

DOCUMENT RESUME

ED 372 881

RC 019 522

AUTHOR Duindam, Ton
 TITLE Experiential Education, Outdoor Adventure As a Modality in Residential Treatment. A Survey of Programs, Principles, Research and Practice.
 PUB DATE Nov 91
 NOTE 16p.; Paper presented at the Conference of the European Scientific Association on Residential and Foster Care for Children and Adolescents (2nd, November 7-9, 1991, Leeuwenhorst, Noordwijkerhout, Netherlands). For a related document, see RC 019 521.
 PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070) -- Reports - Descriptive (141)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Adolescents; *Adventure Education; Behavior Disorders; Delinquency; Elementary Secondary Education; Experiential Learning; Foreign Countries; Group Dynamics; *High Risk Students; *Individual Development; Outdoor Activities; Program Descriptions; *Residential Programs; *Therapy
 IDENTIFIERS Europe (West); Hahn (Kurt); *Netherlands; Outward Bound

ABSTRACT

Orthopedagogisch Centrum (OC) Michiel is a multifunctional regional institution in the Netherlands that serves troubled families and youth at risk. Outdoor programs are used as a treatment modality for adolescents with behavior disorders, drug addictions, or criminal records. Outward Bound was the first experiential outdoor program in the Netherlands, beginning in 1961. Today there are several residential treatment centers using outdoor experiential learning. Although the focus of the programs have changed over the decades, goals generally involve self-discovery and personal growth to stimulate behavior change. Research and program documentation in the Netherlands is often neglected. In the United States, more than 300 organizations run experiential programs. Examples include Outward Bound, Project Adventure, and the National Outdoor Leadership School. Programs in Germany, Switzerland, and Austria are generally based on humanistic psychology. Kurt Hahn is considered the father of outdoor experiential education. Kurt Lewin, a German social psychologist, provided insights into factors related to adventure education. A review of research on outcomes of outdoor programs is noteworthy for the absence of negative results. The staff at OC Michiel is experimenting with experiential outdoor education through activities such as trekking, rock-climbing, caving, and white-water canoeing. Although they see clear progress in the group process and personal growth, there are areas for improvement. (KS)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



Orthopedagogisch
Centrum Michiel

Korrespondentie adres:
Postbus 300
6600 AH Wijchen
Telefoon 08894-12846
Telefax 08894-20899

Gomarius Messtraat 24
6603 CT Alverna-Wijchen

ED 372 881

Experiential education, outdoor adventure as a modality in residential treatment. A survey of programs, principles, research and practice.

Drs. Ton Duindam,
Orthopedagogisch Centrum Michiel,
Gomarius Messtraat 24
6603 CT Alverna,
Netherlands.
e-mail tduind@psyline.nl

Lecture at the 2nd EUSARF conference
(European scientific association on residential and foster
care for children and adolescents)
7-9 November 1991
Leeuwenhorst
Noordwijkerhout
Netherlands

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

TON Duindam

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC):

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
 Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

BEST COPY AVAILABLE

RCO19522

Experiential education, outdoor adventure as a modality in residential treatment. An survey of programs, principles, research and practice by Drs Ton Duindam.

I. Introduction

The residential treatment centre OC. Michiel is operating as a multifunctional regional institution in and around Nijmegen. We are working in small scale units mostly in normal houses in town and try to provide the so called measure-aid treatment. We work with troubled families and youth at risk from 6 to 18 (21) years old. In general we combine residential treatment of the child (including individual therapies) with intensive family therapy guidance. I'm pedagogue of the elder youth and department and in one of my groups we are operating with experiential outdoor adventure.

Outdoor programs have become populair in the Netherlands in the past 15 years. Programs are known as survival training and trekking expedition and are consisting of activities like: mountain climbing and rapelling, flat and white water canoeing, biking, sailing, caving, trekking and camping. The activities are used as treatment modality for a diversity of special populations such as adolescents with behaviour disorders, drugs addicts, youngsters with criminal records or psychiatric problems and disabled young people in wheelchairs. As diverse as the populations, is the diversity in programs, aims, roots, philosophy and used methods.

II. Development in the Netherlands.

A. The diversity of programs. A selection of programs that reflects practices in this country.

The oldest institution in the Netherlands running experiential outdoor programs is Outward Boundschool (OBS). It starts in 1961 with short term 26 day residential programs in which self discovery and personality development are promoted by an intensiv and strict program with physically challenging groupmissions in the form of sport and work activities combined with verbal missions in the sense of groupevaluation, reflexion (Houtman, J.B.F., J.H. Ranft en G. Ferrari, 1971). Light athletic activities and training by seamanship, safe-

guarding and fireprevention on basis of reality to form the character. In the seventies the programs are getting more flexible as well in content as in length. They get a more adventurous character and ideas of bio-energetics and Gestalt psychology are applied in processing the experience (Nuijen M., 1978). Elan-training has its roots in OB and is since the 80's specialised in experiential outdoor and adventure education for the most vulnerable groups special (youth) populations (eg. adjudicated youth, mediterranean problem groups). Elantraining runs 4-week programs and promotes experiential education in residential treatment centers by providing staff training programs.

The 'Dreef' and the 'Haagse Hervormde Kinderhuizen' (HHK) are two of the better known residential treatment centres that utilize outdoor adventure activities as a treatment facility. Both are presenting aspects of their programs on this conference. Mesman Schulz (1985) finds, in a comparative studie of very intensive residential treatment facilities, the 'Dreef' most effective in treatment and results afterwards (p. 139-140). HHK claims succes with 80% of the participants (Keulen, 1991).

In youth centres organising camping weekends and outdoor and survival trips have become more and more populair. Main purposes are to create adventurous leisure, to explore other behaviour, to experiment with other ways of reaching the group (Breugel, 1986).

B. The ideas behind the programs.

The purpose of the OBS (Outward Boundschool, 1961) 'preparing for life'. '.... the program composed in such a way, that they discover themselves. That program sets them tasks that demand selfdiscipline, teamwork, feeling for adventure, hardship and justified risktaking. The training scheme has from the beginning proved to be able to form the bridge between the world of their thoughts and that of the action! ...' (p. 4). In the first decade of OBS the component of (physical, water) training according to a strict schedule takes a prominent place. In the seventies the program focusses on the unity of body and mind and the autenticity of the participants. The program consists of adventurous activities and trust and

communication excersises (Lefebvre, 1977). In the 80's there is tendendency to apply ideas psychosynthesis and confluent education, programs have a pronounced hardship part to train the will.

Elantraining develops the OB ideas from the 70's in the direction an diversificated outdoor experience to discover and unfold talents and character. Elantraining provides an experiential learning experience in which, after a diagnosis by exposure to a multiple stimulating trek, individual aims are set en concrete new behaviour is trained in as well adventurous outdoor (group) activities, as individual experience and problemsolving missions in the community. The following principles (Dutch OB principles developed by Griffioen of Elan-training and Tierolf of SLO (Griffioen, nd.)) are stated as characteristic: - Mobility and confrontation in unknown surroundings, experiencing basic elements and needs, - Providing and promoting physical and psychic safety to guarantee protection and autonomy, - equivalence and responsibility, which promotes autenticity and being open to new experiences, - Contract and challenge (once a choice is made the plan is carried out seriously).

De Dreef (Dreef, nd.) provides a very intensive situation to live and associate in. Principles that are employed to promote this are: mutual acceptance, intensive basic care, a clear and surveyable structure in which almost all information is accessable, concrete activities and the situation here and now as startingpoint. To promote chances to develop and to change, live has to offer experiences and challenge. These are intensive and inevitable offered in on the institution and in outdoor activities and projects.

The treks of HHK expect (Vries, 1985), that by leaving everything behind, the trek creates openings to get new views on a more sensemaking future. Keulen (1991) also indicates that the maximum of imbalance, that is created by the unknown area and the lack of a settled behaviour scheme, creates the possibility to change.

C. Documentation and research.

Projects are poorly documented in the Netherlands. Research is hardly done. It's the field of practisioners. A framework of

ideas or principles on which actions are based is missing and (sometimes hard) accessible information is neglected.

The first Dutch study about OB appears in *Pedagogische Studiën* in 1962 (Mulder, 1962). This study gives a clear description of the method in those days, refers explicitly to the works of Hahn and about OB and gives the results of investigation over 103 participants. Although the investigation doesn't permit sound conclusions that allow generalisations, he concludes a tendency to a positive contribution of OB courses to the personality-development.

In 1972 Biermans-Bresser and Biermans execute an evaluation survey with an experimental (n=163) and a control group (n=187). The results of this study are mentioned in the documentation of tests and test research in the Netherlands - 1982 (Visser, R.S.H., J.C. Vliet-Mulder, A.Evers and J. ter Laak, 1982, p. 587): Conclusion: the variables achievement motivation, habitual tendency to get in action, locus of control, social desirability, and social fear appear to be significantly influenced in the expected direction directly after the course; locus of control, social desirability, and social fear are still significantly changed after 6 weeks. The first Dutch written book is from the Belgian Lefebvre (1977). He describes history, aims, ethics, methods, effects and possibilities of OB. (Unfortunately the outcome studies lack in managing threats of validity and reliability). Bullens (1980), Schellevis, P. (1985) and Scholte, E., P. van den Berg, L. Loeven and J. van der Ploeg (1986) contribute to the acquaintance of the existence of the method, but ignore available scientific information of our own country and neglect to explore, with the in our country available means, what is known about the subject.

III. Survey of the main points of development elsewhere in the world, especially in the U.S.A. and the German speaking countries.

A. Programs in the United States:

More than 300 different organisations and institutions that run experiential, mostly adventurous or outdoor, programs and over 3000 professionals are united in the Association for

Experiential Education. The 'Adventure Alternatives' is the professional group for those who use experiential education therapeutically within fields like health, mental health and corrections. OB was imported in the USA in 1962 and has spread out since then as well as OB (there are about 9 OBS's) as in other organisations that implemented and developed the ideas for their own needs. OB itself felt in the fertile soil of the American camping and trail tradition. The national outdoor leadership school (NOLS) and Project Adventure (PA) can be mentioned as examples. OB runs programs, that vary from short programs in wilderness or urban setting to the 'classic' 24-day wilderness therapy program or expeditions. Project Adventures (PA) elaborated Adventure Based Counseling and the High and Low Ropes Courses. PA runs all kind of courses, trains staff, does programs with addicted and adjudicated youth and builds ropes courses according to high safety standards. Vision Quest (Greenwood, 1987) consists of rustic wilderness camps, wagon trains pulled by horses and mules that travel over the Western states and is extended by sailing and bicycling expeditions. The program, in which is worked with chronic delinquent youth (average of about 8 prior arrests and an age of 16 years), lasts at least one year.

B. Programs in the German speaking area.

In Germany the OBS or 'Kurzschule' (short class) exists since 1951. Within OB there is no tradition with special groups. In the seventies several social therapeutic sailing programs are developed as an alternative for confinement for youth with behaviour disorders. Several residential treatment centers have started with small group travel projects and sailing trips. One of the problems in some sailing projects in the transfer of learning. The society of the sailingship 'Thor Heyerdahl' notices lack of integrating changes in every days life (verein Segelschiff 'Thor Heyerdahl', 1991). The 'Jugenddorf (youth village) Rendsburg' executes since the start in 1976 about 40 experiential programs: ship projects, travel and working projects from approximate 9 month. The projects are located all over the world. (Roeloffs, N., R. Reiter, 1990). Theoretically the projects are mainly based on the Ideas of Kurt Hahn and humanistic psychology. In Switzerland there are several

projects that combine the 'european' ideas and the more systematic approach in the USA. Hans-Peter Hufenus (1991) of 'Wildnisschule' in Mörschwil, states the necessity of a thorough training and safety practice. TREK runs programs that start in Switzerland and have a main training period of 4 month in Canadian wilderness. 'Lucciola' (Italian for glow-worm) runs various intensive experiential travelprograms for youth at Risk. In Austria the center 'Spattatrasse ARGE NOAH' (Noahs Ark) runs a program with sexually abused girls in a severe life crisis. "Nobody bears me!" is the girls conviction. The program lasts eight month on a highsea cutter.

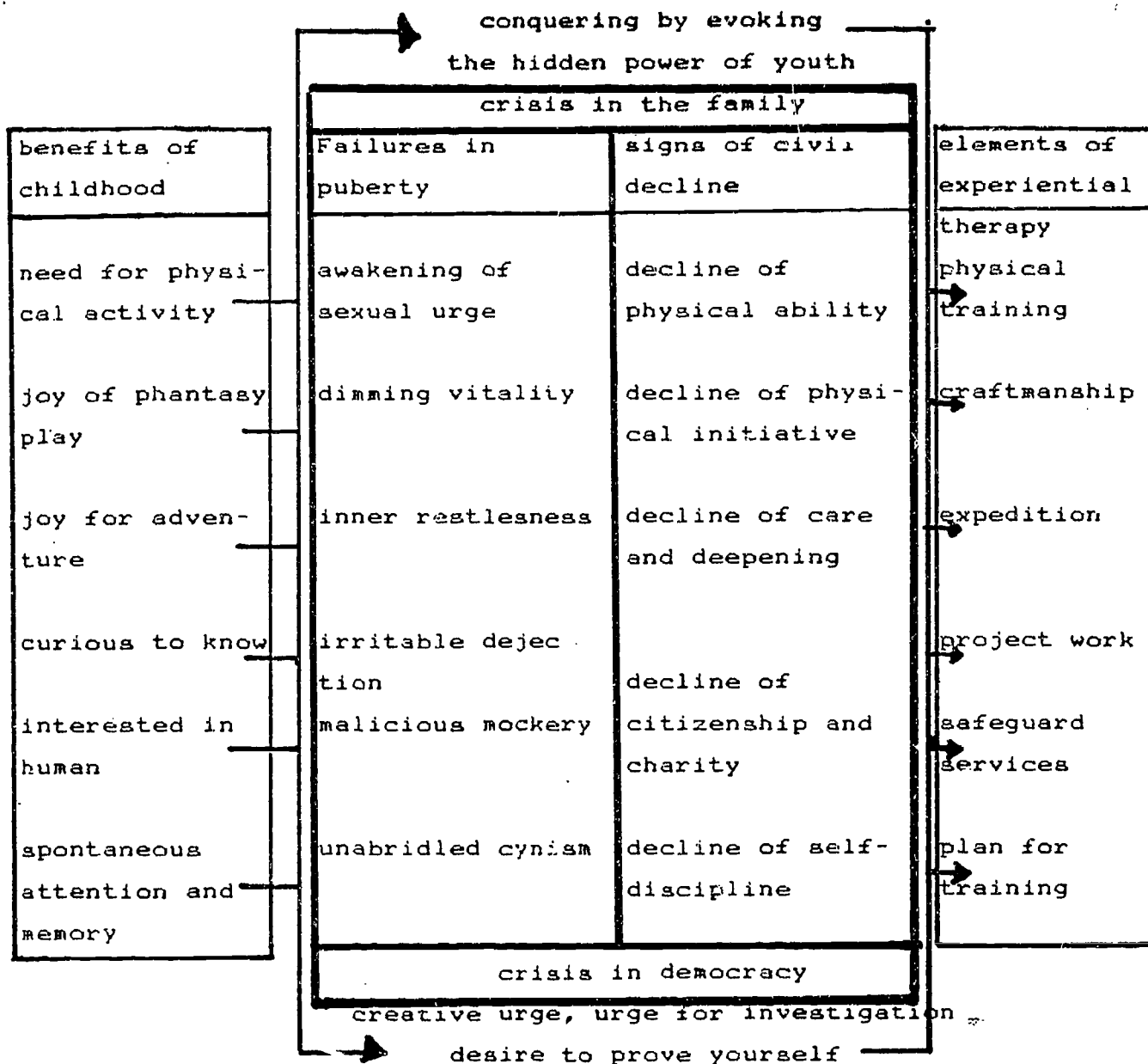
IV. Basic ideas and elements

A wide variety of philosophers, educators, psychologists and practitioners and various sources are mentioned in connection with experiential education. Richard Kraft (1985) mentions all substantial contributors to experiential learning from diverse scientific angles of incidence (philosophical, psychological and antropological). Gass (1992) reworks the principles that are outlined by Kraft (1985) to a definition for adventure therapy: - The client is participant, rather than a spectator in therapy, - therapeutic activities require client motivation in the form of energy, involvement and responsibility, - therapeutic activities are real and meaningful in terms of natural consequences for the client, reflection is a critical element of the therapeutic process and - functional change must have present as well as future relevance for the client and the society in which they are member.

In this place I select the two people that are in my opinion most striking and influential: Kurt Hahn and Kurt Lewin. Both were jewish Germans who exiled because of nazism and contributed substantially to psychology and education.

Kurt Hahn (1886 - 1974)

Kurt Hahn can without exaggeration be mentioned the spiritual father of outdoor experiential education. Hahns view on education and how he comes from the problems, possibilities and mechanisms to experiential therapy has been represented by Knoll (1987) as follows:



Hahn has been the founder or (co)initiator of a number of educational institutions: 9 (inter)national high standard boardingschools, a non-residential training program (later the Duke of Edinburgh Award Scheme) and ± 35 OBSchools all over the world.

Kurt Lewin (1890 - 1947)

Kurt Lewin is a German social-psychologist, who lectured psychology and philosophy in at Berlin University and in numerous other countries, was director of the research center for group behaviour (Journal of social issues, 1945). He also (Johnson and Johnson, 1991) began deriving methods for training leader and groupmembers in social skills, they would

need to promote effective functioning of democratic groups. Although he died two years later in 1947, he made major contributions to the insight in the factors that are responsible for behaviour changes. In the article "conduct, knowledge and acceptance of new values" Lewin and Grabbe (1945) describe the factors that are playing a role when re-education is needed. Together with his formulation of when you are experiencing psychological success (being able to formulate goals, goals are in relation to needs and values, ability to formulate a path that lead to accomplishment of the goals and a realistic level of aspiration) (Lewin et al. 1944), important elements for adventure or outdoor education are brought forward.

V. Research in experiential education.

Since the end of the 60s research has been done. Outdoor education was considered useful in the rehabilitation of criminal and troubled youth. Later on topics of special interest are selfconcept and selfesteem. Burton (1981) gives in a dissertation of this title 'A critical analysis and review of research on OB and related programs'. He selects 19 valid (out of 72) studies, in which he considers the outcome variables that are measured (a.o. self-concept (8), self-actualisation (3), personality factors (3), locus of control (2), behaviour (3), recidivism (4)), the research subjects (the biggest samples have the most positive results: adolescent delinquents (5 (3mp (= mostly positive means more than 30% significantly positive change) /2p (= positive and means less than 30%)) positive and 3 not significant), normal adults (5 (1mp/4p) positive and 2 non-significant)) and the research designs. An important outcome is the absence negative results. In the Vision Quest study (Greenwood, 1987) the data of the first 90 male graduates from the program were compared with the data of two reference groups: 257 male juvenile delinquents who were placed in a probation camp in the two years prior to the initiation of the start of the program and a small group who refused to accept Vision Quest placement. Being rearrested within one year was the case for 71% of youth correctional center population and for 55% of the Vision Quest

youth. This figure of 16% becomes even higher if differences in prior records are taken in account (32%). The average annual post-release arrest rate was 25% lower for Vision Quest graduates. The potential cost-saving of this lower arrest rate is over \$100.000 per offender.

There is an overwhelming amount of information: for example, Dissertations Abstracts gives in the period from januari 1989 till june 1991 21 dissertations that deal with outdoor / adventure education or therapy, seven of which deal more specific with (semi)residential treatment: Rape victims (Pfirman, 1988), juvenile delinquents (Callahan, 1989 and Boudette, 1989), Psychiatric adolescent patients (Ziven, 1988 and Teeple (in combination with family therapy), 1989), socially and emotionally maladjusted adolescents (West, 1989) and maladjusted deaf adolescents (Parent, 1990). In the process of systematizing experiential education in residential treatment and therapy we should take benefit of these kind of findings.

VI. How we are working.

We acquired the process of experiential outdoor education supervised. We experienced the impact of these outdoor activities and decided for development in this direction. Being part of an experiment we still are in a phase of development.

We choose to follow the wave of the schoolyear. This means, that we take advantage of the fact that there is naturally a bigger in- and output of youngsters around the summer-holidays. Weekends and holidays offer an opportunity to program experiences without interrupting the schoolproces. For us this is important since we lay worth on continuation of everyday life in community during the treatment and this includes going to school or work.

We start in the summer holidays with what we call an 'exposure phase'. This is an intensive 10 days outdoor adventure experience. Apart from developing a positive groupclimate, the focus is on diagnosis, self-discovery and experiencing or on experimenting with 'new' behaviour. We guide this processes during different kind of outdoor activities, like trekking,

rock-climbing and rapelling, caving and (white water) canoeing. We believe in a multi- (in contrast to a mono-)emotional arousal. Processing and evaluating promote selfdiscovery and aim development (a solo experience and keeping a personal journal are also used means). The personal journal is used to keep on track during the year. Back at home in everyday life, at least one evening a week is structurally spend together, to play together, to work out things from before, or to prepare new events. Sometimes special exercises of activities are executed. From time to time we spend a part of a weekend or holiday to take some more time to do (outdoor) activities. Central themes are personal and interpersonal processes and the promotion of personal growth. Questions that come up are: How do I deal with ...?, how do I handel what bothers me?, what am I good at?. New personal action theories are developed. Activities are thrilling or having an impact in several ways: the unknown requiers intensive attention or perseverance and emotional, cognitive, physical and will aspects are always present together. Although our experiences are fresh, and in no way objectively measured, we see so far a clear progress in the groupproces and some personel developments, which for us indicates we are on good track.

VII. Weak points, developmental issues.

It turns out to be rather difficult to give an effective intentional structure to the activities and evaluating and processing well the experiences.

A not well guided evaluation doesn't offer anything but annoyance and frustration to the participants.

We are in need of transferable knowledge about the processes involved and here we come to theor, and research. In the Netherlands no attention has been payed to the development of a body of knowledge on this subject. Knowing that there must have been some development in this area in the past 25 years, I started some systematic investigations three years ago.

VIII. Conclusion

Since two years a group of OC Michiel is involved in experiential education and the use of outdoor adventure. From our experience we see and believe in effects, but we still have a lot to learn. As well on the part of hard skills, as on that of soft skills. Both aspects will take time to develop. The hardskill part is a matter of careful practice and learning. In the softskill part we will be obliged to adapt from abroad and to develop with this knowledge a methodology that fits to our culture and population. Although it lacks in the Netherlands at the moment of a sound theoretical framework to develop the method, the first investigations on the subject show more empirical and fundamental information than we imagined in an earlier phase.

IX. Bibliography/references

- Boudette, R.D. (1989), The therapeutic effects of outward bound with juvenile offenders, California school of professional psychology, Berkeley/Alameda: DAI 50/11B, p.5306
- Berg, P. v.d. & E. Scholte (1986), Overlevingstocht als begeleidingmiddel. In: W. Hellinckx (ed.), Kwaliteit in de hulpverlening. Acco: Leuven/Amersfoort, 1986, p 228-247.
- Biermans-Bresser, P.A.A.M. and H.W.M. Biermans (1972), De Outward Bound School, evaluatieonderzoek van een vormingscursus. Doctoraalscriptie sociale psychologie, Nijmegen
- Breugel, Stef van (1986), Frisse lucht doet ze goed, Buitenactiviteiten als methodiek binnen het jongerenwerk. Utrecht: Gamma.
- Bullens, Ruud (1980), Het Wilderness Challenge Program, De ruige natuur als therapeutisch middel. In: Intermediair, 1980, 16(5), p. 21-27, 37
- Callahan, R.C., (1985), Academic and therapeutic potential of the Sierra II process: an evaluation of an adapted outward bound diversion program for adjudicated juvenile delinquents, Old dominion university: DAI 51/03A, p.724
- Dreef, De (nd.=1985), Werkplan, De Dreef. Wapenveld: Dr. Wouter Lourens Slotstichting

- Ewert, Alan W. (1989), *Outdoor adventure Pursuits: foundations, models, and Theories*. Publishing Horizons, Inc., Oh. USA. p. 116-120.
- Gass, M. (1992), *Die Entwicklung und Benützung von abenteuer-begründeter Therapie in Nord Amerika*, *Zeitschrift für Erlebnispädagogik* 12(?), in press).
- Greenwood, P.W. and S. Turner (1987), *The VisionQuest Program: An Evaluation*. Santa Monica CA, The RAND Corporation.
- Griffioen, F. en H. Tierolf (nd), 'Principes, kenmerkend voor outward bound methodiek', (as annex to program descriptions of Elantraining, since 1987). Ulvenhout: Elan training.
- Houtman, J.B.F., J.H. Ranft en G. Ferrari (1971), *Algemeen overzicht en theoretische schets van het Outward Bound Vormingswerk*. Stencil. Renesse: Stichting tot oprichting en instandhouding van Outwardbound Zee- en Bergscholen in Nederland.
- Johnson David W. and Frank P. Johnson (1991), *Joining together, group theory and group skills*, 4th ed., Englewood Cliffs, N.J. Prentice-Hall.
- *Journal of Social Issues* (1945), Who is Kurt Lewin. 1(3), p. 65.
- Keulen, Taco (1991), *Ervaringsleren als aanloop naar sociale competentie*. In: *Tijdschrift voor de Jeugdhulpverlening*, 1991, 3(5), 36-40.
- Knoll, Michael (1987), *Kurt Hahn - ein politischer Pädagoge*. In: *Reihe: Schriften - Studien - Dokumente zur Erlebnispädagogik*, Band 2: Jörg Ziegenaack (hrsg): *Kurt Hahn, Erinnerungen - Gedanken - Aufforderungen, Beiträge zum 100. Geburtstag des Reformpädagogen*, Verlag Klaus Neubauer, Lüneburg
- Kraft, R. (1985), *Towards a theory of experiential learning*. In: *Richard Kraft and Mitchell Sakofs: The Theory of Experiential Education*. Association for Experiential Education, Boulder CO.
- Lefebvre, Luc M. (1977), *Outward Bound School: Naar de natuur, jezelf en de ander*, Brussel: Ministerie van Nationale Opvoeding en Nederlandse Cultuur: BLOSO.

- Lewin, K. and P. Grabbe (1945). Conduct, Knowledge and Acceptance of New Values. *Journal of Social Issues*, 1(3), p. 53-64.
- Lewin, K., T. Dembo, L. Festinger and P. Sears (1944). Level of aspiration. In: J. Hunt (Ed), *Personality and behaviour disorders*. New York: Ronald Press.
- Meeman Schulz, K. (1985), het Driehuizen Project, adolescenten jongens en tehuizen voor zeer intensieve behandeling, Den Haag: CWOD.
- Mulder, H.F. (1962), Karaktervorming door lichamelijke inspanning. In: *Pedagogische Studien*, 1962, 39(12), p 558-582.
- Nuijen, Mieke (1978), Ook Outward Bound bekommert zich om de schoolverlaters. In: *Jeugdwerk Nu*, 1978, 10(20), p. 4-6.
- Outward Bound (1961), Stichting tot oprichting en instandhouding van "outward bound" zee- en bergscholen in Nederland. brochure and registration form. Renesse: Outward Bound.
- Parent, G. (1990), Psychosocially maladjusted deaf youths and the wilderness as therapy, California institute of integral studies: DAI 51/11A, p.3700
- Pfirman, E.S.M (1988), The effects of a wilderness challenge course on victims of rape in locus-of-control, self-concept, and fear, University of Northern Colorado: DAI 49/07B, p.2870
- Prie, Hans du (1991), Ervaringsleren als ordeningsinstrument. In: *Tijdschrift voor de Jeugdhulpverlening*, 1991, 3(5), 41-44.
- Roeloffs, N., R. Reiter, Projekte im ev. Jugenddorf Rendsburg. In: *Zeitschrift für Erlebnispädagogik*, 1990, 10(2/3), 1-138.
- Scholte, E., P. van den Berg, L. Loeven and J. van der Ploeg (1986), Overleven om te leven. Research report, Den Haag, Leiden. (see also Berg 1986)
- Teeple, J.R. (1989), An experiential outdoor family therapy program in the treatment of child and adolescent psychiatric inpatients (outward bound), Spalding university, DAI 49/08B, p.3460

- 'Thor Heyerdahl', der Verein "Segelschiff .., 23 Thesen zur erlebnispädagogischen Arbeit an Bord des Segelschiffs 'Thor Heyerdahl'. In: Zeitschrift für Erlebnispädagogik, 1991, 11(1), p. 15-20.
- Visser, R.S.H., J.c. van Vliet-Mulder, A. Evers and J. ter Laak, Documentatie van TESTS en TESTRESEARCH in Nederland - 1982. Amsterdam: Nederlands Instituut van Psychologen, p.587
- Vries, D. de (1985), Voettrektocht als begeleidingsmiddel, Den Haag: Stichting Haagse Hervormde Kindertehuizen.
- West, F. W. (1989), An evaluation of the effects of a systematic short-term therapeutic camping program on the behaviour and problem solving skills of socially and emotionally disturbed children, dissertation at the Lehigh university: DAI 50/02A, p.351
- Ziven, H.S. (1988): The effects of the challenge group treatment program on psychiatrically hospitalized adolescents, Massachusetts school of professional psychology: DAI 49/10B, p.4567

SUMMARY

This paper gives a short view on the development of experiential education and outdoor adventure on the residential centre DC Michiel. The author gives an survey over the development on the subject in the Netherlands, the U.S.A and some German speaking countries with respect to as well existing programs as available research on the subject. Furthermore he reveals some of the ideas of what he sees as two of the basic ideological contributors to the method. The paper is provided with an extended list of literature on the subject.