therapeutic potential of the Outward Bound process: An evaluation of a treatment program for juvenile del9inquents. <u>Dissertation Abstracts International</u>, 43/03-A, 923. (University Microfilms No. AAD82-18950).

Ziven, H. S. (1988). The effects of the challenge group treatment program on psychiatrically hospitalized adolescents <u>Dissertation Abstracts International</u>, 49/10-B, 4567. (University Microfilms No. AAD88-17729).

Zwart, T. J. (1988). The effects of a wilderness/adventure program on the self-concept, locus-of-control orientation, and interpersonal behavior of delinquent adolescents. <u>Dissertation Abstracts International</u>, <u>49</u>/07-A, 1709. (University Microfilms No. AAD88-16827)

### Table 1

# Author Date Diagnosis Population Banaka & Chronic Adult Young 1985 Psychiatric

Inpatient

Bandoroff 1992 Delinquent Adolescents &

their Families

Boudette 1989 Delinquent Adolescent

Berman &

**Anton** 1988 Inpatient

Psychiatric Adolescent

Callahan 1989 Delinquent Adolescent

Clagett 1989 Delinquent &

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY ... Page 11 of 13 emotionally disturbed Adolescent Clapp & Rudolph 1990 Outpatient Families Creal & Florio 1986 Inpatient Adolescents & their Families Davis-Berman & 1989 Outpatient Berman acting out Adolescent **Deal** 1983 Alcoholics Couples **Duhaime** 1982 Learning-**Disabled Adolescent** Freed 1991 Emotionallyimpaired Adolescent Freeman, et al. 1982 Behavioral problems Children Gass & 1990 Substance McPhee Abusers Adolescent & Adult Gaus 1981 Delinquent Adolescent Gerstein & Rudolph 1989 Non-distressed Families Gibson 1981 Delinquent Adolescent Gillis 1986 Non-distressed Couples Goodwin &

Talwar 1989 Incest victims Adult

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY ... Page 12 of 13 **Kirpatrick** 1983 Alcoholics Couples

Gugino 1987 Delinquent Adolescent

Kjol &

Weber 1990 Sex offenders Adolescent

Kuhn 1982 Behavior

disorders Adolescent

Maizell 1988 Delinquent Adolescent

Mason 1980 Non-distressed Couples

McAvoy . 1989 Fully &

et al Differently Abled Adult

McClung 1984 Inpatient

psychiatric Adult

Minor 1988 Delinquent Adolescent

Nunley 1983 Delinquent Adolescent

Nurenberg 1985 Borderline Adolescent

Pfirman 1988 Rape

Victims Adult

Rice 1988 Delinquent Adolescent

Sakofs 1991 Delinquent Adolescent

Roland &

Hoyt 1984 Physically Adolescents &

disabled their families

Schwartz 1983 Emotionally

disturbed Children

Stich &

Sussman 1981 Inpatient

psychiatric Adult

THERAPEUTIC USES OF ADVENTURE-CHALLENGE-OUTDOOR-WILDERNESS: THEORY ... Page 13 of 13

Walton 1985 Inpatient Adolescent

Weeks 1985 Delinquent Adolescent

West 1989 Emotionally

disturbed Children

Wichmann 1990 At-risk Adolescent

Witman 1989 Inpatient

psychiatric Adolescent

Wright 1982 Delinquent Adolescent

**Ziven** 1988 Inpatient

psychiatric Adolescent

Zwart 1988 Delinquent Adolescent