

Using contact with nature, creativity and rituals as a therapeutic medium with children with learning difficulties: a case study

Ronen Berger*

Kibbutz Kfar Giladi, Israel

In most cases therapy is addressed as an indoor verbal activity in which the relationship between therapist and client stands at its centre. This article proposes a different approach to therapy: conducting it creatively in nature, with the environment being used not only as a therapeutic setting but also as a medium and a partner in the process. The article is based on a case study carried out with a group of children with special needs within a school setting. It explores the therapeutic and educational impact that this approach had on the participants and on nature's role in it. The article also aims to initiate a dialogue around the option of working with this population in non-verbal and experiential ways, illustrating the potential that the use of group work, creativity and contact with nature may offer.

Keywords: *Creativity; Experiential learning; Nature therapy; Special needs; Therapy*

Introduction

It seems that the insight-oriented, symbolic and abstract language used in classical psychotherapy may be of little relevance for adults and children whose IQ and abstraction skills are below the average (Nezu & Nezu, 1994; Butz *et al.*, 2000). This may explain the development and growing use of creative and experiential approaches, working in non-verbal and non-cognitive ways, which may better suit the characteristics of this population (Polak, 2000). From the little published evidence, it seems that such an approach has been used successfully indoors in group and individual settings, as a means to develop social skills, self-confidence and self-esteem, and provide opportunities for personal exploration and expression (Polak, 2000). Nevertheless, despite the potential that may exist in nature as a setting suitable for non-verbal and experiential therapeutic educational work, it seems that work has taken place only within the field of adventure therapy, working with

*Kibbutz Kfar Giladi, 12210 Israel. Email: ronenbw@hotmail.com

children and youths with behavioural, authority or boundary problems (Neill & Heubeck, 1998; Price & DeBever, 1998; Simpson & Gillis, 1998; Garst *et al.*, 2001; Kaly & Hessacker, 2003). Yet it seems that no form of outdoor therapy had been developed for populations whose IQ and abstraction skills are below the average (Berger, 2005).

As there is only little published material exploring the option of working therapeutically with children with learning disabilities in nature, the aim of this case study is to explore the impact of nature therapy on such children. The study is part of the follow-up research on the Encounter in Nature Therapeutic Educational Programme which took place during 2003–2004, in four special needs schools in Israel.

Method

In order to learn more about this innovative way of working, to explore the impact on the participants, and the specific roles and influence nature had upon the process, qualitative follow-up research was conducted using basic case-study methods and established principles (McLeod, 2002, 2003). Data were collected, using open-ended questionnaires which were handed to the group facilitators at the end of the year's process, followed by a three-hour interview. In addition, routine process logs were taken and analysed in order to check the correlation between specific activities, interactions, elements in nature and the group and individual processes.

Both questionnaires and interviews referred to the group and individual processes, relating to the influence of nature on them and to the facilitator's parallel process. Data were analysed and categorised in order to explore the meaning within the overall context of the work. Established principles were used in order to form and support the construction of theory (McLeod, 2002, 2003). After the data were analysed, using Reason's collective inquiry principles (McLeod, 2002; Reason, 1994), a draft paper was sent to the group facilitators for their reactions which were then integrated in the writing of this article.

The setting

Ilanot is a day school for children and youths with special needs, in the north of Israel. It is attended by 64 pupils between the ages of 6 and 21. Some of the pupils have, in addition to the organic disabilities, additional emotional, physical or behavioural difficulties and some are under psychiatric treatment. Most of the pupils come from low or middle socio-economic backgrounds, from different settlements and cultures (Jewish/Arab/Christians, secular/religious). The school buildings are surrounded by a high fence and trees, enclosing a small garden and a courtyard in which the programme took place.

Participants

The group consisted of five boys and two girls, aged eight to ten. Like most of the pupils in this school, these children were of low intelligence and self-esteem and

non-developed emotional language, communication and socialising skills. In addition, they were hyperactive and very dependent on adults, taking little initiative and responsibility for their actions. The group was characterised by a high level of anxiety that was expressed when it had to cope with changes or unexpected events.

Facilitators

The programme was jointly implemented by Yafa, a special needs home teacher and Irit, a dance movement therapist, both experienced with this population. Prior to implementing the programme, the staff attended a training course on which the basic concepts of the nature therapy approach were taught and the programme's outlines were delivered. The programme was supervised by the author of this article on a regular basis—a two-hour session, once every three weeks.

Timetable

The programme was conducted between September 2003 and June 2004, in a one-hour session every week. It was held in such natural surroundings as were available within the school territory: a small garden and a courtyard.

Aims

The programme aimed to develop communication skills, to improve the participants' positive interactions and their ability to work together as a group. It also aimed to improve their self-esteem and self-confidence, and to expand their life experience and overall perspective.

Results

In order to provide as detailed an account as possible of the experiences of the participants in this therapeutic programme, the analysis of interviews and questionnaire material is presented here in two parts: first, the detailed process the group went through over the ten months of its enactment and then an account of the categories generated through established theory analysis.

Illustrating the process

Autumn (first unit: sessions 1–6). The first unit of the programme took place in the familiar classroom. This unit was designed to introduce the overall framework of the programme and various elements of it: the concept of conducting experiential, process-oriented group work in nature, cooperation between the home teacher and the therapist (who had a previous acquaintance with it), and negotiating and signing the group contract. This time unit was also used to complete the separation process from a number of classmates who left the group during the previous year, but apparently 'were still with them'. Since these issues deal with different aspects of the

concept of change, the work in this unit was focused around this issue. It was well correlated with the ‘cyclic story of nature’—the seasonal transition from summer to autumn and the various changes it brought. The sessions in this unit began with an opening ritual—standing in a circle, singing the song ‘Together’ (a popular Hebrew song which talks about togetherness, love and peace), moving and dancing together at the same time, and concluding with the participants sharing current feelings. The work was carried on by looking out of the window, describing what was seen, and then moving into an exchange of the thoughts and emotions arising from the outside scenery viewed. The session concluded with a closing ceremony which was similar to the opening one, using the ‘sharing’ to reflect on the day’s process. The unit expanded itself by adding structured outings into the school’s open territories, exploring them, picking up meaningful objects and bringing them back into the classroom, then exploring them further in experiential ways. This unit was characterised by a high level of anxiety and a strong egocentric sense which was expressed by most of the children.

Yafa: It was very difficult to collect and hold them; it seemed as if each one was busy only with his own, personal needs.

Irit: There was a lot of anxiety, especially fear of insects and snakes. It seemed as though they were used to dealing only with fixed and predictable things. Therefore we worked gradually, coming out of and returning to the known ‘safe’ environment, the classroom.

These outings expanded into longer explorations, aimed at locating a specific place to build a ‘home in nature’.

Winter (second unit: sessions 7–20). The second unit of the programme followed the structure which was built up during the first unit, expanding through the concept of ‘building a home in nature’. The sessions opened with the indoor ‘together ritual’, and continued in the chosen natural place, in an actual ‘building a home in nature’ activity. This concept of ‘building a home in nature’ was developed by the nature therapy approach, and consists of a concrete creative activity of designing, building and maintaining a home in nature. According to Berger (2004, 2005), this home space can be accepted as a personal or group sacred space; a place which is qualitatively different from its surroundings; a safe place where transformation can take place (Jung, 1969). In addition to this process, revisiting the home on a regular weekly basis allows the participants to explore and work on basic issues, such as boundaries, control and flexibility, belonging and identity. The physical process of building and containing the space is equivalent to the formation of the therapeutic alliance between the therapist and client, as well as a physical representation of the virtual potential space (Winnicott, 1971; Berger, 2003, 2005). These factors, in addition to the non-verbal and creative characteristics involved, make the process a powerful mean for general therapeutic work, with this population in particular.

The actual work began with a sorting out activity, getting rid of garbage which had been dumped at the chosen location, a peripheral area within the school not touched by others. The actual building process began with the group choosing to build

individual homes as opposed to the option of building one mutual group home. These homes were located at a distance of 50cm up to 2m from each other, and were constructed from materials which were found on site. The 'homes' were quite different from each other, in size, height, width of boundaries and materials used. Some were prominent, having a clear form and boundaries, while others were hardly seen. The differences between the 'homes' illustrated not only elements of each child's personality, relating to such issues as boundaries, use of space and dominance, but also the group dynamics, relating to who is in the centre and who is outside. After the construction phase, some dialogues took place between the children. Some joined another's 'home' while others stayed in their original one. Some wanted to stay and 'be' in their 'homes' while others wanted to experience more of the 'doing state', asking to wander to further locations and explore the surroundings. The weather and other 'natural' elements that followed played a big role in the shaping of the process. As winter moved in, the environment changed: rain and mud were present, plants sprouted, and animals such as migrating birds and earthworms appeared. These elements intrigued the group members who were not accustomed to encounter such elements so directly within the school setting and perhaps not in their lives in general. This pushed the group to set out from their 'home in nature' to further areas, exploring what could be found in the 'here and now'. Some elements, such as mud and earthworms, were brought back into the classroom, where they were explored, by means of experiential learning principles.

Yafa: The encounters with the natural elements gave the children a chance to experience and explore things which they never met. It was great to see how their attitudes changed, not only towards the natural elements themselves, such as insects and mud, but beyond that to the option of opening themselves to experience and encounter with the world.

This unit was characterised by an individuation process, allowing the participants to explore various personal issues while keeping a nourishing dialogue with the other group members. Again, the conclusion of this unit and moving on to the next stage were influenced and shaped by the change of the seasons: end of winter, the spring budding and the onset of warm summer days.

Spring and summer (third unit: sessions 21–30). As winter ended and the warm days of spring and summer followed, together with the drying of the soil and wilting of the flora, a new voice was heard in the group. This voice was common to both participants and facilitators, raising the option of leaving the present location, and looking for a new place which would suit the new circumstances better.

Irit: The sheltered and pleasant feeling turned into a sensation of heat and hardship. It felt very strong—the reality changed and we had to adjust, to look for other alternatives and to change. It connected with something very primeval within me—the need to migrate.

The sessions in this unit focused around the concept of separation from the personal 'homes' and the transition to a new chosen territory on which a new mutual group 'home' would be built. The process was designed in a dramatic way, using drama therapy's image of therapy as a ritualistic journey (Lahad, 1992; Grainger,

1995; Jennings, 1995, 1998; Jones, 1996). As such, these sessions were oriented around questions such as: 'Where are we going to? What new reality do we intend to meet and create? What obstacles might come in our way? What can help us overcome them? What should we take with us and what should we leave behind?'

At the outset, a new place was chosen, this time closer to the school's building, surrounded by high trees which provided shelter from the sun and wind. Boundaries were then checked and marked.

Yafa: It was great to see how they took claim over the space wanting to protect the place, declaring it as theirs by writing 'No Entrance' signs and placing them on its borders. One boy even built 'traps' around the home—widening its territory and giving it additional symbolic protection.

The actual building started by bringing materials from the former personal 'homes' to the new site, including symbolic elements, building materials and even earth.

Yafa: Tory found the transition difficult. In the beginning he chose to build a personal home outside the communal one, near, but separated. Later, when we started singing and talking inside the home territory he peeked inside but refused to enter. It took time until he came in and joined, constructing a personal space within the communal one.

Once the 'home' was built, the participants followed their own interests, taking initiative to deal with various activities. An interesting difference occurred between the boys and the girls: while the boys kept busy outside the home, making swords and weapons and playing with them, going on symbolic hunting expeditions, the girls stayed at home cleaning and decorating.

The final stage of the work took place towards the end of the school year, consisting of two major issues. One was the separation from the 'home' site, revisiting the places in nature which had been used in different phases of the work, relating to them, exploring them in perspective and giving them personal and group meanings. The second issue was the separation from the therapist, who was about to go on a year's sabbatical and leave the children after having worked with them for several years.

Irit: Because the whole process was very meaningful for me, it was hard to say goodbye. In the last ritual, many goodbye songs came up spontaneously, it was very moving.

This final unit was characterised by a process of group coherence, strengthening trust and intimacy within the group. This process was expressed by the action of taking active responsibility for the formation and maintenance of the group's safe space, the 'home in nature'. It was centred around the group dynamic and narrative in contrast to the previous phase, which was centred on the individual. The unit ended with a closure and separation process, departing not only from one of the group facilitators but also from the 'nature' which had given the group a space to experience, learn and grow.

Established theory analysis

Grounded theory analysis of data from interviews and questionnaires provided by the facilitators generated the following main categories: (1) nature's role and influence on the process, and (2) the impact of the programme on the group participants.

(1) Nature's role and influence on the process

The research indicated that nature had a major influence upon the process, in a number of ways. One of the strongest elements which influenced the process related to nature's independent dynamics, namely the change of seasons, and the dynamics of animals and plants. These elements influenced not only the physical space, constantly shaping the setting, but also the art forms and the 'homes' built 'inside' it. This situation created a unique therapeutic circumstance, in which both facilitators and participants were present in an ever-changing environment that was not under their control or ownership. It appears that this element exercised one of the strongest implications on the process, raising the issue of coping with the uncontrollable and unexpected, and developing flexibility and coping mechanisms.

Irit: The biggest influence that the programme had upon the children was around the question of coping with an ever-changing environment. This reality brought up many opportunities to work on the question 'how do I cope and function with the unexpected changes that life may bring?'

This factor challenged not only the children who participated in the programme but also the facilitators, raising the question of whether 'nature' is an obstacle and disturbing factor, getting in the way of the counsellor's original plans forcing them to work in correlation with it; keeping an open and flexible mode of working.

Yafa: These changes, the drying of the earth and the growth of the thorns, all had to be coped with, encouraging us to keep a flexible mode of working. This way of working makes you really be present and work in the here and now.

During the programme, with the assistance of the nature therapy-oriented supervision, a different perspective was developed, namely learning how to relate to nature's dynamic as a form of therapeutic intervention which presents the participants and facilitators with a spontaneous, rather than planned, perspective or activity.

Irit: Then the rain came, giving the children a chance to get wet and dirty, to touch mud and bringing them into touch with their senses.

In this sense, nature, being a dynamic and sensuous space, gave the children an opportunity they would never find in the classroom, not only in the concrete aspect of the encounter with the rain and mud, but also presenting them with the chance of 'doing something which is not allowed' within a permissive therapeutic framework.

Another significant element influencing the process was the way in which nature provided the group with an alterative space offering a different atmosphere from the classroom. According to the research findings, this had an important impact, not only on the physicality of the setting, being outdoors, large and open, but also on the whole atmosphere it contained. This atmosphere may be emotional, physical, spiritual or aesthetic and had few implications on the process. It brought up the use of the experiential mode of 'being' and increased the participants' connection with themselves and others.

Irit: Nature is a special environment to work in as it calls for metaphors, creativity and physicality and less for concreteness. In school everything is around skill, here they had a different opportunity.

This aspect is inherently connected to the counsellors' choices of methods, keeping a dialogue between the structured and deductive form and the flowing and creative non-verbal modes of working, staying in the experience without cognitive and verbal processing.

Part of this special atmosphere provided by nature can be addressed as a kind of supportive space which encourages the listening and the 'being' states.

Irit: It seemed like certain behaviours and emotions which were hardly expressed in the classroom were frequently expressed in nature: caring for each other, a sense of belonging, curiosity, and personal and group responsibility. There was no need to ask for permission to talk, or any need to remain sitting on chairs, which reduced conflicts and invited calmness and togetherness. Since the space was so big and varied, each child had the opportunity to find something of interest: an insect, a rock or a plant. In this sense, when someone had difficulty with a specific activity, he/she could find an alternative one and stay within the overall framework without breaking it down.

In addition, this aspect of the experience helped the group reach new levels of intimacy and allowed its members to find variety within it.

Yafa: There was something in nature that made them connect in a different way. Perhaps it was the fear of nature that made them bond, looking for support from each other. Some took leadership roles and became very active. This process was present also in the classroom, but it was more prominent in nature.

There is no doubt that this 'permission' and the supportive elements of nature are connected with the atmosphere and emotional space which was created, held and maintained by the group facilitators, yet it seems as if there was something additional that made this special satisfaction possible. It can be explained perhaps by the difference of the space, inviting people to leave their prejudices about themselves and the others, arriving fresh and open to nature, allowing alternative narratives to be expressed and developed. It may also be that there is something in the environment itself, perhaps the spiritual and emotional wisdom of good old Mother Earth that provides a feeling of contentment and freedom.

An additional kind of contribution nature offered was its ability to supply physical materials which were needed for this active and creative 'home-building' process.

Yafa: The 'home' was built out of materials which were found on site and elements which were brought from the previous, personal 'homes'. Branches and sheets were used to create walls and borders. This element has an important symbolic meaning, making the statement 'we can construct our new reality and narrative using the things we have, right now, creating the future out of the present'.

These findings, illustrating nature's role and influence, are consistent with one of nature therapy's basic concepts concerning the three-way relationship between the therapist, the client and nature. The findings support this concept by illustrating 'nature' not only as a physical setting which provides space and materials, but also as a partner in the process shaping the setting, the facilitator's interventions and

methodological choices, hence expanding the therapeutic influence of the entire process (Berger, 2003, 2005).

(2) The impact of the programme on the participants

According to the research findings, a meaningful therapeutic process took place. The process included a procedure of dispersal of the formation of the group, whereby a collection of individuals who hardly communicated bonded into a functioning group whose members cared, communicated, interacted and worked with each other.

Irit: At the beginning, it seemed as if each of the children was busy with himself choosing to build individual houses, avoiding the option to work in couples or triples. With time, a gradual change took place and spontaneous collaborations emerged and relationships were built.

This process was empowered and received concrete meaning through building 'homes in nature', involving the transition from an individual 'home' to group homes. Group and personal responsibility was also developed as the group became more active and bonded.

Yafa: They placed 'No Entry' signs and asked to close the place with walls to prevent other children coming in. I enjoyed watching this active protest action. It is so rare to see them behave that way, taking an active responsibility upon themselves.

Throughout this process, a varied personal learning was gained, and communication skills were developed as violence decreased within the group.

Irit: At the beginning they did not know how to talk to each other; mainly, they just swore or used their hands against each other ... during the process they learned to communicate, to talk, listen and share. Today there is hardly any fighting or swearing.

The creative mode of working encouraged the development of self-expression, including the development of non-verbal and creative communication skills:

Yafa: During the year's work, the opening ritual changed. It became more creative and open, because they used their bodies more freely, initiating more movement and vocalisation.

Throughout the whole process, self-esteem and self-confidence were built up, as the group changed its meeting place from a marginal and neglected location (where the first personal 'homes' were built) to a more central and popular area (where the 'group home' was constructed). Similarly, individuals sounded their voices and became more dominant:

Irit: Marisa went through a big change. At the beginning, I wondered if I would ever hear her say anything. She used to be afraid of leaving the classroom or going out to the courtyard during the breaks. Now I am amazed, watching her play with the others during the breaks, communicating and expressing herself. She even learned how to resist and stand up for herself.

Personal and group cohesion was also developed as the level of anxiety decreased and a sense of belonging was formed.

Yafa: In the beginning, we would come out of the classroom in a clear structure: I walked in front and Irit walked at the back, trying to give them a sense of security. As time went by, the children were able to let go of this protective structure, and simply ran and enjoyed themselves together.

In addition to the personal learning which the participants have achieved, they also changed their attitude and behaviour towards nature, moving from fear and alienation to familiarity, belonging and caring, expressing curiosity and affection towards it.

Yafa: At first, most of the kids were afraid of animals and shouted when they saw one. With time, through the experiential encounters with the natural elements (fauna and flora), exploring them in direct ways, their attitude changed to one of curiosity and affection, as the shouts turned into calls of excitement, inviting others to see the animal that was found.

It appears that this change is connected to the feeling of belonging which was developed during the process of building the 'home in nature'. The sense of belonging came about not only between the participants, but also between them and the actual place—nature.

Irit: They tried to turn nature into something familiar, into their home. It was as if they wanted to bring in transitional objects, things which would give them confidence.

According to these findings it appears that there is an interesting correlation between the process of 'building a home in nature' and the process of familiarisation with nature. Apparently, a direct encounter between the participants and nature was necessary in order to let go of the feelings of fear and alienation, transmitting those into feelings such as belonging, partnership and ownership. These findings strengthen one of nature therapy's basic assumptions, claiming that granting love and care to nature are possible through a personal emotional process and not only through the behavioural approaches which are so often used in the environmental education programmes (Berger, 2003). Hence, nature therapy may be addressed as an innovative environmental education approach, working together with the basic ecopsychology concept which argues that in order to change people's attitude and behaviour towards nature they must go through a personal emotional process of feeling for nature as if they are part of it, as if it was their home (Roszak, 2001; Totton, 2003).

From an overall perspective, it appears that this specific way of working in nature triggered a number of basic psychological themes such as fear of the uncontrolled and unpredictable, together with identity issues, such as the concept of personal boundaries, and the need to belong to other people or places. It appears that the direct contact with the natural elements triggered these basic humanistic, perhaps universal issues, allowing the participants to explore and develop them within a therapeutic environment.

Discussion

Returning to the aims of this case study, its conclusions can be divided into two major sections: nature's potential as a therapeutic medium and the participants' process. It appears that nature provided the participants with an alternative,

sensuous environment, clean of human prejudice, and thereby allowed them to develop skills and expand personal issues in experiential ways which might not have been possible in the indoor and everyday environment. From a closer perspective, it seems that nature's important influence was also connected to living things, allowing them to perform as active media, a co-therapist perhaps, triggering specific issues, while shaping the process in various unexpected ways. Regarding the process that participants went through, it appears that nature therapy was an effective approach to use within a peer group framework, providing support and modelling, as well as a rich space to develop personal issues such as responsibility, communication, cooperation, creativity, curiosity and flexibility. These are important coping mechanisms which can improve a person's overall function and well-being (Lahad, 1992). In addition, the programme increased the self-esteem of the participants, while their anxiety and aggressive behaviour decreased. Another interesting outcome of the programme was the change that took place in the children's attitude towards nature, changing from alienation and fear into one of familiarity, belonging and caring.

Conclusion

This case study presents a way in which the innovative nature therapy approach can be used with children with learning disabilities within a school setting, addressing nature as a media for experiential and non-verbal work. The article presents and discusses the unique role that nature played in the process, taking part in the shaping of the setting and process alike. It presents a successful learning process by the group, illustrating some of the ways in which the facilitators worked with 'nature' to improve the outcome of the programme. An element not dealt with in this article, but important to mention, is the way in which the work in nature contributed to the facilitator's parallel process, developing a well-functioning collaboration contributing to their personal learning, an element which will be presented in a separate article. The proposal based on these findings is to go beyond the common behavioural and cognitive approaches used with children with learning disabilities, using the methods presented here which can be better adapted to suit the special characteristics and needs of this less verbal and less cognitive population.

Notes on contributor

Ronen Berger, ecologist, drama and body therapist, Head of Nature Therapy Center based at Tel Hai College, Israel, is currently finishing his PhD titled: 'Nature-Therapy' at the University of Abertay-Dundee, Scotland.

References

- Berger, R. (2003) In the footsteps of nature, *Horizons*, 22, 27–32.
- Berger, R. (2004) Therapeutic aspects of nature-therapy: therapy through the arts, *Journal of the Israeli Association of Creative and Expressive Therapies*, 3, 60–69 (in Hebrew).

- Berger, R. (2005) Nature-therapy. Appendix to an M.Phil transfer document, University of Abertay-Dundee.
- Butz, M. R., Bowling, J. B. & Bliss, C. A. (2000) Psychotherapy with the mentally retarded: a review of the literature and the implications, *Professional Psychotherapy: Research and Practice*, 31(1), 42–47.
- Garst, B., Scheider, I. & Baker, D. (2001) Outdoor adventure programme participation impacts on adolescent self-perception, *Journal of Experiential Education*, 24(1), 41–50.
- Grainger, R. (1995) *The glass of heaven* (London, Jessica Kingsley).
- Jennings, S. (1995) The TheatreHealing, in: S. Jennings, A. Cattanach, S. Mitchell, A. Chesner & B. Meldrum (Eds) *The handbook of dramatherapy* (London, Routledge), 93–113.
- Jennings, S. (1998) *Introduction to dramatherapy* (London, Jessica Kingsley).
- Jones, P. (1996) *Drama as therapy, theatre as living* (London, Routledge).
- Jung, C. G. (1969) *The archetypes and the collective unconscious* (New York, Princeton University Press).
- Kaly, P. W. & Hessacker, M. (2003) Effects of a ship-based adventure programme on adolescent self-esteem and ego-identity development, *Journal of Experiential Education*, 26(2), 97–105.
- Lahad, M. (1992) Story-making in assessment method for coping with stress: six-piece story-making and BASIC Ph, in: S. Jennings (Ed.) *Dramatherapy: theory and practice 2* (London, Routledge).
- McLeod, J. (2002) *Qualitative research in counseling and psychotherapy* (London, Sage).
- McLeod, J. (2003) *Doing counseling research* (London, Sage).
- Neill, J. T. & Heubeck, B. (1998) Adolescent coping styles and outdoor education: searching for the mechanisms of change, in: C. M. Itin (Ed.) *Exploring the boundaries of adventure therapy. international perspectives. Proceedings of the 1st International Adventure Therapy Conference: Perth, Australia* (Colorado, Association of Experiential Education), 227–243.
- Nezu, C. M. & Nezu, A. M. (1994) Outpatient psychology for adults with mental retardation and concomitant psychopathology: research and clinical imperatives, *Journal of Counseling and Clinical Psychology*, 62(1), 34–43.
- Polak, D. (2000) Ritualistic preservation: a case study that explains preservation as an encouraging communication for the mentally retarded child, *Therapy through the Arts*, 3(1), 31–37.
- Price, R. & DeBever, M. (1998) The Windana therapeutic community's action adventure program, in: C. M. Itin (Ed.) *Exploring the boundaries of adventure therapy. international perspectives. Proceedings of the 1st International Adventure Therapy Conference: Perth, Australia* (Colorado, Association of Experiential Education), 360–367.
- Reason, P. (1994) Three approaches to participative inquiry, in: N. K. Denzin & Y. S. Lincoln (Eds) *Handbook of qualitative research* (London, Sage), 324–339.
- Roszak, T. (2001) *The voice of the earth* (Grand Rapids, MI, Phanes Press).
- Simpson, C. A. & Gillis, L. (1998) Working with those who hurt others: adventure therapy with juvenile sexual perpetrators, in: C. M. Itin (Ed.) *Exploring the boundaries of adventure therapy. international perspectives. Proceedings of the 1st International Adventure Therapy Conference: Perth, Australia* (Colorado, Association of Experiential Education), 318–331.
- Totton, N. (2003) The ecological self: introducing ecopsychology, *Counselling and Psychotherapy Journal*, 14, 14–17.
- Winnicott, D. W. (1971) *Playing and reality* (London, Routledge).