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

Annotated bibliography of actual abstracts from ERIC, PsychLit, and UMI Dissertation Abstracts International DIALOG search compiled by H. L. (Lee) Gillis, Ph.D. only for educational purposes in a presentation on the therapeutic uses of adventure-challenge-outdoor-wilderness research at the Coalition for Education in the Outdoors Research Symposium, January 17-19, 1992 Bradford Woods, Martinsville, IN

THEORY ARTICLES


Learning is a metaphoric function in which the individual confirms or reorders his sense of reality by relating previous experiences with present ones. Outward Bound, an experiential learning approach, incorporates this insight in its theoretical foundations. The effectiveness of the metaphor is dependent on the extent to which the experience is isomorphic of, that is, similar in structure to, the normal life situation of the student. The validity of an attitude to human existence can be judged by the accuracy with which it reflects the characteristics of the natural world as encountered in wilderness experiences. Various chapters of this book, which is intended as an instructor's manual for Outward Bound staff, discuss the techniques involved in (1) assessing what experiences will be isomorphic with the needs of students; (2) reframing the experience so that its value will be more accessible; (3) understanding the archetypal value of the wilderness setting of Outward Bound (archetypes specifically discussed include growth, space, justice, fate, The Mother, Community, The Leader, The Hermit, and The Hero); and (4) circumventing metaphor failures. Two appendices provide outlines of the Outward Bound process and objectives. (SKW)


The evolution of the Outward Bound curriculum in the United States with emphasis on how it has changed to ensure greater transfer of course learning from the Outward Bound wilderness experience to experiences in daily life is examined. A typology of curriculum models is developed consisting of (1) a first generation "Mountains Speak for Themselves" model which focuses on experience alone and which has dominated Outward Bound programming from the 1960s to early 1970s; (2) a second generation "Outward Bound Plus" model, which emphasizes discussion, group process, and imported techniques in use currently; and (3) a third generation "Metaphoric" model, which stresses experiential metaphors and provides a direction for future curriculum evolution. An analysis of the three models contrasts their various strengths and weaknesses. Discussion, however, focuses on the four main parts of the "Metaphoric" model applied to alcoholics as an example. This analysis suggests that the three models do not form a discrete typology, but are different, progressively more sophisticated forms of the same process. Twenty one bibliographic references are provided. (CS)

Paradox and therapeutic double bind techniques are used to overcome resistance in students with a history of success avoidance. Predictions of failure, restraining comments, and the use of paradox in the midst of an activity are defended theoretically by presenting historical roots and a rationale of effectiveness. A skill building approach focuses on examples, practitioner concerns, and common mistakes. Examples include a delinquent adolescent, a recovering alcoholic and a female with sex role confusion. While more traditional direct approaches will remain the standard for instructors, the integration of paradoxical techniques into adventure based education to overcome anticipated or actual resistance can enhance effectiveness. Assumptions underlying paradoxical learning contradict the medical model with its deterministic nature of genes and biochemistry by suggesting that human growth and learning can determine behavior. Those who choose to use the paradoxical approach are doing more than adding techniques to their repertoire, they are embracing a new set of assumptions about the nature and scope of human learning. (SKW)


Outlines the development and growth of a therapeutic adventure program as a component of a private practice. After reviewing the relevant literature, consideration is given to program development. The topics of program design, staffing, patient selection, program sites, evaluation, funding and marketing are discussed. The Wilderness Therapy Program is then presented in terms of social work values. Wilderness Therapy incorporates a systemic view of the person in the environment and aims to enhance self esteem. This program is compared to traditional, office based private practice. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved)


Describes an Adventure Based Learning Experience, which follows the design of the North Carolina Outward Bound Program, implemented for drug aftercare clients. The program is under the control of the Northern District of Alabama probation program. Features of the program and nonstatistical evidence of its effectiveness are described. (0 ref)


The Colorado Outward Bound School (COBS) provides successful adjunct programs for special populations undergoing therapy at the Adventure Home (Boulder, CO), the Juvenile Justice Program and the St. Luke's Hospital Alcoholism Recovery Unit (Denver, CO), and the Dartmouth Hitchcock Medical Center Department of Psychiatry (Hanover, NH). The goals of the COBS therapeutic approach

Discusses the development, structure, and functions of a wilderness camp for emotionally disturbed, but not mentally retarded, adolescents and teens aged 12-17 yrs. Criteria for inclusion in the camp are nature of offenses, varying from truancy to murder; ability to pay; and an IQ of at least 70. Topics discussed include therapeutic programs and social organizational structure of the camp. Evidence from studies of participants followed up 6 mo after release indicates that most did not recidivate during this period. Principle factors are presented that facilitate the rehabilitation of participants. (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved)


The paper explores basic concepts of mental retardation and proposes wilderness adventure programming as an approach that offers mentally retarded persons the dignity of taking a reasonable risk. Benefits of such programming are cited for affective, cognitive, and psychomotor domains. Processes involved in the therapeutic bases for program development are traced from needs assessment, component analysis (covering physical, social, task, perceived risk, and leadership components), and evaluation. An example is provided of designing a therapeutic program to increase risk taking behavior and self esteem. The distinction between a therapeutic and a recreational model for wilderness adventure programming is stressed. Among appended materials is a list of common program activities and the corresponding needs addressed. (CL)


Presents a rationale for using adventure activities (AAs) in group counseling (GC), which could be used as an adjunct to traditional GC processes or as the primary mode of treatment. AAs may be perceived as involving some amount of physical and/or psychological risk, especially when activities require that group members trust or depend on each other. The focus is on AAs involving physical challenge or adventure through leader designed, structured exercises. Such activities may serve
several functions (e.g., generating data for discussion after the activity). The role of the group leader in AAs is discussed. Two case examples are used to describe the adaptation of the activities in GC with couples and single parent/adolescent families.


Describes group treatment models for child incest victims in 3 age categories: preschool, latency, and adolescence. Group structures useful for male victims, the integration of family therapy with group treatment, and the need for community involvement and cultural sensitivity are emphasized. Group treatment for adult incest survivors is discussed, and special techniques used in groups for incest victims, including art and play therapy, psychodrama, bibliotherapy, wilderness encounters, and educational techniques, are outlined. (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved)


Describes the wilderness adventure experience for offenders at Santa Fe Mountain Center. The experience can reveal a composite picture of a client’s global personality in the way s/he responds to tasks, demands, and stimuli. An example of a client evaluation is provided. (ERB)


Describes an "integrative outreach" program designed to meet the developmental needs of adolescents in the Maine state child welfare system. Claims the program activities mirror and promote the adolescent transition from acting out behavior to emotional verbalization and therefore may provide an intermediate step between traditional recreation and traditional clinical treatment. (Author/ABL)


Describes the process in which families participate in a wilderness experience (e.g., trekking, rafting). Metaphors such as climbing or peddaling a canoe are translated into daily living patterns to deepen individual and family self knowledge, self esteem, and intimacy. Premises on which wilderness therapy are based include immediate feedback, trust, and eustress. It is suggested that by weaving various threads into a tapestry of family adventure, a family's unconscious can be unlocked. Through this process, family members can discover new and deeper parts of themselves and increase congruency. This shared experience of risk taking in a safe, supportive environment results in shared mutual vulnerabilities, increasing the intimacy in family relationships.


Describes how the components of inpatient treatment help the chemically dependent adolescent to take responsibility for abstaining from alcohol and other chemicals. These components include family therapy, continuing care, group and individual counseling, medical detoxification services, and education. Research on the physical recovery of adolescents from substance abuse is cited, and a wilderness adventure program is described that exposes individuals to endeavors that foster group dynamics and "natural highs." (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved)


Provides theoretical and practical information on the use of Outward Bound activities in a mental health setting. First section traces the development of physical activity as an adjunctive psychiatric treatment and then describes a model treatment program for psychiatric patients in the second section. (ERB)


A 1975 Outward Bound Mental Health Project, begun with a pilot project for disturbed adolescents, has evolved into an ongoing treatment option in three separate clinical settings for psychiatric patients and recovering alcoholics. Outward Bound consists of a series of prescribed physical and social tasks where the presence of stress, uncertainty, and the need for problem solving, communications, and immediate judgment provide situational analogues for problematic areas in the patient's daily life. The Outward Bound session consists of traditional activities such as individual and group problem solving activities, ropes course, rock climbing, hiking, orienteering, canoeing, and cross country skiing. Patients in the diagnostic categories of schizophrenia, mood disorders, neurotic and personality disorders, alcohol and drug abuse, and adjustment disorders have participated in the program conducted by a treatment team consisting of an attending physician, resident physician, nursing staff, social service, and activity therapy staff. Follow up studies of participating patients indicate that Outward Bound was a very positive experience which increased patients' self esteem. These studies support the postulates that performance accomplishments are an influential source of information and that, when perceived to be of great magnitude, these accomplishments tend to be generalized to other situations in which performance had formerly been inhibited due to feelings of personal inadequacy. (NEC)


Describes an experiential therapeutic program delivered in the context of the Outward Bound model. Outward Bound is a nonprofit education institution that promotes self growth through wilderness
challenges. The Outward Bound Mental Health Project (OBMHP) differs significantly from the traditional Outward Bound experience in length. The OBMHP focuses on individual and group initiatives and on mini expeditions in discrete units of time. The program has been used with a broad spectrum of patients, whose diagnoses have included schizophrenia, mood disorders, neurotic and personality disorders, alcohol and drug abuse, and adjustment disorders. The clinical staff review patients to determine who can benefit from Outward Bound. Those invited to participate review the program and establish personal goals, which tend to vary from the concrete to the abstract depending on the patient's degree of illness, insight, and capacity to generalize. Many patients attend several day long experiences. With repeated participation, it becomes easier for them to see the relevance of Outward Bound as a therapeutic experience and thus to establish realistic goals for themselves. Processing the experience with patients generally occurs either as a focused discussion after each activity or as a group discussion held at the end of the day. Reporting on the field experience includes staff observations, the patient's understanding of his/her psychological difficulties, and the patient's ability to generalize from the field experience to other relevant therapeutic issues. (4 ref)

**EMPIRICAL ARTICLES**

Banaka, W. H. & Young, D. W. (1985). Community coping skills enhanced by an adventure camp for adult chronic psychiatric patients. *Hospital and Community Psychiatry; 36*(7) 746-748

Assessed the effect of a 2 wk wilderness camp on 10 skill areas related to community survival of the chronic mentally ill. 48 chronic psychiatric patients (mean age 30 yrs) who participated in the program and 30 age matched, non-treatment controls were evaluated before, during, and immediately and 2 3 wks after the camp. Results show that, compared with controls, the participants improved in 7 of the 10 areas by the end of camp and maintained their improvements in 4 of the 7 areas for several weeks following their return to the hospital: At 6 mo follow up of discharged patients, significantly more participants than controls were in the community. (14 ref) (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved)


In 2 pilot backpacking trips, 14 adolescent inpatients (aged 13 17 yrs) were taken from acute psychiatric hospitals into the wilderness. Those selected were either withdrawn or acting out, except for 4 adolescents diagnosed with attention deficit disorder or conduct disorder. The former group showed greater change than the latter on a variety of measures including treatment plan objectives, behavioral symptomatology, and locus of control. In general, change during the wilderness therapy program (WTP) was more rapid than during other phases of hospitalization. It is concluded that WTP appears to be a promising alternative to traditional programs. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved)

Evaluated a wilderness therapy program for 23 13-18 yr olds in outpatient counseling. Data were collected before and after 4 camping trips using Rotter's Internal External Locus of Control Scale, the Brief Symptom Inventory, Piers Harris Children's Self Concept Scale, the M. Sherer et al (1982) measure of self efficacy, and several measures designed for this program. Following a backpacking trip that included daily therapy, a decrease in self reported symptoms and increases in self efficacy and self esteem were found. (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved)


Evaluated the effectiveness of a 2 wk therapeutic day camping experience in facilitating change in children aged 8-12 yrs with adjustment or behavioral problems. For each of the 42 Ss attending camp, 3 goal attainment scales (GAS) were administered before camp separately to the children, parents, and counselors. These scales specified individualized behavioral goals for problem areas relating to self, family, children, and group, which could be realistically attained within 2 wks. Postcamp GAS follow up showed that children, parent, and counselor groups each perceived the children as achieving significant positive change in regard to specified goals. Children were also administered The Nowicki Strickland Locus of Control Scale for Children. The hypothesis that internals would be perceived as achieving significantly more positive behavioral change on the GAS than externals was confirmed. Discussion centers on the viability of therapeutic camping, the merits of using the GAS and the multi informant approach, and specific therapeutic strategies indicated by the present findings. (30 ref) (PsycLIT Database Copyright 1983 American Psychological Assn, all rights reserved)


The role of experiential education is the focus of this paper describing the treatment program at De La Salle Vocational, a day vocational high school for adjudicated delinquent youth. The paper begins by discussing the characteristics and needs of the students and describing the Off Campus Program, a 3 year research model designed to address the students' need for life skills. Four off campus, experience based learning modules are explained: (1) stress/challenge courses adapted from Outward Bound; (2) service learning courses based on the work of the National Commission of Resources for Youth and the National Student Volunteer Program; (3) adventure learning courses combining active experiences with traditional subject areas; and (4) community based learning that combines intensive study of one topic area while interacting in the community. The overall treatment program is illustrated through the example of a fictitious student named Rich whose experiences are used to demonstrate the integration of academic and vocational skills with experiential learning. The final part of the paper reports preliminary findings of the project evaluation, which show significant changes in both drug use and legal involvement following the treatment program. Pre and post treatment results are discussed for frequency of drug use, number of arrests, interpersonal maturity, family roles, self esteem, and
school problems. A list of selected references is provided. (JHZ)


According to a small study, Outward Bound can enhance the treatment of hospitalized psychiatric patients. Researchers measured the effect of a therapeutic Outward Bound program of prescribed physical and social tasks on the contentment and self-esteem of seven patients undergoing short-term treatment at the Veterans Administration Hospital in White River Junction, Vermont. After selection by the medical staff, the seven male patients, all between the ages of 25 and 50, participated in three weekly, 4-hour Outward Bound sessions that included a ropes course, rock climbing, and a rappel. Pre- and post-test results indicated a statistically significant effect of Outward Bound on contentment and a positive but statistically insignificant effect on self-esteem. Results of a comparison to a control group were insignificant. Effects of the Outward Bound program did not dissipate during treatment and the Outward Bound patients had a shorter mean stay in the hospital. A questionnaire and self-rating scale completed by 45% of the test group after four months confirmed the findings at the time of hospitalization. Further research is suggested. (SB)

**DISSERTATIONS**


The purpose of this study was to investigate the effects of an Outward Bound course as a supplemental component of a traditional probation program. Further, an attempt was made to examine two premises put forth in a theory explaining the Outward Bound process: (a) participants must be motivationally ready in order to experience the therapeutic benefits of an Outward Bound course; and (b) participation in Outward Bound leads to increased self-esteem, self-awareness, and sense of belonging.

The subjects of this study were 69 juvenile offenders who were referred to the Project Way Outward Bound program by their court counselors or probation officers. Subjects were randomly assigned to experimental and control groups. All subjects participated in a 1-day ropes course. Following the ropes course, the subjects assigned to the experimental group attended a 24-day Outward Bound program and subjects assigned to the control group proceeded with their probation plans as designated by their court counselor.

To evaluate the impact of the 24-day Outward Bound program, the Jesness Inventory and the Global Self-Esteem Scale were administered to both groups of subjects at three intervals. Both groups of subjects completed self-report measures prior to participation in the ropes course and then 1 and 4 months after this date. Recidivism data were collected at the follow-up date.

Self-report data were analyzed with a two-way repeated measures analysis of variance. Results showed significant differences between the experimental and control group only in the area of self-esteem. Both groups improved significantly on 9 of the 10 Jesness scales over time. A trend analysis indicated that the changes for the experimental group were consistently more pronounced than those for the control group. This finding was true for 9 of the 11 scales. Although this finding is the result of an exploratory trend analysis, it is strongly suggestive and supports reason for further investigation in this area.
Behavioral data were analyzed with a chi-square test. There were five categories of recidivism: no allegations, runaways, probation violations, robbery charge or assault charge. The chi-square indicated no significant differences between the experimental and control group.

In order to study the impact of motivational readiness on Outward Bound participants, the Student Attitude Questionnaire, a self-report scale, the Instructor Rating Scale, a behavioral measure, and the Achievement Motivation scale, from the Personality Research Form, were administered at the pretest. Scores from these measures were combined and subjects were divided into high and low motivational readiness groups. Changes from pretest to posttest and follow-up were analyzed with a two-way analysis of variance. No significant differences were observed between high and low motivation groups. Implications of the findings were discussed and suggestions for future research were offered.


The primary purpose of this study was to evaluate the effects of the Sierra II program on adjudicated juvenile delinquents. Specifically, this research measured the program's effect on the self-esteem, self-efficacy, locus-of-control, problem-solving skills, school behavior, and follow-up academic achievement. All study variables, except school behavior and follow-up academic achievement, received pre and post treatment assessments. Both school behavior and academic achievement received pre, post, six-month and twelve-month follow-up assessments. Individuals were assigned (by the court services staff) to an experimental group and a control group.

The Tennessee Self-Concept Scale, modified Internal-External Scale, and the Generalized Expectancy of Success Scale were administered to both groups as a pre-test and post-test. The Means-Ends Problem-Solving Procedure was administered to the experimental group at the pre-test and post-test. Demographic, biographic, offense related, and school related data were collected on each study participant through use of Youth and School Data Forms.

Data were analyzed primarily through the use of an ANOVA with repeated measures. Where appropriate, Matched T-Tests were performed in order to ascertain significance between paired data samples. The variable, self-esteem, showed a significant increase over the assessment periods. The variable, self-empowerment (defined as union between locus-of-control and self-efficacy), showed a significant increase in the measure of locus-of-control, but did not show a statistically significant difference in self-efficacy. Therefore, this variable can only be partially supported. The results of the variable, problem-solving skills, showed a significant increase over the assessment periods. The results indicate that for the component variables related to school behavior and follow-up academic achievement, (negative comments, grade point average, absences/truancy, and discipline comments), only negative comments showed a significant change during the assessment periods. The research indicates that over time the Sierra II process was more effective in improving school behavior and grade point average, but that these changes did not meet study significance.

The findings of this research indicate that the Sierra II program had the theorized effect upon participants. However, further study should be undertaken to discriminate between the Sierra II components effecting behavior and achievement and those related to individual participant maturation. (Abstract shortened with permission of author.)

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. Dissertation Abstracts International, 43/03-A, 728. (University Microfilms No. AAD82-17111)

Problem. The literature indicates that the affective needs of learning disabled children are particularly acute. Many schools have instituted programs of affective education, but research on the effectiveness of such programs is meager and inconclusive.

Several survival training and therapeutic camping programs have been reported to produce improvements in self-esteem, social development, and behavior. Since these are areas of particular difficulty for many learning disabled children, a program of outdoor affective education was developed and implemented to determine its effects on a sample of learning disabled students. Specifically, this research was conducted in an attempt to answer the following question: Does participation in a carefully structured outdoor affective education program for learning disabled students affect self-esteem, social adjustment, classroom behavior, and affective behavior?

Procedure and Methods. Thirty-three boys and 15 girls, aged 10-13, were randomly selected from the population of a school for learning disabled children in eastern Pennsylvania. From this number, nine boys and three girls were then randomly assigned to each of the following groups: (1) Outward Bound, (2) Recreation, (3) No Treatment. The remaining 12 students were designated as alternates.

Subjects were pretested on measures of self-concept, social adjustment, and classroom behavior. The Outward Bound and Recreation programs commenced and continued for seven weeks, each according to a prearranged format and under the direction of the investigator. Observers were present during all sessions of both groups, keeping notes on group and individual behavior.

Upon completion of these programs, posttests data were collected from all three groups.

Results and Conclusions. Analyses of covariance indicated no statistically significant posttest differences in self-concept or social adjustment. In addition, there were no statistically significant posttest differences in Maladaptive Classroom Behavior among the three groups. (Author's abstract exceeds stipulated maximum length. Discontinued here with permission of school.) UMI


This study examined the role of an adventure education program on influencing the behavior or emotionally impaired students in the Traverse Bay Area Intermediate School District's New Campus and Center Programs.

In the fall of 1987, New Campus contracted with the Traverse City (Michigan) Area Public Schools' Bay Area adventure School to provide outdoor adventure programs for its students. This program consisted of one day of initiatives and one day of high ropes activities, as well as two and three day fall, winter, and spring overnight sessions. There was a significant difference (at the .05 level) between Behavior Evaluation Scale (BES) scores in the years after the outdoor program was implemented (N = 21 and 22), when compared to the year when there was no outdoor program (N = 16).

In order to gain a clearer understanding as to what extent behavioral changes might be attributed to the outdoor adventure program, BES subscale measures were taken before and after the winter (N = 35) and spring N = 29 outings in 1990. Data indicated a significant difference in pre and post activity measures at the .01 level for New Campus and Center Program students. It is clear that these two- and three-day sessions can greatly influence BES subscale Interpersonal Difficulties scores on a short-term basis; however, there is not adequate evidence to suggest that numerous short outings provide positive long-lasting change.
Open-ended interviews were conducted with New Campus staff (N = 6) and students (N = 20). Recurring themes were categorized and totaled. Students and staff unanimously agreed that the outdoor program was of benefit and should continue to be a part of the school's curriculum. The primary benefits of the outdoor program were felt to be development of outdoor skills, social skills, environmental awareness and personal growth.

Questionnaires completed by teachers (N = 6) and students (N = 23) in the spring of 1990 indicate that participants perceive the primary benefits of the outdoor program to include increased self-concepts, the development of outdoor skills and enhanced group interactions.


The purpose of this study was to investigate empirically the effectiveness of short-term wilderness therapy programs as an alternative mental health treatment modality. Further, an attempt was made to determine for which individuals a wilderness experience is most and least likely to be effective, in order to understand better both the potential and limits of such programs and to make more appropriate referrals to them. The subjects of this study were 89 students, 66 boys and 23 girls, who were referred to the Connecticut wilderness School for a wide variety of problems by social service, school, and corrections agencies. Each subject participated in a 21-day Outward Bound-type course that included a variety of rigorous, challenging, and stressful wilderness activities.

Two types of dependent variables were chosen for evaluation because they are central to psychological adjustment: self-concept (which included self-esteem, self-regard, self-acceptance, and discrepancy between perceived and ideal self) and interpersonal competence (which was rated by both the wilderness school instructors and the referral agency counselors). Thirteen independent or predictor variables were examined for their possible relationship to success in a wilderness program: previous camping experience, institutionalization, self-esteem, academic achievement, motivation to change, understanding of the benefits to be derived from a wilderness program, intactness of family, parental support for participation in the program, age, race, sex, work experience, and primary referral problem. Four hypotheses were formulated, two pertaining to the changes expected from pretest to posttest on the self-concept and interpersonal competence variables, and two pertaining to the predictor variables, some of which were expected to be related and others to be unrelated to success in the program.

As predicted, comparison of pretest and posttest scores by means of paired-sample t tests showed significant positive changes on the four self-concept measures and the two measures of interpersonal competence. Examination of the subjects' responses on the self-regard measure showed that at the end of the program subjects saw themselves as having increased in integrity, competence, and amiability. The relationship between the predictor variables and success in the program, defined operationally as the amount of change that took place from pretest to posttest on the outcome variables, was examined by means of multiple regression analyses. These analyses revealed no consistent relationship between any of the predictor variables and success in the program. A discriminant analysis of 16 students who dropped out of the program prior to its completion revealed that boys, those referred for delinquency, and those with less understanding of how they might benefit from the program were more likely than other participants to drop out of a wilderness program.

The Connecticut Wilderness School and other similar short-term wilderness therapy programs are effective in bringing about positive changes in the self-concept and interpersonal competence of problem youth. The lack of a consistent relationship between benefit derived from the program and background and personal characteristics suggests that the benefits are not limited to certain classes of individuals and that such programs may be more widely applicable than might have been supposed. As a possible explanation of the wide success of wilderness therapy programs, such programs can be viewed
as a form of milieu therapy, in which treatment is provided by one's total environment and which has influence on many different areas of an individual's concept of self.

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. Dissertation Abstracts International, 47/09-A 3312. (University Microfilms No. AAD86-28877)

This research compared and contrasted the metaphorical introduction of physical adventure activities (group initiatives and ropes courses activities) with traditional introductions to the same activities. Two groups received metaphorical presentations (N = 20) and two groups received traditional presentations (N = 13) while each participated in one 8-hour, outdoor enrichment experience. Participants were compared on (a) relationship satisfaction, (b) couples' communication, (c) personality characteristics, (d) amount of trust and support received, and on (e) the effectiveness of activities for enrichment. Results of the univariate analyses of covariance showed no differences on any of the measures between groups immediately following the activities. The metaphorical group means were consistently higher than the traditional group at weeks following the experience, but on only one measure were significant differences found between groups. A personality characteristic, dominance, demonstrated a significant group times measure, within group interaction F (1, 39) =137.27, p < .0042. Most significant was the metaphorical group's rating of the enrichment activities (when compared to the traditional group's rating) as more effective for couples enrichment experiences F (1, 35) = 7.44, p <.01.

There was statistical evidence that a metaphorical approach is at least as effective as a traditional approach to introducing adventure activities. There was minimal support to indicate that the metaphorical approach has effects upon participants which are not measurable until sometime after completing the adventure experience. The metaphorical introduction of adventure activities did not prove to have a robust effect on normal, non-distressed, couples immediately after the one-day enrichment experience. Males and females participating in the experience did not differ in the present investigation with regards to trust or support received. Gender-linked cultural stereotypes found elsewhere were not supported by this investigation. Suggestions for further research were discussed as was the need for research in adventure programming to investigate more diverse populations and newer therapeutic techniques which might lead to more effective use of this powerful medium.


The purpose of this study was to describe the response of a group of juvenile offenders to a state mandated short term treatment program emphasizing outdoor adventure activities. The specific objective was to document the degree of congruence between the perceptions of the program participants, the perceptions of the staff and the perceptions of the investigator regarding treatment response.

A descriptive classification of eight juvenile offender profiles was developed during data collection and related to response and outcome patterns. The match between the observed needs of the 15 selected juveniles and the treatment approach was examined by assessing the relative impact of four mediating variables affecting responsiveness: (1) the age and developmental level/stage of the juvenile, (2) the extent of socialization, (3) past history of aggressive behavior and (4) the intellectual
capacities of the youth. Two developmental stages with unique needs, task requirements and response patterns were discriminated in the treatment population based on chronological age. Three antecedent variables: socialization, history of aggressive behavior and intellectual capacity, were categorized according to four D.S.M. III Conduct Disorders categories and five WISC-R classifications and systematically arranged in a trait by trait matrix. A selection effect was identified and related to treatment response and outcome.

Four areas of discrepancy related to frequency of outdoor adventure activities, the process of selection, length of stay and program evaluation were discovered. Administrator/counselor role ambiguity and role overload were identified as partial explanations for the incongruencies. The theoretical implications of role conflict, role strain and the considerations of determinate versus indeterminate sentencing in the juvenile justice system were discussed and applied to the findings of this study. Recommendations for future research addressed maximizing therapeutic response in juvenile offenders by investigating matching of treatment interventions to offender characteristics through more discriminating typological classification and outcome studies.


Year-round outdoor therapeutic camping is an emerging alternative to institutional and restrictive placement of emotionally disturbed and troubled youth. Research reports and journal articles indicate that therapeutic camping programs are an effective treatment approach though there are few reports on year-round therapeutic camping programs in the literature.

In order to establish an information base on year-round therapeutic programs a national telephone survey was conducted. A survey instrument was developed and administered over the telephone to the directors of 27 year-round programs who agreed to participate in the study. The survey instrument was designed to secure qualitative and quantitative information to answer seven research questions in five areas: General or demographic information, camp program content, school program, camper graduation policies and procedures, and program evaluation.

Research questions, developed to determine the current status of year-round therapeutic camping programs in the United States, were: (1) What long-term residential camp programs presently exist?, (2) What populations do the programs serve?, (3) What are common elements of the camp program content?, (4) What kind of educational programming is provided in camping programs?, (5) What policies, practices, and procedures are utilized to determine when a camper is ready to graduate?, (6) What evaluation studies have been conducted to determine the efficacy of therapeutic camping?, and (7) To what extent have long-term therapeutic camping programs been influenced by the Loughmiller model?

Results of the study indicated a total of 32 year-round therapeutic camping programs all utilizing the principles developed by Campbell Loughmiller beginning in 1948 at the Dallas Salesmanship Club Boys’ Camp. While some changes have taken place over time, most notably the addition of an academic component to what was originally an experientially based program, the basic constructs of the Loughmiller model remain dominant in all of the surveyed programs.

Other results include a directory of year-round therapeutic camping programs and a directory of foundations and organizations which operate such programs.

Kinetic Learning Methods (KLM) are a series of experiential ways of learning through doing and group processing which utilize an active and adventure-based approach developed from New Games, centering and balancing, group learning exercises, outdoor group problem solving, and Kinetic Psychotherapy. KLM is described, tested, evaluated, and the dynamics discussed through a case study of its use with boys in a residential treatment center for adolescents with behavior disorders.

The study develops a list of behaviors important to the boys' treatment; identifies which behaviors seem to be most affected (i.e., self-concept); provides ratings of behavior, progress, and Kirlian print change during this period; outlines the agenda and activities used and explains how they were utilized; discusses observations made of the dynamics and issues engaged in during KLM and makes recommendations for improvement; and collects evaluative ratings of the sessions from participants and staff.

Both qualitative and quantitative data are collected with emphasis on the former. No control groups exist limiting conclusions about causal relations and generalizing to other populations. The discussions provide largely descriptive information. The evaluations by staff and participants are very favorable. Areas of behavior most commonly focused upon are positive self-concept, personal responsibility, risk taking, involvement with others, identifying feelings, considering alternatives, communication, cooperation and expression of feelings, especially aggression.

KLM seems to work best when used with these boys in a group of 6-8, when House staff are involved in the sessions, when the boys are older, willing to talk about themselves, and open to activity, and when a connection is made between situations in the House and what is learned in KLM.

The study demonstrates how a method combining counseling and educational goals with games, exercises, and adventure activities is used in residential treatment. Further study is necessary to discover causal relationships, to verify information here, and to explore the use of KLM in other settings. A bibliography and appendix outlining the activities used is included.


This study explored the application of Adventure Based Counseling (ABC) (Shoel, Radcliffe & Prouty, 1989) as a model to enhance court adjudicated adolescents' self-concept and self-esteem, using outcome measures of school grades, disciplinary referral rate, attendance, self-concept and self-esteem inventories, participant self-report, and group progress notes. Thirty-one court adjudicated adolescents (23 males and 8 females) were selected based upon current probation status, school attended, and age. Three groups were created, including two intervention groups (G1, and G2) and one nonintervention group (NG). Quantitative assessment of results included the Battle Culture Free Self-Esteem Inventory (Battle, 1982), the Tennessee Self-Concept Scale (Fitts, 1965), analysis of grade point averages, disciplinary referral rates, and daily attendance. Qualitative assessment included student self-report through Experiential Rating Sheets (ERS), verbal self-report, and group and individual progress notes. The major findings of this study were that participants in ABC significantly improved Physical, Moral, and Social Self-Concept, as well as Self-Satisfaction, and Total Self-Concept, as measured by the TSCS, when compared with a nonintervention group. Qualitative measures indicated a concordance with standardized measures. For G1, One-year follow-up on school-related measures indicated significant improvement in grades, and a significant reduction in disciplinary referrals. Additionally, significant improvement was also noted for grades and disciplinary referrals between post and follow-up measures. One-year follow-up on self-concept measures indicated significant improvement in Family, Social and Total Self-Concept, as well as Self-Identity and Self-Satisfaction, as measured by the TSCS. Additionally, significant improvement was also noted for Social Self-Concept and Self-Identity between post and follow-up measures. Significant Improvement in Total
Self-Esteem was also noted, as measured by the SEL. Qualitative measures for G1 indicated a concordance with standardized measures.


The major goal of this study has been to explore the effects of a wilderness outward-bound type experience where stress was employed to assist couples in relationship wilderness enrichment.

The major goal of this study has been to integrate an outdoor rock climbing program with an inward bound type program in a four day wilderness couples enrichment program. The second goal was to incorporate the use of the physical self in the traditional cognitive-affective enrichment program formats using a group structure in order to discern the difference between verbal trust and the nonverbal enactment of trust. This goal is especially significant because trust has been considered the basis of all human relationships. The third goal has been to utilize stress (the positive use of stress) in a planned way so it can be the catalyst for change. The fourth goal was to determine what results from this experience can be applied to the knowledge base about bonded relationships.

The data analyzed here came from 20 individuals, or ten couples, married 18 years or less. The couples were volunteer subjects from participants in a couples wilderness enrichment program. The couples were asked to participate in this study by a therapist and outward-bound trainer who had an information session for possible participants.

All couples first filled out self-report questionnaires which focused on: (1) Background information; (2) Lifestyle Assessment Inventory (LAQ); (3) Personal Assessment of Intimacy in Relationships (PAIR); (4) Family Adaptability and Cohesion Evaluation Scales (FACES); (5) Family Inventory of Life Events and Changes; (6) Self-Esteem (Tennessee Self-Concept); (7) Fundamental Relationship Orientation—Behavior (FIRO-B); (8) Couples Climbing Questionnaire (CCQ).

The couples completed these questionnaires when they arrived at "The Edge," a large retreat home on the North Shore of Lake Superior. They had four days of living together, climbing and talking together in evening discussions. Individual (male and female) scores were separated and couples' scores were recorded on all the instruments. After the post-testing, six weeks after the climbing weekend experience, data were analyzed and mean scores were examined on all variables, some within the framework of the Circumplex Model (FIRO-B, FACES, and PAIR). t tests were run to determine significance of change after the climbing weekend.

The study resulted in validation of some assumptions about relationships and enrichment. The sample consisted of 9 of the couples falling within the "normal" or open range on the Circumplex model; couples had increased self-esteem at post-testing time. Trust findings were significant; women's self-trust increased twice that of men's; as women's self-trust increased, so did their "perceived intellectual intimacy." Women also reflected less need for inclusion at post-testing. Men showed higher scores on "perceived emotional intimacy" at pre- and post-testing. While couples did show increase in life changes (stress) at post-testing, they reported less Family Strain.

The study reflected many of the gender-linked cultural stereotypes—that women had less trust in themselves, that males trusted equipment more than women, that women's overall wellness, including physical health, was higher than men's and that women's perception of their partner's trust in them was less than that of men's.

The main goal of the study was to explore the relationship between the variables linked with enrichment programs for paired relationships. From this study a group of hypotheses can be generated for further research.

What we have learned here is that when couples experience an enrichment program including nonverbal communication through the metaphor of rock climbing, we can integrate qualitative and quantitative findings to learn what dimensions of enrichment programs might have further in-depth

The purpose of this study was to assess the value of adventure based-programs as a therapeutic technique with the chronically mentally ill and to explore simultaneously the validity of six assessment procedures employed to gather information across a wide spectrum of personality variables. Assessment consisted of pre and posttesting with the MMPI, the Tennessee Self Concept Scale, and an Interview Assessment and Questionnaire devised by the researcher and measuring behavioral, self-efficacy, and phenomenological characteristics; self-reported behavioral data recorded daily for fourteen weeks; monitoring group counseling goals; and a case study of each participant to identify additional relevant variables.

Research was completed on six outpatients at a psychiatric facility in Arizona. All participants had been diagnosed as "schizophrenia" or having "schizotypal personality disorder." The study consisted of three phases: four weeks of baseline data-gathering during which pretests were administered; six days of rock-climbing and six days of group counseling, each component occurring one day per week for six consecutive weeks; and four weeks of post-rock-climbing data-gathering during which pretests were administered and goal implementation was assessed. Case study information was accumulated throughout the study.

The results yielded evidence that the rock-climbing program produced positive changes in all six participants, primarily in how they perceived themselves and their abilities. The most valuable tools in this determination were the case studies, the Tennessee Self Concept Scale, the interviews, and the goal implementation technique. The least valuable was the MMPI which proved to be an inadequate measure of change. Behavioral assessment is indicated to be one of the most valid of the available tools when proper implementation is feasible.

In the opinion of the researcher, maximum benefit from adventure-based programs with the chronically mentally ill can be derived and adequately assessed if the program design allows for sufficient exposure to the intervention strategy, comprehensive assessment of a wide spectrum of personality, and meticulous research of the appropriate assessment methods. A final indication for this population is that a supportive and caring staff is a critical variable in maximizing positive effects.


Although the efficacy of correctional rehabilitation was questioned during the early 1970s, recent research has demonstrated that certain intervention programs, when implemented under appropriate conditions, are effective in reducing illegal behavior. The objective of this research was to evaluate the effectiveness of a court-based intervention for juvenile probationers. The program was developed on the basis of caseworkers’ assessments of youths’ problems and needs. The theoretical perspective underlying the intervention consisted of a joint combination of critical, social control, and differential association theories. A major implication of theory is that the juvenile court’s capacity to facilitate informal social control should be given priority over its role as an agent of formal control. Hence, the goals of the intervention were to augment social integration across conventional social institutions and,
therefore, to reduce illegal activity among probationers. The program had three main components including job preparation workshops, an outdoor adventure experience, and family relationship counseling.

Forty-five youths participated in the research, with 22 of them taking part in the program and the remainder serving as controls. Effects were evaluated using a two-factor partially randomized-groups design. Pretest and posttest data were obtained on a variety of self-report measures as well as on several measures of official delinquency. The attendance and participation of the 22 experimental subjects were monitored throughout the intervention.

The data were analyzed using analysis of covariance. Despite prior research support for each of the intervention components, few positive findings were obtained. The self-reports of the experimental and control groups were not substantially different. Likewise, few differences emerged on the official measures, which spanned an 18 month follow-up period. However, significant differences were discovered for the offense activity of those youths with lengthy histories of criminal involvement.

The attendance and participation of experimental subjects were less than satisfactory, and these are described as one explanation for the disappointing outcomes. The methodological adequacy of the research is examined, and the findings are discussed with reference to theory. Implications for further program development and research are presented.


Scope and Method of Study. This study examines the effects of a therapeutic outdoor program called Project B.O.L.D. on the locus of control and self-concepts of those troubled youth participating in the program. The sample for this study consisted of 56 troubled youth selected and referred to the program from a state treatment facility, private children's homes, or community Youth Services agencies from across the state of Oklahoma. This sample was randomly assigned into two groups, a treatment group and a control group. The 56 subjects consisted of both males and females between the ages of 12 and 18. The 28 adolescents in the treatment group participated in a 5 day program called Project B.O.L.D. which consisted of a series of structured, low to moderate stress adventure activities, trust exercises, and other experiential learning activities. The 28 subjects in the control remained at their place of residence. Within three days before Project B.O.L.D. began, each subject in both groups were administered the Nowicki-Strickland Locus of Control Scale for Children and the Coopersmith Self-Esteem Inventory. These same tests were administered again to each subject in both groups within three days after Project B.O.L.D. The split-plot analysis of variance and the dependent t-test with correlated means were used for analysis of the data.

Findings and Conclusions. The analysis indicated that there was no significant difference in the scores of these two groups on the locus of control measure or the self-concept measure. The results suggest that a five day treatment program may not be long enough to significantly impact the self-concept or locus of control, although it might well begin such a change. Additional studies are needed to corroborate the findings of this study.

This study explored selected changes in borderline adolescents expected to be associated with their participation in a wilderness therapy group. Evidence of psychological growth was sought in test/retest comparisons of the subjects' ego functioning, self-reports of anxiety and depression, ability to separate from parents and locus of control.

The theoretical works of Mahler, Winnicott and Masterson provided the major theoretical background for the study. A naturalistic panel design was employed using a sample of convenience. The sample consisted of thirteen adolescents, between the ages of fourteen and nineteen, who were involved in wilderness group therapy. The adolescents were interviewed at two points in time separated by a ten month interval. The measurements used were the Ego Strength Scale, the Nowicki-Strickland Scale of Externality, two modified Thematic Apperception Test cards (focused on separation issues) and the Costello-Cornely Scale of depression and anxiety. A semi-structured interview served to corroborate quantitative findings.

The findings suggested that the adolescents felt greater impulse control, autonomy, relatedness and self-esteem. Scores on a subtest for greater frustration tolerance were not statistically significant. The subjects perceived themselves as more separated from parents, less depressed and anxious, and more internally-oriented. The interviews reflected similar findings.

Certain aspects of wilderness group therapy such as the stress factor, the leader as good rapprochement mother, and the holding environment of the group, appeared to encourage the adolescents' renegotiation of earlier developmental issues as they tackled age-appropriate tasks. The leader and the group, as transitional phenomena, might also have enabled the adolescents to internalize their therapeutic experience.


This study examined the effects of a three day wilderness course, wilderness Challenge, as an adjunctive treatment for victims of rape in respect to fear, locus of control, and self-esteem. The participants were evaluated by the Modified Fear Survey, the Tennessee Self-Concept, and the Levenson Locus of Control. Outward Bound and EVE in Colorado, and the Santa Fe Mountain Center in New Mexico, conducted the wilderness courses. Subjects of this study were 16 women, age 18 and over, who were victims of rape and in therapy, and who were referred by their therapists. The research was conducted during the summer of 1987.

A repeated time series design was utilized. Data was collected at four times, two weeks before the course, one week before the course, the last day of the course, and four to six weeks following the course. Analysis of variance was used to examine the data. Thirteen hypotheses representing three areas, fear, self-esteem, and locus of control, were tested.

Results indicate that after the wilderness Challenge course and at the 10 level of significance there was a significant decrease in participants' overall level of fear, fear of rape, and fear of failure. In addition, the participants reported increased self-esteem, including positive feelings toward their body, identity, and interactions with others. Results also showed that the victims saw other people and chance events as having less control over their lives.

One hypothesis that was retained indicated that even though the women saw others and chance events as having less control over their lives, they had not yet internalized their perceptions of having more internal control, although there was a trend in that direction. The second hypothesis that was retained indicated that the participants' perceptions did not significantly change in relation to seeing themselves as "good" or "bad" persons.

The statistical data from this study indicate that a three day wilderness program that contains specific activities in a structured sequence, may be effective as an adjunctive treatment in ameliorating long term symptoms in victims with rape trauma. It may be specifically effective with
increasing locus of control, reducing fear, and increasing self-esteem.


Long-term residential wilderness therapeutic camping is an approach for treating troubled youth which substitutes an existing environment for one which is situationally demanding, yet physically and emotionally secure. The study was an ex post facto investigation of the relationship between long-term therapeutic wilderness camping and self-concept development among behaviorally and emotionally troubled youth from the Eckard Family Youth Alternative, Inc.’s eleven therapeutic camping programs. Specific research questions resulting from the overall analysis of the impact of the treatment on self-concept development examined linear combinations of client characteristics as predictors of change in self-concept following treatment.

The overall treatment effect was analyzed utilizing paired differences t-tests for each of eleven dependent measures on the Jesness Inventory. Client factors of gender, race, age, IQ, legal status, family status, and socioeconomic status were further investigated as to their relationship with change in self-concept induced by treatment. Multiple regressions and ANOVAs were performed to investigate these relationships.

The data revealed that, on nine Jesness subscales, t values were significant at the .01 alpha level. On the subscales measuring Immaturity and Social Anxiety, difference values were not significant at the .05 alpha level.

Analysis of regression and ANOVA results revealed IQ to be a statistically significant predictor in relation to change on five subscales of the Jesness (i.e., Value Orientation, Immaturity, Manifest Aggression, Repression, and Denial). All were significant at the .05 alpha level. Family status was predictive of change on the measures of Social Maladjustment and Autism (.05 alpha level). Variables of race and socioeconomic status were each determined to be statistically significant predictors of change on the Withdrawal-Depression measure (.05 alpha level). Legal status was related to change on the Asocial Index at the .05 alpha level. None of the independent variables seemed to be systematically related to change on Alienation.

Results of this study offer research implications for further study regarding therapeutic camping and self-concept development. They suggest that the program should direct its attention toward youth with the intellectual capacity to conceptualize the program elements. Parental involvement should be emphasized.


Despite the long history enjoyed by therapeutic camping for emotionally disturbed children and the enthusiasm it has received by professionals over the years, there is little empirical evidence demonstrating its effectiveness as a clinical intervention. This study determined the effects of participation in an eight-week, psychodynamically oriented, therapeutic summer camping program on 6-12 year old emotionally disturbed boys and girls. The study was also designed to determine whether this model of therapeutic camping was equally effective across some of the subclassifications and behavioral categories characterizing emotionally disturbed children.

Two hundred and fifty-eight 6-12 year old emotionally disturbed children were the subjects for this study. Seventy-two of these children enrolled in the Camp Rainbow therapeutic summer camp
program served as the experimental sample, while the remaining 186 children, not enrolled in any structured camping or recreation program, served as controls. The groups were pretested in June, prior to the beginning of the Rainbow program and posttested eight weeks after the program ended. Children were pre and posttested in their educational environments utilizing the Tannenbaum and Levine Classroom Participation Scale, a two-part behavior rating scale.

The scores for both groups on the Classroom Participation Scale were subjected to factor analysis yielding 4 strong factors for Part I of the scale (Interpersonal Conduct, Self-Sufficiency, Use of Materials and Peer Relations) and 3 strong factors for Part II (Aggressive/Disruptive, Anxious/Withdrawn and Inattentive/Immature).

The results suggested that eight weeks after the end of the therapeutic camping program, the experimental sample as a group improved on both Part I and Part II of the scale and on all seven factors indicative of a decrease in maladaptive behavior patterns. Although the results of this study suggest that this model of therapeutic camping is an effective clinical intervention, the program, although somewhat more successful with Anxious/Withdrawn children than with either Aggressive/Disruptive or Inattentive/Immature children, doesn't appear to be singularly effective with any one typeology of emotionally disturbed child.


This investigation examined the effect a therapeutic camping program would have on the scores of adolescent psychiatric inpatients on the Means-Ends Problem-Solving Procedure, the Nowicki-Strickland Locus of Control Scale for Children, and the Tennessee Self-Concept Scale.

Subjects from a residential treatment program were matched for age, sex and reading level and then randomly assigned to one of two conditions. Subjects in the experimental condition received exposure to a treatment program that was in addition to treatment already being provided. The control condition received no additional treatment other than two recreational camping trips.

The treatment program consisted of six one-hour per week group sessions, and weekend camping trips following the third and sixth group session. Camping skills were used as a medium by which to teach problem-solving skills. The camping trips provided an opportunity to use these new skills. A six-week follow-up period completed the program. The control condition consisted of six weeks of no treatment followed by six weeks of partial treatment (two recreational camping trips).

Results indicated a significant increase in problem-solving skills and internality for the treatment group as well as a significant increase in internality. No significant differences were found for self-esteem. It was concluded that therapeutic camping did serve as a useful adjunct to more traditional therapies when treating adolescents in an inpatient setting.

Limitations of the study were addressed. Small sample size, subject attrition and scheduling conflicts may have served to limit the treatment effect. Subject selection, application of consequences and investigator involvement may decrease external validity. Recommendations for future research included a larger sample, greater communication between research and residential staff, a greater variety of dependent measures and the systematic inclusion of related treatment conditions to determine their singular and combined effect on outcome.

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

The purpose of this investigation was to compare the Sierra II group, a wilderness adventure Program, to a control group receiving a traditional probation program on recidivism and school behavior pre, post, and 6 months following the program. The second part of the study was to analyze the effects of Sierra II, serving as a probation alternative on selected behavioral variables (self-esteem and interpersonal effectiveness) in a group of juvenile delinquents. Pre, post, and 3-month follow-up tests were given to the experimental group. The subjects for this study (n = 18) with ages ranging from 13 to 17 years were adjudicated through the Virginia Beach Juvenile Court System and referred to the Sierra II Program from the field units. The control group (n = 18) with ages ranging from 13 to 17 years was randomly selected from a pool of adjudicated delinquents from the Virginia Beach Juvenile Court System.

Data relative to recidivism, school behavior, self-esteem, and interpersonal effectiveness were analyzed by an ANOVA repeated measures. The results of the variable, recidivism, showed a significant decline in crimes for both groups over the 3-time periods (pre, post, and follow-up; p < .001). There was also a significant interaction between the Sierra II and the control group over the pre-to-post-time period on recidivism (p < .001). The results indicated that for the four variables of school behavior, number of teachers' negative remarks, grades, absences, and number of discipline remarks, absences was the only variable which showed a significant interaction effect over the pre-to-post-time period between the Sierra II and the control groups (p < .05). The 6-month treatment phase of the Sierra II Program was more effective than the 6-month treatment phase of the control group in reducing absences. The Sierra II participants showed a significant improvement on the behavioral variables of self-esteem and interpersonal effectiveness over the 3-time periods (p < .001). Further research needs to be implemented to evaluate the successful program components that distinguish the Sierra II Probation Program from the traditional probation programs.


The purpose of this study was to evaluate the effects of a series of short-term overnight therapeutic camping trips on the behavior and problem solving skills of socially and emotionally disturbed (SED) children. The subjects of this study were 22 SED boys, ages 10 to 13, who were assigned to Centennial School, a university-affiliated private special education school. The subjects were divided between two self-contained classes.

The experimental group participated in eight, two to three night therapeutic camping trips. The therapeutic activities that were conducted during the camping trips included activities designed to promote self-confidence, such as ropes courses, and activities designed to promote group process, where all the boys had to cooperate in order to accomplish a difficult task such as climbing over a high wall.

There were two dependent variables. Weekly averages of the Centennial School Point System, a truncated frequency count, were used to measure changes in behavior. These changes were analyzed using visual analysis techniques within subject, across subjects and across groups. A descriptive analysis was done on the Problem Solving Meeting Questionnaire, a rating tool developed to measure the quality of group process which was completed by the teachers immediately following each problem solving meeting.
The results indicated that, for 10 of the 12 boys in the experimental group, a series of therapeutic camping trips had some or much effect on improving the boys' behavior during the camping trips. For 8 of the 10 children whose behavior improved during camping, the camping trips resulted in an increase in the level of inappropriate behavior immediately following some of the camping trips. Procedural integrity measures were utilized to substantiate the findings.

Therapeutic camping promoted group process as measured by the Problem Solving Meeting Questionnaire. The experimental group participated in six problem solving meetings, while the comparison group did not have any problem solving meetings for the entire year of the study.

Limitations of the study were addressed. Implications of the findings for professionals interested in using therapeutic camping as a treatment intervention for socially and emotionally disturbed children were discussed.


The asocial behaviors of 36 male youth-at-risk who participated in a 30-day therapeutic wilderness course were studied. Asocial behavior was measured with the Wichmann-Andrew Behavior Intervention Scale (WABIS) a 40-item Likert type behavior rating scale. A quasi-experimental, non-equivalent control group design was used. Data were analyzed using analysis of covariance to adjust for pretest differences between groups. It was found that experimental subjects differed significantly from control subjects on post-treatment asocial behavior when the effects of pre-intervention asocial behavior were statistically controlled.

This study also examined several multiple linear regression models. It was discovered that interpersonal problem solving, as measured by the Means-End Problem Solving (MEPS) procedure, accounted for 24% of the variance in post-treatment asocial behavior. Furthermore, interpersonal problem solving is predictive of post-asocial behavior over and above age, pre-asocial behavior, instructor experience, and instructor role expectations. A forward selection, stepwise regression analysis was used to form the best predictor model for the criterion, post-treatment asocial behavior. The best predictor model included the variables of pre-asocial behavior, interpersonal problem solving, instructor experience, and instructor role expectations. This model accounted for 61% of the variance in post-treatment asocial behavior.


This study investigated the outcomes of adventure program participation by adolescents involved with psychiatric treatment. The proliferation of such programs has raised questions regarding their efficacy.

Subjects of the study included 11 experts in the field of adventure programming, 207 participants in adventure programs at 12 adolescent treatment programs, and the 24 leaders of the programs in which participants were involved. The experts, through a modified Delphi process, identified skill/attitude outcomes and valued program characteristics. Program participants indicated their level of agreement with these items through a questionnaire administered at the conclusion of their program
involvement. They also cited perceived differences between adventure and other treatment. A week following their participation a random sample (N = 42) of participants responded to interview questions regarding their discussion and application of the program experience. Program leaders added the perspective of diagnostic/evaluative information gained.

Findings indicated that the majority of participants gained personal skills/attitudes relevant to treatment particularly in regard to self-concept and interpersonal relatedness. "Process" characteristics of the adventure experience were valued more than "content" characteristics. Additionally participants perceived the adventure program as different than other treatment, talked about the program with others and applied skills and attitudes gained in the program in situations beyond the program itself. These situations included applications in other treatment, with peers and with families. The program was also cited by many participants as being an enjoyable "fun" social and interactive experience. Program leaders reported gaining a variety of diagnostic/evaluative information regarding participants. Among the independent variables which were analyzed "site" had the most influence on reported outcomes.

Implications of the study for practice include the need to develop family, pre-adolescent, more "process" oriented, and outpatient adventure programs. Additionally, programs need to be of longer duration (20 or more hours) and have a variety of activities in order to maximize benefits. Research which further specifies outcomes and identifies longitudinal impacts of participation is also indicated.


An evaluation was conducted of the effects of an adapted Outward Bound program on delinquent youth. Specifically the study measured the program's effects on the self-esteem, self-efficacy, locus of control, cardiovascular fitness, and problem-solving skills of the participants. Individuals were assigned to an experimental group and a control group through a random process existent within the referral system of the agency. Experimental subjects participated in the 26-day wilderness treatment program. The control group subjects were waiting for placement in the program.

The Tennessee Self Concept Scale, modified Internal-External Scale, Generalized Expectancy for Success Scale, and modified Harvard Step Test were administered to both groups as a pretest and a posttest. The Means-Ends Problem-Solving Procedure was given to the experimental group at the pretest and posttest. A background information sheet was also completed on each subject recording simple demographic information and offense history from agency case files.

The data analysis used the analysis of covariance, matched t-tests, and product-moment correlation techniques. The analysis revealed that there was a significant difference between the experimental and control group in self-esteem (p < .01), internality (p < .01), and fitness (p < .05) at the end of the wilderness program. The experimental subjects were found to show a significant increase in self-esteem (p < .001), self-efficacy (p < .01), internality (p < .001), and fitness (p < .001) between the beginning and the end of the program. The experimental group however showed no gain at all in problem-solving skills. The analysis also demonstrated that neither the seriousness of offense history nor the demographic variable of age were strongly related to having a more positive experience in the adapted Outward Bound program.

The major conclusions of the study were that the program made a significant impact on the participant's physical fitness and self-orientation (i.e. self-esteem, self-efficacy, and locus of control). In contrast to those positive program effects, the study demonstrated that participants failed to show an increase in problem-solving skills as a result of the program.

The purpose of this study was to evaluate the effectiveness of the Challenge Group treatment program, a challenging, physical, group problem-solving treatment technique, applied as part of an acute care adolescent psychiatric inpatient program. Previous research on related programs—Outward Bound and Project adventure—has suggested, but not concluded, that this type of treatment might be an effective adjunct psychiatric treatment. Eighty-four hospitalized adolescents, diagnosed with conduct disorder or affective disorder, were divided into two groups, an experimental group which received the Challenge Group within the occupational therapy program and a comparison group which received the occupational therapy program alone. All other psychiatric treatment was comparable between groups. Groups were compared for differences in their improvement in psychological health, as defined by self-esteem, locus of control, interpersonal relatedness, psychiatric symptoms, and social adjustment. The experimental group, and certain of its gender-diagnosis sub-groups, improved more than the comparison group in self-esteem, locus of control, and interpersonal relatedness. Poor outcome was examined through case study. Ramifications of the findings for future psychiatric applications were discussed.


The purpose of this study was to examine the effects of a 26-day therapeutic wilderness program for delinquent adolescent males on three conceptually distinct but closely related constructs: self-concept, locus of control orientation, and interpersonal behavior. Justification for the study was derived from the limitations of past wilderness/adventure research which suggested that there was a need for additional research on the effects of this type of alternative program for delinquent adolescents.

It was hypothesized that following participation in this program the youths would exhibit increased self-concept, more internal locus of control orientation, would express higher needs for inclusion and affection and a lower need for control, and would display more socially adaptive interpersonal behaviors.

In order to examine the research questions, three self-report inventories were administered to 43 adjudicated delinquent male adolescents participating in this program which serves as an alternative to traditional detention treatment. A sample of 45 male delinquents in a traditional detention program served as a comparison group. In addition to the pretest, posttest, and follow-up self-report data, behavioral observations were obtained from the instructors of the wilderness courses.

The results of this study failed to show a significant treatment effect on any of the primary dependent variables. The lack of a significant effect on the self-concept and locus of control variables was attributed primarily to apparent exaggeration and inaccurate self-report by the subjects in both samples. While there was no statistically significant effect on the three measures of interpersonal need, the results of the behavioral observations by the group leaders indicated that the participants learned more socially appropriate behaviors as a result of the experience (were observed to communicate more effectively, be more responsible and sociable, and possess higher self-esteem).

It was suggested that future researchers might continue to study these variables, especially the interpersonal effects of participation. It was also suggested that qualitative research methods and research on specific program variables would be appropriate.