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Risk, Resilience and Outdoor Programmes for At-risk Children

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Abstract

- *Summary:* In this article we explore a continuum of interventions that offer at-risk children and youth experience in outdoor wilderness environments. Though these experiences are thought to enhance the well-being of participants, the mechanisms by which programming in natural environments promotes health have been poorly understood. In this article we discuss different types of outdoor programmes in which social workers and allied professionals participate, linking programme goals and outcomes to research on mitigating risk and promoting resilience in at-risk populations.
- *Findings:* Findings are based on qualitative data gathered as part of regular programme evaluations and a separate study of 14 participants' reactions to programming. Results show favourable outcomes in terms of relationship building and a sense of spirituality and purpose, though there was little increased awareness of environmental issues. Follow-up and support after programming helped to reinforce changes made during the outdoor experience.
- *Applications:* These case studies, combined with a review of the literature, provide the basis for a theoretically sound approach to understanding the health-enhancing mechanisms that operate through outdoor experience-based education and treatment. Similarities between the gains made in well-being and resilience are highlighted.

Keywords at-risk youth ecology environment outdoor programming resilience

Introduction

Social workers are frequently active participants in therapeutic recreation, wilderness adventure and outdoor education programmes that are offered through government and nongovernmental organizations as interventions with at-risk and marginalized groups (Gilbert, 1998). There is little, however, in the social work literature that has considered the justification for using nature as a context for treatment, nor has there been an adequate discussion of the possible benefits, if any, for participants who join these programmes (Neill and Heubeck, 1998; Witman, 1993). In fact, when discussed, the positive aspects of these programmes are often assumed though little considered debate has occurred on how, or if, these programmes improve mental health outcomes.

One way to address this problem is to explore the literature on risk and resilience, well known to social workers and allied professionals, as a means to assess the effectiveness and relevance of outdoor programming as a form of intervention. To date, there has been little attention paid to how programming in natural environments, a popular activity with delinquent youth, people with physical disabilities, families, and many other populations deemed to be 'at-risk', can enhance the well-being of participants. Among the professionals working with these populations, risk is understood as a constellation of factors, including behaviours, that reasonably predict poor health outcomes (mental and physical) (see Romer, 2003). As Kirby and Fraser explain, 'Risk factors . . . may include genetic, biological, behavioral, sociocultural, and demographic conditions, characteristics, or attributes' (1997: 10). Though there is an apparent fit between the stated goals of outdoor-based experiential programming and effective interventions that seek to mitigate the effect of risk on vulnerable populations, this link has been neither well conceptualized nor well researched.

This article explores a continuum of different interventions that make use of the natural environment as a context in which to address either the individual or collective needs of different populations of children and youth. Murray Bookchin (1980), the social ecologist, argues that the natural state for humans is to be in a relationship with both nature and each other that is less hierarchical and more anarchistic. Feminist scholars who have looked at this same aspect of human development have argued that growth occurs through relationships (Surrey, 1991), which might reasonably be taken as including relationships with elements of the natural environment, including plants and animals.

In order to explore the influence of this connection with the environment and the relationships formed through outdoor programming, we will discuss two programmes. For the sake of comparison, we will examine programmes that deal with identifiable risk factors of different magnitudes. The first programme, Winter Treasures, is a form of primary prevention, seeking to bolster among teens a sense of themselves as having a meaningful role in their communities and a rite of passage necessary to make the transition from child to adult status. The second, the Choices Wilderness Program, addresses the risks posed to

youth when they are harmfully involved with substances such as drugs and alcohol or gambling. Through the discussion of these two case examples, the specific mechanisms by which experiences in natural environments promote resilience will be examined.

The Natural Environment and Social Work

Hoff observes that in most ecological (systems-oriented) social work interventions, 'the ecological framework has not led social workers to place greater emphasis on assessing the significance of the physical environment itself; rather, it has served as a vehicle to argue for more attention to the dynamics of the social environment, in contrast to intrapsychodynamic models' (1994: 18). Similarly, Lovell and Johnson write: 'social work has yet to embrace the concept of a dynamic interaction with the non-human environment' (1994: 03). Instead, nature provides a convenient setting or a metaphorical model for understanding that has remained anthropocentric (focused on human needs, rather than those of nature). Importantly, outdoor programming offers the potential to address this problem by emphasizing both the social and physical environments and the role each plays in fostering health. The connection between a healthy ecology and healthy humans as discovered through the kinds of outdoor programming discussed below are, however, better articulated by ecopsychologists like Henderson (1999) who has argued that what we need as people to be mentally healthy is much the same as our planet needs. Contact with nature, and acts of caring for nature, can therefore inform efforts as social workers to address the adversity children face. Immersion in nature can make us aware of not only our relationship with our natural environment, but also our relationships with each other.

Resilience

The literature on childhood resilience has defined resilience as resulting from an individual constellation of characteristics and capacities, or as the result of interpersonal processes that mitigate the impact of biological, psychological and social factors that threaten a child's health (Fraser and Galinsky, 1997; Kaplan, 1999). As will be shown, outdoor programming relies on the same mechanisms as found in other approaches to mitigating risk. As outcomes from these experiences resemble those from interventions that promote resilience, such programmes may be a viable intervention with populations experiencing varying amounts of risk. However, given the range of experience-based outdoor programmes and the lack of research on their long-term effectiveness, this conclusion is tentative at best. This article is a first step to a more theoretically sound approach to understanding the psychosocial benefits from participation in these programmes and the role social workers can play in their delivery.

Qualitative reviews of both programmes raise issues relevant to the promotion of resilience. However, further more rigorous study is needed that builds on this preliminary work if we are to demonstrate fully the utility (or lack thereof) of outdoor programming as social work intervention.

Outdoor Programming

Programmes that use the outdoors as a programming element vary greatly in their focus. The literature contains an eclectic blend of approaches that can be roughly divided into two categories: outdoor wilderness experiences and environmental education. *Outdoor wilderness*, or adventure, programming seeks to challenge participants in ways that make them rely upon or develop personal and social resources. The focus is primarily on personal growth and recreation, with nature providing a setting or context. In contrast, *environmental education* and other forms of outdoor programmes that sensitize participants to nature and our interdependency as humans with the natural world emphasize the engagement of participants intimately with the natural environment. Few programmes, however, make such clear distinctions and aspects of both approaches are frequently in evidence during programming.

Though professionals endorse programmes at both ends of the continuum between adventure and education, the evidence remains weak that exposure to the environment changes behaviour. This is because few studies have managed to show definitive results linking outdoor programming to the cessation of problematic internalizing and externalizing behaviours among children (Davis-Berman and Berman, 1999). Nor have studies shown long-lasting effects on attitudes towards nature or empathy for others as is anticipated from such programmes (Klint, 1999; Russell, 2000). This lack of a direct relationship between intervention and outcome is not surprising given what we now know about complex associations between risk, protective mechanisms, and health outcomes, or resilience, in populations facing adversity and challenge (see Fraser and Galinsky, 1997; Masten 2001). A better understanding of the risk and resilience literature can provide a conceptual frame to study the effect of these programmes on participants.

The Health-enhancing Aspects of Outdoor Programming

There are many positive outcomes associated with outdoor programming similar to those under investigation among the burgeoning field of resilience researchers. Outdoor programming researchers have focused on specific individual or group outcomes, including enhanced self-esteem, self-efficacy, coping, competence and decreased delinquency, suicidality, and violence (Boss, 1999; Ewert et al., 2001; Hirsch, 1999; Neill and Heubeck, 1998; Russell, 2000). Others have looked at common aspects of programmes at both ends of the adventure–education continuum, identifying generic outcomes among participants such as

better energy flow, an understanding of natural life cycles, an appreciation for bio-diversity, community and relationships, a greater tolerance for change and enhanced adaptability (Bunting and Townley, 1999). The mechanisms by which this growth takes place is speculated on in the literature, though there is little empirical support for the conclusions drawn, especially when one considers the difficulty participants experience integrating into their lives back home the lessons learned during programming (Levitt, 1994). Furthermore, authors such as Autry (2001) remind us to take stock of gender differences in this work. Girls derive different benefits from these programmes than boys, often valuing more the group's social interactions than the challenge of surviving out of doors.

An absence of well-designed research, qualitative or quantitative, has meant that the field is populated with programmes of varying lengths and characteristics with little rationale for the choices made. Nevertheless, these issues do not take away from the popularity of these programmes and the sincere belief in their potential to influence participants positively (Gillis and Ringer, 1999). Lacking, however, is both a conceptual frame sufficiently robust to explain what happens during these programmes and research to reliably demonstrate the successful fit between interventions and populations. Burns (1999) notes in his review of the effectiveness of wilderness programmes for juvenile offenders that there is insufficient evaluation of the programme interventions themselves. Instead, what he finds is that as long as supports are provided post-discharge, recidivism is reduced temporarily. However, when supports are withdrawn recidivism rates – the number of children who return to custody before their eighteenth birthday – rise after two years to levels similar to those expected for the equivalent populations who did not receive outdoor programming while in custody. Such findings suggest that the mechanism of growth is not the programme but the level of support provided afterwards.

Further research is needed. According to Witman (1993), research on these programmes has not kept pace with their expansion, nor have the most appropriate domains for study yet been identified. In a study of 11 experts and 207 participants from 12 adventure programmes for adolescents residing on inpatient psychiatric wards across the United States, leaders and participants reported different aspects of the programmes as the most helpful. Participants generally valued process over content, with activity items like the doing of ropes courses, interactive games and problem-solving rated far below opportunities to help others, meeting challenges, realizing the importance of caring for others, developing trust and feeling like part of a group. This pattern was even more distinct for female participants who valued more than males activities that promoted trust. Witman encourages staff of these programmes to develop the 'soft skills' (relationship-building capacities) necessary to build group dynamics, motivate and teach communication.

Risk-mitigating, Resilience-enhancing Programming

There is a well-developed body of literature that parallels research done in the field of outdoor programming. The study of risk and resilience in different child, youth and adult populations has hypothesized a number of theories relevant to the experiences of these programme participants. Priest (1999), speaking from his role as a leader in the adventure education field, notes that for a programme to be successful for an individual there must be the right balance between the amount of risk and the level of competence the participant brings or can reasonably develop to meet the challenges of the experience. Within the popular literature on risk and resilience, a large and varied number of authors like Eric Wihenmayer, a visually impaired mountain climber, and even Anne Frank, the Dutch Jewish girl who endured two years in hiding, recount stories of personal struggles to overcome 'environmental' challenges. Within these accounts emerge themes such as isolation, physical hardship, long periods of reflection, attunement to the environment one is in, social strife that must be resolved, group attachment, the overcoming of adversity, hopefulness and meaningful involvement with one's community. These pathways and indicators of resilience also appear frequently as outcomes anticipated from outdoor programming or are the types of stresses purposefully imposed on participants to stimulate growth. For example, many of these programmes encourage 'solos,' periods of solitude in the forest during which the youth has time to journal and reflect, and survival skills that build self-efficacy, both factors often identified as helping at-risk youth achieve resilience (Romer, 2003; Werner and Smith, 2001).

Specifically, resilience is defined as 'good outcomes in spite of serious threats to adaptation or development' (Masten, 2001) and refers to both how we behave and our inner strengths. However, different populations define resilience in contextually specific ways. Resilience may, therefore, also be understood as resulting from successful negotiations by individuals and their communities to convince others with more power than those marginalized that problem behaviour is health-enhancing when resources that enhance well-being are scarce (Corin, 1990; Ungar, 2002b, 2004, 2005). Research on resilience in children has documented a lengthy list of characteristics associated with positive outcomes (see Table 1). It has also been shown that a number of protective mechanisms operate in children's lives. Protective mechanisms are processes and factors that promote favoured outcomes. According to Rutter and his colleagues (Rutter et al., 1998) these include eight mechanisms that:

1. reduce the child's sensitivity to risk, usually through experiences of successful coping;
2. reduce the potential for risk factors to impact on a child, as when a parent in a high-crime neighbourhood adequately monitors their adolescents' social activities;
3. reduce negative chain reactions so that a problem like family strife doesn't lead to family breakdown;

4. increase positive chain reactions as when that same family in crisis finds the supports it needs to stay together;
5. promote self-esteem and self-efficacy through experiences coping successfully with stress;
6. neutralize or compensate for the risks the child faces, as when an abused child is placed in a secure and loving foster home;
7. open up positive opportunities for change and growth, as when access is gained to good schools and recreation facilities, coaches and equipment; and finally,
8. encourage the positive cognitive processing of negative life events in order that hopefulness may replace feelings of helplessness.

Combined, these eight mechanisms provide a matrix of ways children (and adults) successfully overcome adversity.

There is a remarkable similarity between the anticipated outcomes from outdoor adventure programming and characteristics of resilient individuals. Furthermore, many programmes are attentive to some or all of the eight mechanisms that promote resilience. In the next section, two programmes are highlighted from the east coast of Canada that take different approaches to working with youth in the outdoors. Each in its own way seeks to promote the well-being of participants and address the risks children face growing up. These programmes were chosen because they confront risks to children from both ends of a continuum from very dangerous (drug abuse) to more ubiquitous social factors that confront all children in Western cultures (a lack of sense of place in one's community or opportunities to show oneself as mature) (Lesko, 2001). These examples also illustrate differences between adventure programming and environmental education, with both programmes having a therapeutic intent. These examples are used to ground our subsequent discussion of the factors associated with outdoor experience-based programming that may act to strengthen resilience.

Examples of Outdoor Programmes

Winter Treasures: Helping Youth Contribute to Their Communities

Winter Treasures (WT) is a sequential earth education programme (Van Matre, 1979) run through a school–community collaboration. In this collaboration, high-school students are trained in leadership techniques and take responsibility for guiding younger children through WT. The programme, run by a municipal outdoor centre, follows an earth education model whose content is grounded in the ethical principles of deep ecology, and whose processes are based on the philosophy of experiential education. WT is organized around an experiential one-day excursion to a large urban parkland. This outdoor experience becomes a springboard for integrating environmental learning into the school curriculum. The programme creates a learning partnership between

Table 1 **Characteristics of resilient children and youth**

Individual attributes

Competence (intellectual, physical), past and present
Self-efficacy, internality
Positive self-concept/self-esteem
Self-awareness or insight
Sense of humour/creativity
Positive outlook/optimism/hopefulness
Goals and aspirations/personal mission
Problem-solving ability
Healthy sexual identity
Initiative and planning
Perseverance
Empathy for others
Emotionally expressive
Autonomy and independence or dependency (as appropriate to situation)
Morality
Spirituality
Constructive use of time

Interpersonal attributes

Meaningful relationships with others/social bonding
Maintains a network of school, home, community and peer associations
Emotional management in stressful situations
Social competence (understands what motivates others, how to act appropriately, etc.)
Assertiveness, resistance to negative and controlling behaviours by others
Capacity to restore self-esteem when threatened by others
Interpersonal planning skills
Interpersonal problem-solving skills
Evoking personality, engages with others, elicits positive attention

Family attributes

Parents monitor the children in age-appropriate ways
Quality of parenting
Financial resources sufficient to meet family's needs and social expectations
Avoidance of dangerous or threatening family interactions
Family emotional expressiveness
Collaborative family problem-solving
Flexibility
Low level of family conflict

continued

Table 1 Continued

General characteristics of the environment beyond the family (including peers, school, community)

Availability of mentor to provide guidance when needed
 Access to community resources and relationships that counter the effects of risk
 Maintaining proximity to safe environments
 Keeping distance from dangerous and stigmatizing environments
 Perceived social support
 Affiliation with a religious organization, spiritual supports
 Appropriate use or abstinence from substance use/abuse
 Community expectations for success
 Access to school and/or a learning community
 Access to recreation opportunities
 Safety and security
 Academic opportunities to excel
 Age-appropriate vocational opportunities
 Meaningful role in community
 Time for reflection and renewal

Social and cultural context

High social status (based on wealth or position)
 Economic stability of the family
 Meaningful rites of passage that include manageable levels of risk
 A relational world view, emphasizing coherence, unity, place
 Perception of events as either stressors or normative events as is appropriate to community norms

the children and their volunteer high-school leaders who guide them through the day's events in exchange for credit as part of a course equivalent that counts towards their fulfilment of their educational requirements. One part, then, of WT's purpose is to foster connections between high-school students and the natural world, while engaging them in leadership experiences designed to enhance their capacity to create positive change in their communities.

A series of qualitative interviews were conducted with 14 of these adolescent leaders asking them about their experience and how it influenced aspects of their psychosocial well-being. The research was conducted as part of a Master's thesis. A thematic analysis of the data was conducted by the researcher and findings discussed with staff. Though this was an exploratory study, results were later used by staff to justify the programme and its funding.

Results showed that students effectively explored their relationships with themselves, with each other and, to a lesser extent, with society and the natural world (Dumond, 2002). Participants did, however, comment that the effects of

the training and meaningful responsibility given them through the experience were influenced by how the school environments to which they returned either promoted or constrained further growth. Thus, the programme by itself was seen by participants positively, but the leaders' personal and social development depended as much on what happened following participation. Personal growth depended on support from a responsive school community. The most important findings related to the leaders' exploration of their identity and the gains they made related to practising their roles as leaders. Present, but less fully developed were the students' explorations of how to create positive relationships with adults and peers in the programme and of how they could make a contribution to their communities and better preserve the natural world.

Student leaders noted most often the quality of their relationships with adult programme staff that emphasized equality and respect, the importance of the ongoing support and training they received throughout the programme, and how the hands-on experience of learning about leadership was a highly motivating and rewarding aspect of their programme experience. A secondary set of outcomes mentioned by students was the importance of contributing to something larger than their individual lives. It was important to some students that their leadership experience be directed towards serving a social end. This theme had two main dimensions, the first being 'making a difference for the kids' and the second being 'making a difference for the environment'. In particular, students discussed the real responsibility (coded in the study as 'authenticity') they shared for teaching younger children as being a meaningful way for them to contribute to child development (and their own development as healthy competent teenagers with a role in their communities).

In terms of the second dimension, making a meaningful contribution to the environment, the majority of leaders talked about having little knowledge of the natural world or affective connection with it prior to their participation in the programme. Even after their training, most participants did not understand the rationale behind immersing children in the natural world and consequently tended to regard these immersion activities (sensory activities such as appreciating the 'secret skeletons' formed by winter-bare tree branches) as 'unimportant' or 'boring'.

Students did discuss at length, however, the importance of the relationships they made with each other during the programme. Relationships with staff were also important in setting the tone for self-exploration and creating a safe space for skill and leadership development. These relationships were perceived as being relatively egalitarian and based on mutual trust. However, students had ambivalent feelings about their relationships with peers in the programme. Participants discussed how training offered them neither enough meaningful opportunities to build strong relationships nor enough activities that required collaboration. Most also talked positively about their relationships with children as one of the primary motivating factors in joining the programme. Students enjoyed feeling free to be 'crazy' and have 'fun' without being

self-conscious. Students who had the most mutually satisfying relationships with children talked about leading children 'at their level'.

Choices Wilderness Programming

The Choices Adolescent Drug Treatment Program employs a multidisciplinary staff of clinical therapists (with backgrounds in social work and psychology), nurses, teachers, recreation therapists and support staff with access to an adolescent psychiatrist when needed. Clients include youth aged 13 to 19 who are 'harmfully involved' with drugs, alcohol and/or gambling. 'Harmful involvement' is thought to occur when the young person's addictive behaviour has a negative impact on any aspect of his or her life. Youth who abuse drugs or alcohol typically disrupt their education, family life and pro-social activities and often become involved in criminal activity. Choices employs a 'Harm Reduction Model' throughout its residential and day programmes, which includes a Wilderness Program component. It is this programme that is detailed here as an example of an outdoor adventure based experience for youth with identifiable risk factors such as addictions.

In 1999 Choices hired its first recreation therapist to explore wilderness programming as a complement to treatment. The title Wilderness Program is, however, a misnomer. The programme is an introduction to wilderness adventure as a form of treatment. Monthly events range from evening outings and day trips to three-day overnight excursions. Other events have included indoor climbing, day hikes, kayaking, canoeing, and community service activities. Like other wilderness treatment programmes, the Choices programme has the following objectives congruent with interventions typically associated with enhancing resilience (Ungar, 2004):

1. Demonstrate lifestyle choices that are an alternative to substance use/abuse;
2. Promote responsible thinking towards self and others;
3. Increase self-awareness and confidence;
4. Increase awareness of our connection to the natural world;
5. Teach and practise teamwork;
6. Challenge clients' excuse-making and promote accountability;
7. Enhance decision-making and problem-solving capacity;
8. Create a positive, supportive community for clients of Choices.

The acceptance criteria for participation are not rigid. Clients must be willing and able to participate, and cannot be suicidal or have an untreated mental illness.

As one phase of the programme, a three-day trip is planned starting with an evening session where participants are walked through a series of preparatory activities. To encourage socialization and formation of the group, staff use small group games and icebreakers. There is a discussion about logistics (packing list, departure time, location), hopes and fears, and the establishment of community

standards. The intent is to get the participants to come up with rules which they believe are necessary for communal living, the premise being that clients will be more committed to standards they have set themselves. Consistently, groups have agreed that everybody is to do their share; respect each other; not litter; and abstain from the use of drugs or alcohol during programming.

The wilderness/outdoors provides opportunities for learning on many levels. At the most basic level, nature forces its visitors to work together to secure comfort such as when building shelters. Feedback is immediate: if it rains and the shelter is ready, clients feel a sense of accomplishment at having provided for their basic needs. At the level of group participation, time spent in the wilderness with nowhere to run encourages group participation in prosocial activities and with no choice but to work through the challenges encountered. To find their places in the group participants have to examine their attitudes, communication styles and abilities to empathize with others. At a spiritual or reflective level of experience, the wilderness provides a peaceful, uncluttered place where distractions are minimal. Participants say that a babbling brook, chirping birds, grassy meadow, thick woods, sandy beaches and soft waves all provide relaxing environments conducive to reflection. Reflection is further encouraged by sending clients for solos for 20–30 minutes each day, where they find space by themselves to think, write and/or sketch.

Written evaluations by participants of the Choices Wilderness Program are completed at the end of each event. These, combined with anecdotal clinical evidence gathered from therapists, have made it possible to document what the Wilderness Program has meant to participants. The following is a sample of some of the participants' comments made during these evaluations. In general, programme staff have found that the longer participants spend together, the more thoughtful and insightful their responses become.

In response to what participants found most enjoyable about the programme, they commented:

I enjoyed the shelter I helped build and the area where we camped.

It was really fun because we got to go out and meet new people and try a new thing.

Working with other people I do not know and having responsibility for myself and others and I thought it would suck but it didn't.

Participants also report learning about themselves:

I learned that it is possible to have fun without drugs, I also learned how to make a community work.

That I can do a lot of things I put my mind to.

I should never say that things are impossible until I at least try.

That I'm independent and capable of handling myself in the wilderness.

Typical of many participants, one stated,

I learned to communicate better. The trip was fun and challenging. The only thing I would change would be to make the trip longer.

In asking participants about how they will apply what they learned to their lives back home, they said:

One step at a time gets you where you want to go.

Even if something looks easy, it can be tough, if something is hard you can stick with it and find a way through.

What I learned about creating a community was that you have to give everyone a chance.

Observations of the clients by the treatment teams have routinely documented the overall sense of accomplishment and pride and greater willingness to engage in individual counselling that participants show following their wilderness experiences. Staff report that clients who were most ambivalent about 'therapy' talk more freely about their lives and problems and tend to become more receptive to learning opportunities. Though these reflections are based on informal data collection techniques, programme staff have used the results to convey to management the necessity to continue this form of intervention. Like their counterparts in the WT programme, they too feel that more rigorous evaluation is required.

Discussion: Generic Qualities of Outdoor Programming

Evaluation of these programmes would be made easier if we had a framework from which to view outcomes from programming. Arguably, the risk and resilience paradigm offers a body of well-developed literature upon which to base more detailed future research. However, even these two exploratory attempts to document participant reactions to outdoor programming show that many themes associated with resilience emerge as positive outcomes from participation in such programming.

These programmes and many others like them share the goal of affecting positively the children and youth who participate through the immediacy of experiential learning in a natural setting. Though they are remarkably different, there are a common set of elements that, when viewed from the perspective of research on risk, resilience and protective mechanisms, make it reasonable to expect these programmes to contribute to positive outcomes. The most evident is that these programmes foster secure attachments with staff and other participants that are less hierarchical, more caring, and based on natural consequences that avoid issues of power, discipline and control. These relational elements mirror well the core components of any good clinical intervention (Duncan et al., 2004). The authenticity of such experiences provides opportunities for the development and demonstration of new competencies, problem-solving, autonomy, helpfulness and other positive attributes associated with resilience

(see Table 1). As Bunting and Townley discuss, there is a need in outdoor programming to avoid the 'lure of compartmentalization' and instead promote an appreciation for the 'significance of interdependency' (1999: 436) between all aspects of programming. Though it is helpful to discuss outdoor programming from the perspective of research already done on risk and resilience, there are dimensions of these programmes that offer unique health-related outcomes because of the context in which they take place. These include immersion and flow; rites of passage that address the maturity gap; and finding meaning and spirituality. Each of these aspects of outdoor programming will be discussed below. Though each has been identified in the literature on resilience, outdoor programming appears to be particularly adept at stimulating growth in these areas despite few references to this model of intervention.

Immersion and Flow

All outdoor programming seeks to immerse participants in a different environment, exposing them to the unfamiliar and in the process encouraging them to question accepted beliefs and practices. There is in the outdoor programming literature an emphasis on immersion (whether in a social group or a natural environment) needing to be of a sufficiently long duration to allow participants to begin to experience the difference between their new and old selves. If the immersion and intensity of the experience is insufficient it is unlikely to result in positive outcomes. As Csikszentmihalyi and Kleiber explain with regard to any experience that actively leads to self-actualization: 'Involvement in an activity must be deep, sustained, and disciplined to contribute to an emerging sense of self' (1991: 94). The adaptive strategies necessary to survive in one environment, and the transferability of these, do not occur unless there is a depth of connection fostered through action. Action that enacts this connection may lead to what has been described by McDonald and Schreyer as 'flow': 'The flow experience is represented by a merging of action and awareness . . . Flow experiences involve a loss of sense of self' (1991: 183). Immersion is similar to the opening up of opportunities emphasized by Rutter and other resilience researchers. A new opportunity that provides a different experience of self and others will likely become a turning point in a child's life and change the trajectory of the child's growth (Sampson and Laub, 1997). Such was the hope of the programmes discussed above, most overtly among facilitators of the Choices programme, who saw the wilderness experience as part of formal treatment.

Rites of Passage and the Maturity Gap

Moffitt and her colleagues (Moffitt et al., 2001) talk of a maturity gap experienced by delinquent youth who want to achieve a more adult status but lack opportunities to do so. Deviant behaviours among some are their way of coping. Outdoor programming provides children with natural and direct consequences for their actions without the interference of others (Davis-Berman and Berman, 1999). Such experiences are thought to bolster participants' sense of self-esteem

and self-efficacy, aspects of healthy development and maturity associated with resilient individuals.

Another way to think of these experiences is as rites of passage. Rites of passage, according to outdoor education leader Stephen Venable (1997), are a necessary part of growing up. Those who study youth have observed a growing trend towards the prolonging of adolescence and the absence of challenge tasks necessary for children to make the transition to adulthood (Lesko, 2001). Venable shows the need for a rite of passage to provide programme participants with a period of separation from their old status as a child, a transitional exercise through which change occurs and finally the reincorporation of the new status the initiate achieves. This tripartite process of separation, transition and reincorporation is the foundation of all rites of passage. Moffitt has shown through her longitudinal study of a thousand New Zealand youth that many will use association with delinquent peers to achieve a premature adult status, with a core group of 5 percent of delinquent adolescents providing a stable source of challenge activities for their peers. Themes of leadership, connection, responsibility and stewardship emerge through outdoor programming, themes synonymous with healthy transitions to adulthood. In the absence of opportunities to experience these, youth will create their own rites of passage that may or may not be socially acceptable (see Thompson et al., 1998).

Meaning and Spirituality

Resilient children have demonstrated an awareness of self and their interdependency with others and with a greater good that is synonymous with what we perceive as spirituality. Spirituality, often measured as religious affiliation or participation in organized religion, is a component of health in at-risk children. Though religious affiliation may be used as a proxy for spirituality, there is a cluster of factors associated with spirituality that predict resilience. These include a belief system that promotes coherence (a sense of order in one's life), a sense of purpose, and connection to others and place that contributes to feelings of being whole, and a sense of one's life as having a greater purpose (Walsh, 1998). These same aspects of spirituality emerge during outdoor programming. Group connection is hypothesized as an interim step to spiritual awakening, a growing awareness of one's interconnection with others and aspects of the transcendental. Connecting to a group and nature breaks the artificial boundary between one's self and something larger than one's individual self. When this connection is nurtured in a natural environment, nature too is experienced as an extension of the individual.

An emphasis on these spiritual (coherent) dimensions of work with youth are found in the writings of both risk and resilience researchers and those in adventure programming (see Anderson-Hanley, 1997). For example, Cooley's (1998) work explores the magic and potential of wilderness environments to heal. Likening outdoor activities to a re-enactment of our pre-agricultural evolution, he shows how at-risk children, such as victims of sexual abuse, find

through tasks like lighting a fire renewed capacity to conquer darkness, both the real darkness of a wilderness night and the intrapsychic darkness that being abused creates in a child. This enactive quality of outdoor experience leading to a spiritual peace is common in others' writing as well (Haskell, 1999; Stringer, 2000), and the more lengthy the period of engagement with the outdoors, the more meaning is likely to be found. Long (2001) demonstrates this point in her look at troubled girls' experiences during ropes courses. Following nine girls at a long-term residential wilderness camp with a ropes course component, Long documents an evolution in the meaning of the experience for participants. They change from an attitude of fun and escape with a focus exclusively on themselves, to a more mature perspective found among longer-term residents for whom the ropes experience informs their lives and how they live them.

Conclusion: Social Work and Ecology

Social work's historical interest in the person-in-environment and ecological/eco-systems approaches to practice would suggest a natural fit between the profession and outdoor programming (Ungar, 2002a; Wakefield, 1996). Though the evidence for the effectiveness of these programmes is still emerging, clearly groupwork in natural settings offers promise as a way to promote well-being in at-risk children and mitigate the impact of the risk factors they face. This fit between the mandate of the profession and the goal of promoting health and outdoor programming is beginning to be recognized. Gilbert (1998), for example, describes a tertiary qualification in adventure-based social work available at Waiariki Polytechnic in New Zealand. The programme emphasizes a bicultural approach sensitive to White and Maori cultures and the environmental perspective held by each. This exemplar aside, Hoff (1994) notes that too often social work's ecological framework has emphasized the adaptive and evolutionary qualities of human beings' interactions with their social environments but rarely with their natural environments.

An emerging group of social work scholars is taking up the challenge of integrating this kind of ecological perspective into practice (Besthorn, 2005; Coates, 2003). Besthorn, for example, is uncompromising in his belief that social work has overlooked a source of great potential for healing: 'human beings have a need – a *biological imperative* – to connect with nature in order to maximize their potential and to lead productive, fulfilling lives' (2005: 124). The field of social work, like related professions, is a long way from realizing such potential. As Besthorn explains, Western psychological discourse has left little room for understanding well-being as anchored to our experience of the natural, as well as social, environments. The two programmes used as examples and discussed in this article are indicative of the myriad of programmes offered around the world by social workers. Though their intent is varied, with differing amounts

of emphasis on education, wilderness adventure and healing, all demonstrate that context is important to programming. It seems a logical extension of the mission of social work to look beyond the human sphere to explore every resource that might influence an at-risk child's well-being. Optimistically, Besthorn concludes his latest work by saying: 'If we can find a way to heal our estrangement from the earth, then perhaps, we can begin to incorporate all the values and lessons of the natural world as an essential core of children's lives' (2005: 129).

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