# Abstracts

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# Welcome to SEER 2009

Welcome to the 9th Annual Symposium on Experiential Education Research (SEER). The purpose of this Symposium is to provide you with a formal setting for the reporting of research in the fields of Experiential Education. Toward that end, all the research presentations were blind reviewed by a panel of referees. There were 21 submissions for the 12 available presentation slots. Whether accepted or not, the authors who submitted material should be congratulated for their efforts.

Along with the researchers who submitted their work for review, a number of other entities and people deserve a note of thanks for their efforts in making the Symposium a reality. First, the AEE and its various staff members including Evan Narotsky, Natalie Kurylko and AEE Chief Executive Officer, Paul Limoges, and the 2009 Conference Host Committee for their support and coordination of SEER. We also wish to thank the members of CORE, especially Bobbi Beale, for their ongoing support.

Much appreciation goes to the scholars who graciously served as reviewers of the submitted abstracts: Bruce Martin, Deb Bialeschki, Mary Breunig, Deb Sugerman, Karen Warren, Amy Shellman, Gary Green, Stacy Taniguchi, and Brent Bell. Thanks also to Mary Breunig for giving this year's opening talk, and Wynn Shooter and Brent Bell for providing thoughtful discussions. Special thanks is due to Cheryl Stevens for her service to the experiential education community over the past three years, as Co-Chair of SEER.

And finally, a big thanks to the attendees of the Symposium, since it is your keen interest and thoughtful feedback that ultimately drives the research and practice relationship forward. Without you and the various educational endeavors you provide within the broad arena of experiential education, all of our efforts would be for naught.

Thanks to all of you for being a part of SEER.


Jayson Seaman, Co-Chair (2009-2011 term)
Cheryl A. Stevens, Co-Chair (2007-2009 term)


SEER 2009

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# The Changing Climate of Outdoor Education in the Quebec CEGEP System

*Bill Mitchell and Teresa Socha*

## Introduction

This study examined outdoor education (OE) programming changes in the English Quebec Collège d'enseignement général et professionnel (CEGEP) system (similar to the US community college system) during the last 20-30 years, and the factors contributing to these changes within the assumptions of the postpositivist paradigm. The research is the first of its kind to provide a historical perspective of OE programming changes in Quebec English CEGEPS (1980s-2009).

## Literature Review

There is a paucity of research on the historical perspective of outdoor education programming, yet anecdotal evidence suggests a change in programming from the 1980s to the present. Related literature that suggest such a change includes student alienation with respect to physical education (Carlson, 1995), a disconnect with nature (Louv, 2005), changing landscapes (Potter & Henderson, 2004; Wilson, 2002), obesity (Noble, 1995; Swinburn & Egger, 2004), student apathy (Hwang, 1995), a shifting focus to traditional academic curriculum (reading, writing and arithmetic) (Humbert, 2005; Miller, 1998), and a recent focus on physical activity (Humbert). This study draws its historical foundation from the works of Carlson (1980), Hammerman (1980), Watters (1985; 1997), Ewert (1987), and Attarian (2002) among others. The theoretical frameworks that guided this study were Kolb's (1984) experiential learning theory (ELT), as well as Fullan's (2000) theory of large-scale school reform.

## Methods

A qualitative case study approach was employed as it pays special attention to completeness in observation, reconstruction, and analysis of the case under study (Zonabend, 1992). Purposeful sampling was used to select outdoor educators with 20+ years of experience teaching outdoor education at the CEGEP level. The resulting sample was six outdoor educators (1-2 teachers per institution) with an average of 25 years of teaching experience at the CEGEP level. The sample was 66.7% male outdoor educators, which reflects the predominant male representation found in outdoor education positions (Humberstone, 1990; Neill, 1997b).

Data collection consisted of in-depth interviews, analysis of research documents specific to the CEGEP context, and document analysis including curriculum documents, pedagogical documents, course timetables, and course descriptions. Semi structured interviews, lasting between 60 and 105 minutes, were performed sequentially from one CEGEP to the next. For example, one participant from each of the four GEGEPs was interviewed prior to conducting a second round of interviews in the same institutions. This rotation process continued until data saturation was reached.

Data were analyzed using the constant comparative method which involved gathering data,

sorting it into categories, collecting additional data, and comparing new data with emerging categories (Creswell, 2005). Triangulation was achieved by cross-referencing themes across data sources.

## Results and Discussion

Four major themes were identified and are listed in order of significance: curriculum reform (introduction of core competencies and experiential education), heightened risk management, aging teachers, and student change.

As a result of educational reforms in Quebec CEGEPs in the mid 1990s, teachers are required to teach additional curriculum content in the same number of course hours. Hence in order to address the added health component in the curriculum, courses are currently grounded more in outdoor pursuits than outdoor education. Subsequently, much of the focus on relationships with the natural world, including outdoor living skills, has been removed from some courses. "The core competencies have taken away some of the meat of outdoor education" (Interview #1). Therefore, outdoor pursuits, though they continue to be regarded as outdoor education by both faculty and administration, are on the rise.

The use of experiential pedagogy, however, is increasing. Its use is mandated by the curriculum reform, although practice varies significantly from one instructor to the next. The variability therein reinforces the need for additional professional development in this area.

Risk management has been increasingly prevalent and effective. "In the steps that we take, as far as teaching goes, it has made a difference" (Interview #3). Responsibility for safety is now shared by both teachers and students. There is evidence in the literature of the watering down of outdoor education as a result of increased risk management (Potter & Henderson, 2004). This study, however, did not seek to find explicit evidence of this in the CEGEP system. Nevertheless, a balance will need to be established between reducing risk and maintaining learning opportunities that are inherently risky in order to maintain authentic field experiences.

Aging teachers provide a stronger learning environment for students through their wealth of experience. "The maturity of teachers has brought better teaching and a more balanced perspective…" (Interview #6). However, many will soon retire which will create a void that will need to be filled. The CEGEPs should consider a transition plan as a result of the impending retirements so that expertise and knowledge can be shared between teachers leaving the profession with those entering to take their places.

"Students have changed drastically. It's not specific to our school. It's not specific to our city. It's societal. There are a lot of factors involved" (Interview #4). Student change is the result of a lack of experience, the prevalence of technology, decreasing physical health, increased employment, and changing enrolment trends. Teachers are already modifying their courses to meet the needs and interests of students. One example is the addition of Global Positioning System technology in course work. These types of changes aid in attracting the modern student. However, it is important to keep in mind that traditional technologies should not be abandoned if one of the program goals is to provide meaningful engagement with natural settings (Cuthbertson, Socha, & Potter, 2004).

The implications of change in CEGEP outdoor education programming highlight both the

outcomes of trends over the last 20-30 years and the need to continue monitoring and conceptualizing change through future research in the field.

While delimited within the Quebec context, this study has implications for school-based outdoor education programming in North America. This study's major limitation was that it gained data exclusively from teachers and not students. This was the result of the potential complexity of gathering a historical perspective of the last 20-30 years from students. Therefore, data gathered with respect to student attitudes reflects teachers' perceptions of those attitudes and not student attitudes themselves. Thus future research should consider the direct student perspective.

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# Engaging Students in Physical Fitness: A Case Study of an Adventure-based Fitness Program

*Alison Rheingold*

## Introduction

High school students in the United States are not physically active at levels recommended by national guidelines (Robbins et al., 2008). School-based interventions aimed at increasing levels of physical activity need research to evaluate the efficacy of these programs, identify the psychosocial variables that are correlated with increased levels of physical activity (Dunton et al., 2007), and acknowledge the contextual factors in schools that support life-long fitness.

The present study focuses on a public school district in Massachusetts that implemented an adventure-based approach to fitness as part of their physical education and wellness program. They adopted non-traditional pedagogical strategies by implementing Project Adventure Inc.'s curriculum, *Achieving Fitness* (see Panicucci et al., 2008).

The purpose of this study was to: 1) explore the factors that constituted the implementation of *Achieving Fitness* in physical education; and 2) establish criteria for future research. The guiding question was: What are the salient features of an Achieving Fitness implementation and how do the qualities of these features contribute to an effective implementation?

## Literature Review

Adventure has been used as a means for revitalizing physical education (PE) for over 30 years (Brown, 2006). There has been little research, however, into the infusion of adventure-based programming and PE programs. Adventure has also been proposed as a means for engaging students in physical activity and for achieving health-related outcomes. In the few studies that exist in this area (Brown, 2006), researchers have found correlations between an adventure approach and reduced levels of obesity (Jelalian, 2006) and increased levels of physical activity (Mygind, 2007). However, neither of these studies looked specifically at school-based interventions in PE programs.

## Methods

Case study was chosen to address the research aims and questions. As explained by Yin (2003), a case study "investigates a contemporary phenomenon within its real-life context" (p. 13) and is useful for collecting and synthesizing data "from multiple sources of evidence" (p. 14). Because the purpose of this study was to investigate the process of an Achieving Fitness implementation, multiple data sources were needed. Access to multiple perspectives (teachers, students, researchers) was critical in creating a cohesive understanding of the adventure approach to fitness in PE.

Five high school teachers participated in this study, all of whom attended a two-day Achieving Fitness workshop as well as multiple days of other adventure-based training, including challenge

course programming and PE workshops. Each teacher implemented a unit that consisted of approximately eight to ten hour-long lessons. Students within their classes were asked to be part of the study; parental and teacher consent was obtained.

The following data were collected: observations of adventure-based fitness lessons; observation-based reflective teacher interviews; post-implementation teacher interviews; online lesson report forms in which teachers recounted their lessons; and student self-report measures. Student self-report data were collected via two measures: the Physical Activity Enjoyment Scale (PACES) (Motl et al., 2001) and the Social Support for Physical Activity Scale (SSPAS) (Marcus & Forsyth, 2003).

Data were analyzed by following an "explanation building" approach (Yin, 2003). Each type of data contributed toward an investigation of the process of implementing the Achieving Fitness program. Notes and transcripts from observations and interviews were collated, looking for patterns and themes. Student pre and post self-report measures were analyzed using statistical software for changes in levels of enjoyment and social support for physical activity.

## Results

A picture emerged of teachers' implementation of Achieving Fitness. This short report focuses on teachers' articulation of how the adventure approach differed from their usual fitness instruction. Liz said, "All of these games …it was honestly organized chaos and when it was like that the kids loved it. When they are at the brink of being out of control, but [felt] safe enough that they could be on that brink, it facilitated some awesome movement [and] cool moments." Bill described this notion of feeling safe in another way: "The big turn off is that we do fitness assessment and…it's about a number…'What'd you get? What place did you get?' The Achieving Fitness approach is a great way to have fun, still get content in, improve fitness levels, but not in such an *exposed environment*" (my emphasis). Bill also said, "The other thing I like about it is that everybody's so busy that they are not looking at another person. Everybody was doing exercise and no one was realizing that those kids were struggling with doing push ups – and they kept on trying – even through the whole game… there's Pat, who's banging off push ups and there's Dave who's struggling, dropped to his knees…I think it's a great way for people [to be engaged]."

Liz, in describing how her unit was different said, "With the adventure-based fitness…this experience is new for everyone. It's not like we are going to play basketball and only the tall, fast people will be good. Everyone has their place…really!" She went on to say, "It was *an equal opportunity kind of thing*" (my emphasis).

The social aspect of Achieving Fitness was also new. Tracey said, "The [fitness center] machines are very isolating…there's no social interaction." Correspondingly, Sarah said, "Sense of community is huge…totally different" and that "they've built amazing relationships that wouldn't have been built." Amanda said, "Learning to play and be goofy and get along with your peers and work with other people. It's so much more social than [traditional fitness approaches]…it supports the idea that if someone is going to continue with this life-long fitness they need to have that social engagement."

Teachers also integrated and taught fitness-related content *through* the lessons, which was

different from their more typical "chalk talk" approach - students engaging in movement and then sitting down for a content-based lesson. Liz said, Achieving Fitness "is presenting information in a kinesthetic way versus sitting in the classroom."

Additionally, teachers described several questions about their units. One was out-of-class application. Amanda said, "I have a hard time connecting that throwing a chicken and running after it … are they really this weekend going to go get a chicken and say, 'Come on let's go play Chicken Baseball'?" Teachers also questioned what they saw as a decreased intensity of physical activity *in the moment*. Amanda said, "I am not sure they were getting their target heart rate up [as high] as if they were on the elliptical. I definitely don't think it is as intense." Teachers generally agreed, however, that there was a positive trade off: less class time rigor but greater comfort with physical activity over the long term.

## Discussion

The results help to explain the *process* of adventure-based learning in PE while indicating several ways in which Achieving Fitness may contribute to increased levels of physical activity. By decreasing students' inhibitions, offering lessons in which students can "lose themselves," and teaching content through activities, adventure-based methods appear to create a context that allows students to participate in dramatically different ways from their typical fitness classes. The means highlighted in this study point toward the impact of thoughtful and sustained implementation of "the cornerstones of adventure" (Panicucci, 2008) including challenge by choice and full value contract.

With psychosocial perspectives frequently employed for the design of fitness research and interventions, this study offers insight into the *context* in which constructs such as enjoyment, social support and self-efficacy may be impacted for students. Providing resources that assist teachers in creating fitness-based PE classrooms that de-emphasize student exposure and highlight fun and interdependence seem to be a key to improving the physical fitness of high school students.

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# Alternative Experiential Education in Western Canada: A Narrative Program Evaluation

*Michael Caulkins*

## Introduction and Literature Review

Alternative education programs serving 'at-risk' youth are increasing in North America (Lehr & Lange, 2003), matching recent increases in violent youth crime and youth substance use (Taylor-Butts & Bressan, 2006; Snyder & Sickmund, 2006). For the purposes of this study, the term 'at-risk' includes youth who regularly face challenges such as abuse, unstable living conditions and hunger (Smith et al, 2007); in the face of such realities, regular attendance and graduation are difficult.

Some alternative schools designed for these youth incorporate experiential education to support the growth of students (Barron, 1995; Collingwood, 1997; Gordon, Houghton & Edwards, 1998). Understanding the way that 'at-risk' youth are being served by experiential activities used by alternative education programs is an important aspect of current educational conversations.

Although the literature on 'at-risk' youth in alternative education settings contains a few articles on program evaluation (Loughead & Shu-Hui, 1995; Moody, Childs & Sepples, 2003), no studies to date include a specific investigation into experiential learning components; further, a retrospective approach that includes data from former students long out of the alternative program has yet to be applied in this context. This study fills a portion of that gap, asking: What long-term impacts do experiential education activities, grounded in an alternative high school setting, have on 'at-risk' youth?

Narrative inquiry, as the theoretical frame for this study, attempts to create a foundation from the existing narratives being told through the research space, while at the same time anticipating new ones that are emerging in the midst of the researcher and collaborators (Clandinin & Connelly, 2000). Narrative inquiry is a way of becoming aware of the multiple, layered, and overlapping stories that are interwoven/converging at the site of inquiry.

## Methods

A case-study design (Yin, 2003) was selected as a means to collect qualitative data for this narrative program evaluation. Case studies offer opportunities to incorporate issues raised during the research and also probe deeply into previously unconsidered areas (Graue & Walsh, 1998). It was believed a case-study design would provide the research with depth (rather than breadth), and would serve the narrative framework by moving below the surface of the program.

The "Outdoor Alternative Program," or OAP (renamed for confidentiality) was selected for the study because OAP students engage in day-long (weekly) experiential outings and longer wilderness trips (10 days, 3x/year) as a part of their required academic program. Located in a metropolis in Western Canada, OAP is a full-time alternative high school for roughly 40 students. Primary data consisted of semi-structured interviews (averaging 60 minutes) with 20

former OAP students. Secondary sources of data included program documentation, informal staff discussions, program observation, and research/field notes. A two-hour focus group with interviewees was convened after initial data analysis to verify preliminary results.

Recruiting participants was challenging; accurate contact information was not readily available for former students. Many were reluctant to be interviewed, and about 1/6 of those who agreed skipped their interview. For these reasons the sample is considered to be self-selected. The volume of narratives and range of topics guided researchers to a three-tiered analysis process based loosely on Miles and Huberman (1994). First-tier analysis was data transcription, coding and re-reading; second-tier was data organizational layout; third tier was summarization and re-writing. This form of analysis allowed for a cyclical and reflective process, first breaking down the data into manageable pieces, then moving those pieces into logical patterns/charts for further analysis, and finally going back to the data (and collecting new data) in order to verify conclusions.

## Results

*Alleviated Emotional/Physical Problems*. Of the myriad challenges facing the participants when they entered/participated in OAP, data showed that many were addressed, at least indirectly, by the outdoor trips. Participants mentioned that the trips were especially helpful in improving self-worth, enhancing personal responsibility, and increasing physical/emotional health. One participant said: "…on the first couple of trips I still brought [cigarettes], but being away from weed and cigarettes… it helped me have a clear head. And it helped me have more energy…I got hungrier for filling food versus…junk food." Another said: "…when you go on these trips, you learn accountability…if one person falls, then everyone falls. So…you have to become responsible." From these words we see that participants recalled learning accountability for their actions, which many struggled with before coming to OAP.

*Relationship/community building*. Participants reported that the longer backpacking/canoeing trips tied the class together as a family, generating bonding, teamwork, and peer solidarity. One student stated: "…sometimes you are put in a setting where you have to work with somebody who you don't like or know or agree with or whatever. And you sort of learn how to deal with it…in a civilized way." Another said: "I think the trips are good because they…teach you to rely on other people… and…help you to become part of a team." Other important aspects of this finding include the building of trust where little existed before, and the ways that peers learned to relate to each other. It was apparent that these relational lessons were powerful; many discussed how the lessons learned on trips years before still held meaning for them at the time of their interview or focus group.

## Discussion

This study suggests that experiential education activities used by alternative schools can generate meaningful and long-lasting impacts in the lives 'at-risk' youth. Participants discussed how the trips helped them overcome emotional/physical problems and taught lessons on building healthy relationships. As students facing significant barriers attending/finishing school, the outdoor trips provided long-term opportunities for overcoming myriad challenges. The literature corroborates the findings. For example, the building of trust through teamwork and wilderness immersion can be found in several studies (Mitchell & McCall, 2007; Ungar, Dumond & McDonald, 2005).

Further, wilderness therapy literature shows that physical activity itself (and the physical closeness of camping) promotes healthy connections to others (Caulkins, White & Russell, 2006).

I see several opportunities for extending this research. One is to inquire about the ways that the 'at-risk' label itself negatively impacts participants in these programs (see Swadener & Lubeck, 1995). Secondly, comparing these findings to other experiential/adventure activities (horseback-riding, rock-climbing, etc.) used by alternative programs serving 'at-risk' youth would be interesting.

In conclusion, this research has revealed that outdoor trips from alternative programs can impact 'at-risk' youth in positive ways for years into the future. Improving the overall status of 'at-risk' labeled youth in our societies, however, is a much larger task than any individual program is capable of remedying, and should be investigated.

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# A Multi-Method Approach to Understanding Empowerment Processes and Outcomes of Adventure Education Program Experiences

*Amy Shellman and Alan Ewert*

## Introduction

Outcomes associated with adventure education program experiences have received much attention in the literature (e.g., Ewert, 1983; Goldenberg, McAvoy & Klenosky, 2005; McKenzie, 2003; Neill, 2002). These studies generally support the view that adventure programs contribute to positive developmental outcomes such as increased self-confidence, self-efficacy, trust, teamwork, and overall life effectiveness (Cason & Gillis, 1994; Hattie, Marsh, Neill, & Richards, 1997). Although most providers of adventure education experiences would likely agree that the adventure education process can be 'empowering,' empirical examination of empowerment is relatively limited in the literature (Angell, 1994; Autry, 2001; Sklar & Gibson, 2004).

While theories of empowerment (both processes and outcomes) have been advanced, the context in which empowerment is developed and acted upon, must also be understood (Narayan, 2005; Spreitzer & Doneson, 2005; Zimmerman, 1995). Thus, understanding how participants perceive their adventure experience is critical to understanding how a sense of empowerment is developed. This study takes the perspective that an adventure education experience not only affords opportunities for participants to develop empowerment (process), but that it also facilitates the development of an empowered state (outcome). Using a mixed method approach, quantitative and qualitative research techniques were used to examine how adventure experiences can serve as a mechanism through which participants develop and are enabled by empowerment. Additionally, this study sought to understand how specific program influences (e.g., specific course attributes) may facilitate participant empowerment, and finally, how participants translate their experience into everyday life.

To achieve these goals, the following research questions were addressed in this study:

1. Does participation in an Outward Bound program increase participants' perceived level of psychological empowerment?

2. With regard to empowerment, how do participants interpret their Outward Bound experience?

## Methods

Psychological empowerment was measured with a pre/post quasi-experimental design using participants of selected Outward Bound courses as the treatment group and individuals enrolled in a general education course at a large Midwestern university, as a comparison group (N=72). The instrument consisted of a modified psychological empowerment scale (Chronbach α=.89 obtained in this study) developed by Spreitzer (1995). Surveys were mailed to participants prior

to their course start (N=319). All participants who returned a completed pre-course survey (N=115; 36%) were sent a post-course survey following course completion. Eighty-eight participants returned a post-course survey for an overall response rate of 27.5%.

Semi-structured in-depth telephone interviews were conducted with selected program participants three to four months following completion of their Outward Bound course. Effort was made to select a purposeful sample of participants with the goal of trying to achieve a balance with regard to sex, and maximum diversity with regard to age, geography (state of permanent residence), and course length. Each semi-structured interview lasted between 30 minutes and approximately one hour. Interviews began with participants being asked to share why they chose to take an Outward Bound course, to describe their experience from day one, to share what they learned and then to share what their life has been like since returning home from Outward Bound. Interviews were transcribed verbatim and read multiple times in their entirety before being coded and categorized into themes for the purpose of data reduction (Creswell, 2007b). Notes were taken by the researcher immediately following each interview to summarize main ideas, record impressions, and enhance clarity when coding. Qualitative findings were examined in relation to quantitative findings to assess points of convergence and divergence.

## Results

After data screening, 86 matched questionnaires were retained from the Outward Bound group and 69 matched questionnaires were retained from the comparison group resulting in a combined total of 155 matched questionnaires. Participants in the treatment group ranged in age from 14 to 30 with a mean age of 17.3 years (SD = 3.3), and included 49 (57%) males and 37 (43%) females. The comparison group was comprised of 27 (40%) male and 42 (60%) female participants ranging in age from 18 to 27 with a mean age of 20.1 years (SD = 1.5).

To determine if there were significant pre-existing differences between the groups prior to any treatment, ANOVA was conducted on the pretest scores obtained from both the treatment and comparison groups. Results indicated no significant difference between the Outward Bound group and the comparison group, $F(1, 154) = 1.71$, p $= .19$, for the pretest values. Effects of participation in the adventure education program on psychological empowerment were analyzed using a 2 x 2 repeated measures ANOVA. Results indicated a significant interaction between group and time. Analysis of main effects revealed that the Outward Bound group scored significantly higher on the posttest measure, $F(1, 170) = 16.81$, p $< .01$, $\eta_p^2 = .090$, than on the pretest measure. No significant change was observed in the empowerment scores for the comparison group from pretest to posttest, $F(1, 136) = .023$, p $= .88$, $\eta_p^2 < .001$. Outward Bound participants reported a significant increase in perceived empowerment with a medium-large effect size, while the comparison group indicated no significant change in empowerment from pretest to posttest.

Interview analysis revealed three primary themes: (1) Intrapersonal, (2) Interpersonal/ Interactional, and (3) Behavioral Aspects for how empowerment manifested for participants. For some participants it was a change in perspective (e.g., experiencing a sense of achievement such that life challenges seemed less daunting, realizing that one person actually can make a difference), while others increased their involvement in their community (e.g., engaged in volunteer work), made significant changes in their personal life (e.g., changed jobs, ended a relationship), or actively took on new challenges.

**Discussion**

The empirical evidence obtained from this study supports the long-held belief that Outward Bound and, more broadly, adventure education can strengthen a sense of empowerment held by the participants. Quantitative data analyses indicated that significant, positive outcomes of empowerment were attained following participation in Outward Bound. Based largely on interpretations of the qualitative data, these results appear to be mediated by a hard-earned sense of achievement leading to a belief that one is capable of more than s/he previously thought and/or capable of doing things differently in his/her everyday life, thus suggesting that perseverance and achievement in times of challenge and difficulty can play an important role in the development of empowerment. Knowing this, it is suggested that future work focus on the durability of these changes in empowerment and in the development of programs specifically designed to increase the sense of empowerment in our students.

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# The Effect of Decision-Making Factors, Risk Taking Propensity, and Environmental Conditions on Predicted Decision-Making in Hazardous Outdoor Terrain

*Scott Schumann, Nathan Furman, and Wynn Shooter*

## Introduction

Despite the popularity of avalanche education courses, snow avalanches kill or injure hundreds of winter backcountry users each year (Tremper, 2001). From 1998 to 2008 there have been 308 avalanche-related fatalities in the United States and 129 in Canada (American Avalanche Association, n.d.). Experts claim that accidents are often a combination of both environmental factors and human factors (Fredston, Fesler, & Tremper, 1994). Investigation of variables present during decision-making in hazardous outdoor terrain may inform experiential educational programs designed to teach students about these factors and ultimately, increase safety in the outdoors.

## Literature Review

Decision-making is a product of both controlled and automated processes. Controlled processes are thought to be the rational, cognitive factors of decision-making, whereas automated processes include intuitive, gut-feeling, emotion-based factors (Ferreira, Garcia-Marques, Sherman, & Sherman, 2006). One specific type of decision-making process, heuristics, are typically thought of as a "fast-and-frugal" approach that can produce optimal decisions (Gigerenzer, 2008) without undue cost to cognitive resources (Shah & Oppenheimer, 2008). Although heuristics typically operate beneath our conscious awareness, they are influential in our day-to-day decisions (Gigerenzer, 2008).

A recognizable link between heuristics and decision-making in hazardous outdoor settings was made by McCammon (2004), he proposed that *heuristic traps* are a contributing factor to many avalanche injuries and fatalities. McCammon described how six different types of heuristic traps influence decision-making in avalanche terrain. The six heuristics are: (a) familiarity, (b) acceptance, (c) consistency, (d) the expert halo, (e) scarcity, and (f) social facilitation. The literature on decision-making traps, largely informed by McCammon's work, has increased considerably (e.g., Stremba, 2005; Wheeler, 2008). Considering that McCammon's conclusions are informed by post-incident data, it may be valuable to gain a more complete understanding of the role of heuristic-based decision-making, particularly for groups traveling in hazardous terrain. Therefore, one purpose of this study was to evaluate the influence of heuristic-based decision factors in decision-making among participants of avalanche education classes. In addition, this study also examined the role of avalanche conditions and incorporated a measure of risk taking propensity with items related to recreational risks (Zaleskiewicz, 2001).

## Methods

A self-report measure that incorporated a multilevel factorial survey design was developed to answer the research questions. Data was gathered from 266 students enrolled in avalanche

education courses across the United States during the winter of 2008-09. The avalanche conditions (low, moderate, considerable, high) and the decision-making factors (listed above) were randomly generated and situated into vignettes that described backcountry skiing scenarios. Participants responded to six vignettes by indicating their intention to ski a slope based on the unique conditions provided in each vignette. The Simulating Risk Inventory (SRI) provided data about each research participant's tendency toward risk.

Descriptive statistics were calculated and the data was analyzed through hierarchical linear modeling (HLM), which is a regression-based multilevel modeling approach to data analysis (Luke, 2004). The Level 1 model included the (grand centered) measure of the forecasted avalanche conditions and heuristic traps on intention to ski (n=1596). The Level 2 model accounted for the differences of trait level risk propensity among individual respondents (n=266).

## Results

Descriptive statistics revealed that the majority of the respondents were male (76%), considered themselves to be advanced (32%) or expert (33%) skiers, and were a mean age of 30 years old. The HLM tests indicated that forecasted avalanche conditions ($\gamma 10$ = -1.10, $t$ = -31.26, $p$ <.001) had the greatest influence on decision to ski a slope, followed by an untracked slope ($\gamma 70$ = .64, $t$ = 10.81, $p$ <.001), familiarity of the terrain ($\gamma 20$ =.58, $t$ = 9.11, $p$ <.001), the presence of a leader in the group ($\gamma 50$ = .43, $t$ = 7.28, $p$ <.001), the presence of other skiers in the area ($\gamma 60$ = .29, $t$ = 4.83, $p$ <.001), and the commitment to ski a given slope ($\gamma 30$ = .18, $t$ = 2.85, $p$ <.001), respectively, at level one. Whether or not the group included members of all the same gender or consisted of a mixed gendered group ($\gamma 40$ = -.01, $t$ = -.18, $p$ >.05) did not predict decisions to ski a slope. Risk taking propensity ($\gamma 01$ = .43, $t$ = 3.62, $p$ <.001), predicted the likelihood that participants would ski a slope, but due to research design limitations, it's influence cannot be accurately evaluated relative to the other variables. The overall variance explained by the full model was 48%.

## Discussion

Decision-making in hazardous terrain is complex and multi-faceted; we focused on the factors identified by McCammon (2004) and found several to influence predicted decision-making. The results of the present study have implications for funding and education to increase the awareness of decision-making factors.

The avalanche condition variable contributed more powerfully to predicted decision-making than any other variable. Avalanche conditions are reported by over 23 forecast centers in the United States (American Avalanche Association, n.d.). These centers typically operate on grants and philanthropic support; given the results of this research, continuing to fund these programs is critical in providing information about objective hazards to skiers. This information may help them travel more safely amidst hazardous terrain.

In regard to the decision-making heuristics, five out of six significantly contributed to a skier's predicted decision to ski a particular slope. The *acceptance* decision-making factor did not contribute to a skier's decision as McCammon (2004) suggested. This is consistent with Wheeler's (2008) hypothesis that gender dynamics in a group do not hold to any one particular

dynamic.   Of the significant heuristics, *scarcity* (whether the slope showed signs of previous skiers) was the most predictive.  Skiing untracked powder is indeed among the greatest of backcountry rewards and appears to be highly influential; skiers should bear in mind the considerable increased danger associated with this hazard.

*Familiarity*, was the second most predictive decision-making factor, suggesting that familiarity with an area may cause individuals to accept more risk.  The remaining significant decision-making factors found to be predictive of decision-making included the *expert halo* (presence of a leader recommending to ski a slope), *social facilitation* (presence of another group), and *consistency* (commitment to a goal).  In addition to providing support for the factors identified by McCammon (2004), these findings are relevant for experiential educators who teach in the outdoors and train individuals to travel safely in hazardous outdoor terrain.   Experiential educators should be aware of the various decision-making factors that drive behavior in risky recreational settings.

Finally, in addition to avalanche conditions and decision-making factors, risk taking propensity was found to significantly influence predicted decision-making.  This suggests that individuals interpret and respond to risky situations differently.   Experiential educators should consider their own propensities for risk as they make potentially consequential decisions.   In sum, perhaps the greatest application of these, and the above findings, lie in increased attention in the need for outdoor experiential educators to maintain an awareness of decision-making influences and the subsequent outcomes in hazardous outdoor terrain.

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# A Positive Learning Spiral of Skill Development in High Risk Recreation: Reversal Theory and Flow

*Susan Pfab Houge, Ken Hodge, and Mike Boyes*

## Introduction

This research project investigated the motivational basis of skill development in high risk recreation. Flow Theory (e.g., Csikszentmihalyi, 1975; Nakamura & Csikszentmihalyi, 2005) and Reversal Theory (RT, e.g., Apter, 1982, 2001) are two general psychological models which describe the structure of motivation and offer theoretical bases from which to understand both optimal experiences (e.g., flow) and non-optimal experiences (e.g., fear and anxiety) in high risk recreation. Reversal Theory is grounded in the tenet that individuals regularly reverse between opposing *meta*motivational states (e.g., between the 'telic' serious-minded state and the 'paratelic' playful state) and that the quality of current experience is dictated by an individual's *meta*motivational state at any given time (e.g., Frey, 1999; Potocky & Murgatroyd, 1993). Flow research with adolescents has demonstrated that a synergy between momentary involvement (i.e., flow) and long-term goals can optimise talent development (Csikszentmihalyi, Rathunde, & Whalen, 1993). Theoretical literature has proposed that an integration of key constructs in these theories could better elucidate optimal experiences and their relation to a 'positive learning spiral' of skill development (Rea, 1993). Specifically, a balance of serious and playful states, and flow states, has been postulated to optimise skill development over time (Rea, 1993). Despite theoretical similarities, previous research has not empirically evaluated the nature of high risk recreation flow states, or their role in a positive learning spiral, within a Reversal Theory framework. Therefore this study evaluated: (a) whether a 'positive learning spiral' of skill development was evident in high risk recreation; (b) the nature of flow states in relation to a 'positive learning spiral'; and (c) whether a 'positive learning spiral' was related to the development of increasingly complex flow states (e.g., serious play), as suggested by theoretical literature.

## Methods

This study employed a prospective, mixed-methods design (Creswell, 2002) to investigate the nature of flow and a positive learning spiral of skill development amongst novice riversurfers (a high risk recreation activity in which participants navigate and surf river rapids on a body board) during a three day riversurfing course. Novices were purposefully selected to evaluate key constructs during initial skill development phases (Patton, 2002), while riversurfing was selected as this activity was expected to facilitate flow based on criteria identified in flow literature (e.g., clear goals; quick/automatically reactions required; opportunities to continually rebalance challenges and skills; Jackson & Csikszentmihalyi, 1999). Moreover, previous investigations of

flow in whitewater settings documented flow and dramatic mood changes pre and post-rapids (e.g., Jones, Hollenhorst, & Perna, 2003; Jones, Hollenhorst, Perna, & Selin, 2000; Males, 1999; Males & Kerr, 1996; Priest & Bunting, 1993).

Quantitative data was collected with all ten course participants (mean age = 23 yrs, 8 males, 2 females) via survey measures related to RT states (i.e., the telic/paratelic state instrument, T/PSI, O'Connell & Calhoun, 2001), flow states (i.e., the short flow state scale, SFSS, Martin & Jackson, 2008) and perceptions of challenges and skills (Stavrou, Jackson, Zervas, & Karterliotis, 2007) at key points throughout these three days.  In addition, five of these ten participants (mean age = 25 yrs, 3 males, 2 females) were purposefully selected to wear head-mounted video cameras throughout the course and participate in daily interviews facilitated by footage from their camera.  These five participants were purposefully selected to provide a cross-section of outdoor and whitewater experience (e.g., more to less experienced) as  previous research indicated that experience in one domain could influence an individual's experience in similar environments (i.e., previous river experience) and/or utilising similar skill sets (e.g., Brody, Hatfield, & Spalding, 1988; Creyer, Ross, & Evers, 2003; Ewert & Hollenhorst, 1989). Therefore, daily interviews of between 25 to 50 minutes were conducted in a semi-structured, inductive format which concluded with deductive concepts (Patton, 2002; Scanlan, Russell, Wilson, & Scanlan, 2003).  Data was analysed using a *concurrent nested design* (Creswell, Plano Clark, Gutmann, & Hanson, 2003) process in which quantitative and qualitative data are interpreted concurrently, but quantitative findings are 'nested' within, or considered as supplementary to, qualitative data analysis.

**Results**

Quantitative data regarding flow and RT states, and perceived challenge and skill ratings were triangulated with qualitative interview data to identify key trends and qualitative differences amongst flow states.  Both of these data sets demonstrated that participants experienced high levels of flow and regular metamotivational reversals throughout the three day riversurfing course.  Data also supported the constructs of telic flow, paratelic flow and the positive learning spiral.  Specifically, telic and paratelic flow states appeared to differ qualitatively based on the degree of salience of key aspects of these states (e.g., level of goal importance, arousal-seeking). In the telic state, anxiety and potentially unpleasant feelings regarding challenges and goal achievement tended to precede more 'intense' flow experiences, while the paratelic state appeared to provide a wider range of flow opportunities as paratelic flow did not appear as outcome dependent as telic flow.  Higher skill perceptions (e.g., sense of control) and the presence of clear, challenging goals also appeared to be a more important antecedent of telic flow than paratelic flow.  The finding that telic flow tended to occur the first time participants mastered a novel task, while paratelic flow was more likely to occur once a task became familiar or 'automatic', also suggested a multi-phasic relationship between these flow states and a positive learning spiral of development.  Data suggested that the dynamic recalibration of perceived challenges and skills which was necessary to facilitate these distinct flow states

contributed to the multi-phasic nature of these states and a positive learning spiral skill development (in the longer-term).

## Discussion

This study provided a starting point from which to identify qualitative differences amongst states of flow and enjoyment, and their relation to a positive learning spiral of longer-term skill development, in high risk recreation. Contrary to previous theoretical RT literature (i.e., Apter, 1982; Kerr, 1989), the key role of the telic state in flow experiences was supported. Results suggested that telic and paratelic flow states, and resulting emotions (e.g., satisfaction, relaxation), in high risk recreation were dynamic and multi-phasic. Moreover, optimal experiences (in the short term) and skill development (in the longer-term) appeared to depend upon the dynamic tensions between opposing states (e.g., telic seriousness and paratelic playfulness; anxiety and excitement), rather than one state in isolation. Continually shifting perceptions of personal skills in relation to challenges also contributed to optimal alternation between telic and paratelic flow, and contributed to the upward movement of the positive learning spiral.

These findings highlighted the symbiotic relationships amongst seemingly 'opposing' states in the learning process and identified the need for further refinement of Flow Theory and Reversal Theory in the context of high risk recreation. These findings have practical implications for high risk recreation participants (e.g., mental skills training programs) and instructors with regard to the facilitation of optimal experiences in the short term (e.g., trip planning and activity sequencing) and optimal skill development in the longer-term (e.g., programme design). For example, alternating phases of perceived skill mastery and perceived skill learning can optimise skill development and enjoyment for participants. However, instructors should not necessarily eliminate *all* negative emotions as they appeared to function symbiotically with intense positive emotions. Instructors should seek to facilitate *a range of flow opportunities* at lower to moderate, as well as heightened perceived challenge levels.

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# Environmental Studies Program Graduates as Leaders in Regional Environmental Nonprofits: What Sustains Them and What Influence Did Their Education Have on Them as Committed Environmental Professionals?

*Kel Rossiter*

## Introduction

This phenomenological study investigates the stories of ten committed, regional environmental non-profit (ENP) professionals who were environmental studies program (ESP) undergraduates, exploring what sustains them in their work, with a focus on the role their undergraduate academic and extracurricular experiences play in supporting their commitment.

## Literature Review

Researchers and those working in the field have noted the prevalence of burnout among professionals in the environmental non-profit (ENP) sector (e.g., deBoer, 1997; Snow, 1992a, 1992b; Whelan, 2000). The massive scale of the problems, slow timelines for change, unclear markers for progress and contentious public debate are a few of the challenges faced. In yet, research also shows that many are able to sustain their commitment to environmental work (Schmuck & Sheldon, 2001), melding their passion with their profession such that it becomes their vocation or even calling (Malikow, 2007; Thomas, 1993). Though only a small percentage (2%) of the entire non-profit sector, ENPs wield a potent political influence and position in the public eye and regional ENPs occupy a vital niche in the ENP landscape (Snow, 1992a).

Collegiate training programs in environmental sciences and environmental studies (ESPs) have gained increasing popularity over the last 40 years (Romero & Silveri, 2006). These programs play a formative role in producing the environmental professionals who go on to work in ENPs (Crowfoot, 1992; Foster, 1993; Hall, Tietenberg, & Pfirman, 2005; Snow, 1992a). Though the degree of emphases vary, many of these programs integrate in experiential education components such as field studies, community-based research, and internships; additionally, through extracurricular activities such as participation in special-interest clubs or theme housing, many students participate in experiential learning that aligns with their academic development (Hall, et al., 2005; Romero & Silveri, 2006; Snow, 1992). This study explores the ways in which regional ENP professionals who were ESP undergraduates sustain themselves in their work, with a particular focus on understanding how their undergraduate academic and extracurricular experiences have helped them to develop into professionals capable of withstanding the rigors of the regional ENP world. In doing so, this study provides a deeper understanding of how people persist in this work and sheds light on ways that ESPs can build their capacity to produce the graduates so needed in the vitally important and particularly difficult world of professional work in regional ENPs. Because many of the capacity-building methods explored in this research involve academic and extracurricular experiential education, the findings and discussion are of particular interest to those in the field of experiential education.

## Methods

Coming to understand who these participants are necessarily involves understanding their stories, as experienced in the present (Lewis & Maruna, 1999; Seidman, 1998). Capturing the nuances, varied meanings and complexity of these stories necessitates a qualitative approach. This study is based on the phenomenological assumptions that participants' lives must be understood in terms of the events and relationships within those lives and that through dialogue and reflection with a number of participants it is possible to convey the "essence" or "central underlying meaning" of a phenomenon (Schram, 2003, p. 71). The study used a purposive "critical case" sampling procedure (Patton, 1980, p. 103) to gather a group of ten participants who were ESP undergraduates, have sustained professional work in the regional ENP sector for five or more years, and describe themselves as strongly committed to their work. Participant interviews explored what sustained them in their work and how their undergraduate academic and extracurricular experiences did or did not build that capacity for persistence. NVivo8 software was utilized during an open coding of the interview data. Participants' responses were broken down into discrete parts, each related to a component or factor that appeared to contribute to sustaining them and their work. As coding progressed, themes emerged among participants' responses (Gall, Borg, & Gall, 1996). Peer debriefing and field logs were used to address subjectivity concerns (Glesne, 2006; Schram, 2003).

## Results

Financial hardships, public valuation of environmental work, the need to perform multiple roles within the organization, complexities in ecological practice, the associated complexities in human interactions, and a slow timeline for change were the major challenges reported by the participants in their work with regional ENPs. Despite challenges, they persist in their work, often feeling called to the work and prompted by a desire for ethical accord between their personal values and professional lives. Participants describe their academic programs as helping them understand the nature and scale of the environmental challenges. Study abroad, field research, internships, and community-based class projects were all mentioned as academic experiences that allowed them to explore their identities as environmentalists and develop inter and intrapersonal skills. Involvement in student clubs and organizations also provided opportunities for identity development and inter and intrapersonal skill building. Outdoor experiences provided participants with opportunities to develop a sense of place, influencing their future decisions about where to live and work.

## Discussion

Recommendations for ESPs, drawn from the research, include that funding for study abroad programs and field research should be made available to ensure all can access these experiences. Also recommended is having academic courses with a range of levels of activism, coupled with a range of class and club offerings on campus, which allows students to choose their level of engagement. Given attachments to place formed during the undergraduate years, and the subsequent desire for graduates to remain in those places, organizations interested in strengthening the environmental movement in particular regions could do so by increasing the strength of ESP offerings in those regions. In addition, once in the job, continued learning was vital in sustaining participants in their work; greater awareness of, and access to professional development is needed. Mentoring offers another avenue for supporting on-going learning.

These regional ENP professionals are success stories, having persisted – even thrived – in a difficult profession.  Despite the difficulties, they maintain generally positive personal and professional outlooks.  Understanding their stories provides data about what can to be done to help sustain the existing leadership and improve the preparation of the future regional ENP leadership.  Understanding the important ways in which experiential education has enhanced the academic and extracurricular components of these participants' undergraduate years is important for experiential educators looking to build the capacity of our future ENP leaders to produce positive and enduring results in their field.

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# Developing a Culturally Relevant Outdoor Leadership Training Program for Aboriginal Youth

*Stephen D. Ritchie, Mary Jo Wabano, Nancy Young, Robert Schinke, Duke Peltier, Randy Battochio and Keith Russell*

## Introduction and Literature Review

Aboriginal People in Canada have suffered discrimination and oppressive federal policies over the past 200 years. Beyond that, they have survived through centuries of imperialism, colonization, and assimilation (Royal Commission on Aboriginal Peoples In Canada, 1996). This long history of adverse events, coupled with a rapidly growing population, vast geographic dispersion, and poor socioeconomic conditions, place Aboriginal youth at risk of developing mental health problems (Health Canada, 2005; Kirmayer et al., 2007). For example, Aboriginal youth suicide rates in Canada are five times the national average (Health Canada, 2005). Recommendations for suicide prevention include mental health promotion strategies, developed through a community-driven approach, to build Aboriginal youth resilience and cultural identity (First Nations Inuit and Aboriginal Health Branch, 2003). Since Aboriginal people are intimately connected with their outdoor environments (Hill, 2006), and outdoor adventure has proven effective in addressing the needs of youth at risk (Russell, 2003), outdoor adventure appears to be an intervention ideally suited for addressing mental health and youth leadership preparation in Aboriginal communities.

A collaborative research team including university and community investigators addressed this need through the development of a culturally relevant outdoor leadership program within one Aboriginal community in Northeastern Ontario. The collaborative process used a community-based participatory action research (CBPAR) methodology and targeted focus groups to develop a 10-day outdoor leadership training program (OLTP) that was implemented in the summer of 2009.

## Methods

Creswell (2009) adequately described the philosophical assumptions of a participatory worldview, and numerous examples can be found in the literature (e.g., Minore, B., Boone, M., Katt, M., Kinch, P., & Birch, S., 2004; Schinke et al., 2009) and also in guidelines (Martin-Hill & Soucy, 2005) for CBPAR projects with Aboriginal communities. The CBPAR methodology was rooted in a collaborative approach between Laurentian University and the Wikwemikong community, involving three inter-related components: community meetings, a community research steering committee, and targeted focus groups. Community meetings included both formal and informal meetings, workshops, and presentations by university and community collaborators. The community research steering committee included Elders, mental health workers, youth workers, band councilors, and youth representatives; it served as an independent research resource and support mechanism that also preserved the community's best interests.

We recruited a purposive sample of Elders and mental health workers from the community and invited them to participate in targeted focus groups. Elders were selected as they are the guardians of community history and cultural wisdom. Mental health workers provided relevant expertise on possible programming improvements that would further promote mental health and well-being for youth participants in the program. In a collaborative fashion, the focus groups were co-facilitated by a Wikwemikong community investigator and the Laurentian University principle investigator. The focus groups were transcribed verbatim and analyzed using a process of *indigenous coding* (Schinke et al., 2009) to compile and arrange thematic responses such that the words were reflective of the language and intended meaning within the culture and context. The analysis followed Cho and Trent's (2006) guidelines for transactional and transformational validity.

## Results

Seventeen elders and four mental health workers participated in two separate focus groups, and four themes emerged from the data: (1) influencing self and others; (2) connecting with Aboriginal roots and culture; (3) respect and values; (4) persistence challenges and strategies.

### Influencing Self and Others

Focus group participants emphasized the necessity for youth to become self-reliant and independent, be disciplined, and assume responsibilities. Concurrently, participants indicated that youth must interact and connect with others, develop effective relationships, and learn to solve problems and resolve conflicts. Support structures for the youth need to balance love, affirmation and involvement with clear boundaries and consequences for actions.

### Connecting with Aboriginal Roots and Culture

Both Elders and mental health workers reported that youth develop a sense of Aboriginal identity through stories, legends, and lessons from the past as well as growth opportunities through spiritual ceremonies and traditions (such as prayer and offering tobacco), learning the Ojibway language, and receiving teachings from Elders.

### Respect and Values

Values such as patience, appreciation, forgiveness and the Seven Grandfather Teachings (wisdom, love, respect, bravery, honesty, humility, and truth) were identified by both the Elders and mental health workers as important for youth development. The Seven Grandfather Teachings are traditional teachings that are also considered gifts from the Creator for living a balanced life. Perhaps the most salient theme from the Elder focus group was a perceived loss of respect by youth for themselves, others, and their community.

### Persistence Challenges and Strategies

Participants identified many significant challenges faced by youth in the community such as physical and emotional abuse, substance abuse, negative parenting, and peer pressure. However, persistence strategies such as making a commitment to change, building positive functional relationships, and cultivating a positive outlook combine to support youth as they persevere through these same challenges.

**Discussion**

Focus group participants provided insights that contributed significantly to the OLTP development in unique ways. In terms of influencing self and others, staff was trained to intentionally role-model desired functional behaviours within a social milieu involving natural consequences resulting from interactions in an outdoor expedition context. Connecting to Aboriginal roots and culture resulted in the involvement of Elders, cultural learning themes, using Ojibway (native language) terms, and providing reflection opportunities through a solo experience and evening sharing circles. To ensure that values were emphasized, the OLTP was adapted to incorporate the seven Grandfather Teachings daily as themes and also through a process of *mentoring intentionality* – a deliberate attempt by staff to role model and reinforce the teachings. The progressive challenges, teamwork, and triumphs associated with the outdoor expeditionary model of the OLTP were deemed to inherently foster the requisite persistence strategies.

A limitation of the approach used is that the program was unique and proprietary to the intended community and not necessarily generalizable to other Aboriginal communities. The inter-related and iterative process of program development and refinement occurred over the course of two years and characterized effective CBPAR. A collaborative development process through community meetings, research steering committee support and guidance, and results from the targeted focus groups, culminated in a program that reflected community expertise, the wisdom of Elders, and support from academia. The OLTP was implemented during the summer of 2009, commencing with two weeks of staff training. Forty-four youth from the community participated in six separate ten day OLTP's that were delivered experientially during a canoe excursion homeward in the traditional territory of the Wikwemikong community.

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# The Relationship between Newcomer's Expectations of Job Demand Stressors, Job Satisfaction and Days of Field Experience: A Study of Field Instructors in Wilderness Therapy

*Geneviève Marchand*

## Introduction

The steady demand for outdoor behavioral healthcare programs for adolescent youth in conjunction with the call for increased oversight by federal and state agencies has created a need for more highly trained and qualified field employees responsible for the direct care of clients (Russell, Gillis & Lewis, 2008). As we continue to improve our knowledge concerning positive outcomes of those types of treatment (Fletcher & Hinkle, 2002; Russell, 2005; Russell, 2006), there is an apparent need to recognize and better understand the individuals working on a daily basis with clients in the field. However, the turnover rate of these employees remains relatively high (Kirby, 2006; Marchand, Russell & Cross, 2009) and there are growing concerns that the job demands of working in outdoor behavioral healthcare are unsustainable for long periods of time (Marchand, Russell & Cross, 2009). The job demands or characteristics of the workload associated with field instructing in wilderness, includes but is not limited to physical and emotional burdens associated with working in the wilderness with youth at risks and unconventional work schedules which often leads to extensive time away from friends and family. One hypothesis suggests that the newcomer's expectations of job demands related to the work of field instructing in outdoor behavioral healthcare are more likely to be unrealistic, and may lead to lower job satisfaction, as well as a higher turnover rate.

This study aimed to create a better understanding of the expectations of job demand stressors, and represents an attempt at measuring field instructors' relative job satisfaction working in outdoor behavioral healthcare. Further, the number of days each field instructor had been working in the field was utilized to look more closely at the relation between days worked in the field (a proxy for experience), job satisfaction and job demand stressors.

## Methodology

In fall 2008, the majority of field instructors from eight North American wilderness therapy programs who catered primarily to non-violent teenagers, were surveyed about their job demand stressors. A retrospective pretest was elaborated from the first Field Instructor Survey (Marchand, Russell & Cross, 2009) to evaluate expectations and current job demands stressors of 30 different elements. Job satisfaction and connected subscales were also assessed during this study. Demographic data was collected so as to continue increasing knowledge of this population of professionals. These demographics included: gender, age, marital status, education, previous experience, length of time at current program, length of time at other programs and schedule.

The sample included 151 surveys that were kept for analysis, based on the condition of their participation in an initial training. Changes in mean and direction of change between expectations and current job demands were evaluated for each item and as an overall assessment. Regressions were performed between expectations of job demand stressors and job satisfaction,

as well as current job demand stressors and job satisfaction. Two categorical variables were created: 1) change in levels of job demand stressors, which included the categories underestimation, overestimation and met expectations, and 2) days of field experience. Two multivariate analyses tested for differences between each categorical variable and job satisfaction.

## Results

This study reported differences between realism of expectations and current job demand stressors for over half of the items evaluated. Underestimation of job demands was found in seven items and overestimation was found in 11 items. The biggest differences were found in pay rates compared to feelings of worth and physical exhaustion after a course. Job satisfaction showed that field instructors were on average satisfied with their job, but the subscales pay, promotion and fringe benefits scored ambivalent rather than satisfied. Regressions indicated that expectations and current job demand stressors predicted a small variance of job satisfaction.

A MANOVA indicated significant differences between underestimation, overestimation and met expectations of job demand stressors and job satisfaction. Job satisfaction scored lower for individuals who had underestimated their job demand stressors. Lower scores were found in these areas of job satisfaction: pay, promotion, fringe benefits, contingent rewards, coworkers, nature of work (e.g. job meaningfulness, specific tasks to perform) and communication, such as job expectations and work assignments. Another MANOVA indicated differences between days of field experience and job satisfaction. Lower scores were found in the areas of promotion, contingent rewards, operating conditions and communication for field instructors who had worked over 262 days in the field compared to individuals who had worked 52 days or less in the field. Demographic data was similar to two previous studies of field instructors, with a slight increase in males (61%) compared to female field instructors (39%), as well as an increase of 15% in single individuals (63%) (Marchand, Russell & Cross, 2009; Kirby, 2006).

## Discussion

The results of this study confirm that expectations of job demand stressors play a role in the job satisfaction of field instructors. While the results may not be applicable to all areas of wilderness therapy, the general findings may lead to a better preparation of field instructors. The importance of giving realistic information and lowering expectations of new employees has been linked to better job satisfaction (Buckley, Fedor, Veres, Wiese & Carraher, 1998; Buckley et al., 2002). It is possible that some field instructors suffer from "reality shock" (Hughes, 1958) because of unrealistic job expectations. This discrepancy was seen through lower satisfaction with job promotion, contingent rewards and communication for individuals who had unequal expectations compared to their current job demand stressors. These findings reiterate the importance of providing a realistic idea of the work to perform (Nelson et al., 1988), but also of the importance of preparing individuals for the actual stressors of their new job (Nelson & Sutton, 1991). Programs need to be diligent not to create false expectations in hope of attracting and retaining new employees.

The findings also indicate that there may be reasons for concerns within specific job satisfaction areas. While overall job satisfaction was satisfactory, field instructors were ambivalent with pay, fringe benefits and promotion. Results also indicated that field instructors who had the most days

of field experience had a lower job satisfaction, including in the area of promotion, contingent rewards, operating conditions and communication. These findings may translate into programs further involving more experienced field instructors in the decision making process of their program. Rewarding experienced field instructors through promotions may also help lower dissatisfaction.

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# The Impacts of Participation in Outward Bound and Military Service Personnel: The Role of Experiential Training

*Alan Ewert, Ph.D., and Jon Frankel*

## Introduction

The United States is a nation at war. A conflict that was projected to be limited in scope and duration has now lasted well into its sixth year; longer than almost any other conflict in American history (Sammons & Batten, 2008). More than 1.6 million US soldiers, sailors, and marines have been deployed in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Of the redeployed (returning) veterans, 38% of soldiers, 31% of Marines, and 49% of National Guard members report psychological symptoms (Wheeler & Bragin, 2007). Many veterans report a broad range of health-related problems including post-traumatic stress disorder (PTSD), substance abuse, destructive marital and family discord, depression, anxiety and other debilitating illnesses (Resnic & Allen, 2007). Thus, there exists a growing need to provide a broad continuum of therapeutic responses to those veterans in need.

One experientially-based and innovative program designed to help returning veterans deal with some of these health-related issues has been the development of the Outward Bound for Veterans Program (OBVP) in which specific courses scaffold military experiences with purposive and discrete tasks designed to create positive emotional and psychological outcomes. The overall goal of the OBVP is to address or prevent combat-related disorders by providing immersive wilderness-based courses that draw heavily on the therapeutic aspects of the natural world, teamwork, and challenge-based activities. Specific issues that the OBVP seeks to address include a sense of isolation, lack of trust, sedentary lifestyle, affirmation of self, developing a sense of empowerment, and improving relational skills. The purpose of this study is to examine the impacts of participation for veterans returning from OEF and OIF areas of operations.

## Methods

To investigate the impact of participation in the OBVP, this study examines two data sets. The first set of data was collected throughout 2008 and consists of 142 veterans who responded to nine course evaluation questions immediately following their participation in an OBVP course. These questions focused on confidence, physical and emotional safety, feelings of success by course end, knowledge for everyday life, leadership and teamwork skills, compassion and respect for others, and acceptance of responsibility. Each question was constructed using a Likert scale anchored by 1 = Strongly Disagree and 7 = Strongly Agree. To determine how congruent Veteran students were with other adult-age students attending Outward Bound, these scores were compared to those generated by other adult students who participated in an Outward Bound course during the same time period.

Phase II of this study is in-progress and consists of measurement of OBVP participants on 11 personal constructs: self-confidence, self-actualization, compassion, healthy and balanced lifestyle, goal setting, group collaboration, effective communication, conflict resolution, problem-solving, social responsibility, and environmental responsibility. These items are part of

the recently developed Outward Bound Outcomes Instrument (OBOI) (Frankel & Ewert, 2009) and will be measured throughout the summer season of 2009 using a pre-post test format. The anticipated sample size for the Phase II data collection is 500 individuals.

The 11 constructs measured by the Outward Bound Outcomes Instrument (OBOI) coincide with participation outcomes identified in many other studies of Outward Bound and similar types of programs (Hattie, Marsh, Neill, & Richards, 1997). In addition, the OBOI was first used on a sample of 577 participants during 2008. These data indicated that when compared to scores generated before the Outward Bound course, post-course scores on all the 11 personal constructs statistically improved at the .01 level, with an effect sizes ranging from 0.36 to 0.77.

In addition, qualitative data will be collected via telephone interviews during Phase II. These data will be used to verify the quantitative data collected and to additionally probe for information and insight not identified through the self-report OBOI.  Interview data will be transcribed, coded, and examined for thematic content with individuals being afforded the opportunity to review the interpretation of their responses for accuracy and missing information.

## Results

In examining the Phase I data, levels of agreement differed between veterans and non-veteran adult students who participated in an Outward Bound course during the same time period. Based on a 1-7 point Likert scale, anchored by strongly disagree (1) and strongly agree (7) veterans reported higher scores on five of the nine items (confidence, physically safe, emotionally safe, successful, and gained knowledge), than non-veterans. Conversely, veterans reported slightly lower scores when compared to non-veterans on four of the nine items (leadership skills, compassion and respect for others, teamwork, and acceptance of responsibility). The average veterans score for these four items was 5.8 (on a 7 point scale) compared to the non-veterans average of 6.1.

While Phase II data are currently in the collection phase, there exists a body of anecdotal reports that presents a compelling picture of possible effects from OBVP participation.  To date, testimonials from licensed therapists involved with the veterans who have participated in the Outward Bound programs have posited statements such as: "amazing transformations," "affirmation of self and an awakening of the sense of possibility that one can, in fact, change his life." Selected statements from the veterans themselves, include: "this course helps me to revive the basic values of life and freedom that gets lost in the PTSD 'fog of war." These and other testimonials offer an interesting dichotomy when compared to the lower level items reported by Veterans in the Phase I data.

## Discussion

Using the Outward Bound model as a framework, participants are placed into unique social and physical settings in which they need to form a team and are faced with increasingly more challenging tasks.  Through effective facilitation and personal reflection they emerge more resilient and capable to deal with uncertainty, stress, and other potentially adverse issues (Sibthorp, 2003). The data point to items such as confidence, safety, and knowledge as areas in which Outward Bound can be effective. Areas where veterans probably already have skills and backgrounds from their military experience, such as leadership and accepting responsibility,

appear to offer less of a learning opportunity for them than their non-military counterparts. With its particular focus on developing resilience, empowerment, and personal responsibility, the OBVP may be an effective intervention for dealing with a number of health-related issues for the returning veteran.

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# A Way to Wisdom Through Service and Relationships

*Andrew Bailey, Ph.D., and Keith C. Russell, Ph.D.*

## Introduction

Youth workers and psychologists alike assert the need to address the development of non-cognitive assets in education (Gardner, 1983; Goleman, 1995; Pittman et. al, 2003).  This call comes in the wake of recent statistics which indicate that academic success and well-being are negatively affected by distrust, disinterest, and isolation in the school environment (CASEL, 2002; CDC, 2006).  The effort to evade the escalation of negative attitudes and behaviors has taken a turn for the "positive".  Positive youth development and Positive Psychology present optimal models of thriving that maximize subjective and objective well-being (Ardelt, 2003; Benson & Scales, 2009).  One such model is represented in the construct of Wisdom.

## Literature Review

Wisdom is a virtue for the common good that involves the balance and integration of many intrapersonal domains: cognitive, affective, reflective, & volitional (Baltes, Gluck, & Kunzmann, 2005).  Wiser youth and adults report fewer risky behaviors (i.e. alcohol and tobacco use), fewer depressive symptoms, and higher levels of physical and subjective well-being (Ardelt, 2003; Perry et al. 2002).  Previous studies have identified several important antecedents to wisdom, including:  intelligence, openness to experience, one's social environment in early adulthood and experience in a variety of social contexts (Ardelt, 2003; Bailey & Russell, 2008; Staudinger & Pasupathi, 2003).  Given these findings, experiences which intentionally foster social engagement, pro-social behaviors, and openness may contribute to the growth of Wisdom.  The purpose of this study was to determine the effects of a volunteer travel experience on Wisdom, Openness, and Civic Attitude in early adulthood.  To test this, the following hypotheses and research question were developed:

> *Hypothesis 1a.* Those participating in a service-learning trip will demonstrate no higher gains in *Wisdom* domains than the control group.
> *Hypothesis 2a.*  Service-learning participants will demonstrate no higher gains in civic attitude and openness than the control group.
> *Research Question 1b.*  Which elements of the service-learning program were most salient for growth in each *Wisdom* domain?

## Methods

This study was conducted within the framework of a larger, longitudinal research project consisting of a sample of 400 students attending five colleges in the upper mid-west of the US, 53% of whom were female (*Mean* age= 21).  Roughly half (n=191) of these students participated in an alternative Spring Break trip called the Pay It Forward Tour (PIFT).  The tour included

cross-country travel, community service, and nightly reflection activities. An additional 209 college students who did not participate on the trip served as a control group. All students completed a battery of survey instruments one week before spring break and again one month after spring break. The treatment group completed an additional survey immediately after the trip. The survey packet included Ardelt's (2003) 3-Dimensional Wisdom Scale (39 items measuring Cognitive, Affective, and Reflective traits), Civic Attitude (Mabry, 1998), and the Openness subscale of the NEO-PI (Costa & Mcrae, 1985). Reflective items measured perspective-taking and restraint of judgment, Affective items address compassion, and Cognitive items, intellectual effort and tolerance for ambiguity.

A supplemental survey was added to the post-trip questionnaire for the treatment group to determine which aspects of the experience were most salient for growth in each Wisdom domain. The final supplement consisted of 15 trip components which were clustered into five conceptually appropriate factors. Participants rated these items (5-point Likert scale) as to their importance in generating growth in each Wisdom domain.

## Results

To determine if the treatment group demonstrated significantly higher gains in Wisdom, Openness, and Civic Attitude over the course of five weeks, a MANOVA was conducted on the "difference" scores for each factor with group status as the between subjects variable. The results revealed significant differences in growth patterns for the Affective (F= 6.27, p= .013) and Reflective (F= 7.59, p= .006) domains and for Openness (F= 10.52, p= .001). The *Mean* difference for the control group was negative on four of the five outcome variables, indicating that students who did not participate in the program declined in Wisdom and Openness over the course of five weeks.

The relationships formed on the trip were perceived as the most important aspect for growth in the Reflective domain (*M* = 4.34). The most important component for growth in the Affective (*M* = 4.35) and Cognitive (*M* = 4.15) domains was the "service activities". Gains in the Reflective domain remained significant one-month after the trip, while the scores for the Affective and Cognitive domains returned to pre-trip levels. The "service activities" and "relationships" formed on the trip were ranked highest in all domains, with "reflective activities" ranking third, and the "travel" and "leader" factors ranking lowest across all domains.

## Discussion

The two groups demonstrated different growth trajectories for two of the three Wisdom domains. Both groups reported decreases in cognition over the course of five weeks. Since all three domains increased significantly from pre-test to post-test measurement for the treatment group, this decline in cognition would appear to be the result of circumstances encountered after the PIFT. It is unclear what would have caused such a decrease in cognition, but one reason may be that the follow-up measure was administered immediately before final exams. Given that the Cognitive domain assesses one's willingness to expend significant effort to understand phenomena on a deep level, this could be indicative of a decline in intellectual enthusiasm. Educational theorists have criticized traditional methods of schooling which utilize extrinsic

forms of motivation (i.e. grades on a test) to coax students into rote memorization (Atherton, 2005).  Such methods often invoke feelings of drudgery, the effects of which could be a decline in cognitive functioning.

The control group also exhibited substantial declines in affection and reflection.  Researchers have long contended that traditional forms of schooling neglect the development of domains other than cognition (Gardner, 1983; Goleman, 1995).  These findings indicate that the circumstances a typical student encounters during the school semester may inhibit the growth of Wisdom.  The actual cause of these declines cannot be ascertained from the variables assessed in this study, but PIFT participants rated service activities and relationships as the most important components for growth in all domains. This combination of serving others and interacting with diverse groups (i.e. Bridging Social Capital; Putnam, 2003) may be a recipe for stimulating progress toward Wisdom.  Educators should incorporate teaching methods that promote cooperative work toward a common goal and make intentional efforts to facilitate meaningful interactions between students.  Such efforts would go beyond the concern for test scores, providing a means to prevent risky and/or anti-social behaviors, and stimulating growth toward long-term well-being for individuals and communities.

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# The Impact of Short-Term Adventure Experiences on the Body Image Perceptions of Women over 40

*Denise Mitten, Ph.D., and Sara Woodruff*

## Introduction

The aim of this project was to conduct a pilot study to help better understand connections between short-term outdoor adventure experiences and body image in women over 40 and test methods for gaining this information. This limited study also has information for outdoor practitioners.

## Literature Review

Researchers have discovered many different factors influencing and impacting women's body image (Bessenoff & Snow, 2006; Kiewa, 2000; Snooks & Hall, 2002; West-Smith, 1997). Within Western European culture, particularly American culture, there is disturbing evidence of unhealthy and negative self-perceptions of individual body image (Sinclair, 2006; Strelan & Hargreaves, 2005). This view has become so prevalent it has been referred to as Normative Discontent (Rodin, et al. 1985 as cited in Webster & Tiggemann, 2003; Sinclair, 2006).

Research is mixed when exploring the influence of exercise on women's lives. Women whose primary motivation to undertake exercise is to improve how they look frequently find themselves locked in a losing battle to achieve their idealized appearance (Kiewa, 1996; West-Smith, 1997). In contrast, results have been consistently positive in research exploring how exercise impacts women's bodies when that exercise occurs in outdoor settings (McDermott, 2004). In 1997, Lisa West-Smith showed that women who are regularly active, meaning they have participated in outdoor adventures at least on a monthly basis for the past year, have an increased positive body image as compared to those who are not active in outdoor adventures. Although not specifically targeting body image, McDermott's (2004) found that women developed new meanings associated with their individual physical identities and their abilities to engage and feel competent in their bodies after participating on a canoe trip. Other research indicating that outdoor adventure experiences may help women create a positive body/self relationship includes (Arnold, 1994; Hornibrook et al., 1997; Kiewa, 2000; Mitten, 1992; Pohl, Borrie, & Patterson, 2000; Ross, 2003).

## Methods

Quantitative and qualitative data on the impact of adventure experiences on the body image of women over 40 was obtained utilizing a 32-item on-line questionnaire including, demographic questions, close-ended questions concerning physical attractiveness and effectiveness, Secord and Jourard's Body Cathexis Scale (BCS) (1953, as cited in West-Smith, 1997), and open ended questions about women's body image. Reliability of the BCS "has been established in reports of a test-retest coefficient of between .84 and .91" (West-Smith, 1997, p. 44).Thirty-nine women responded to the questionnaire, 22 in the control group and 17 in the adventure group. Moreover, a case-study group consisting of five participants was employed through interviews conducted

following a four-day canoe trip.  A Pearson product-moment correlation coefficient (PC) was utilized to determine correlations among six variables: importance of being physically attractive, the importance of being physically effective, self-rated level of physical attractiveness, self-rated level of physical effectiveness, BCS mean, and outdoor adventure experience. Thematic Analysis was conducted in a three-step process to identify underlying themes for all open-ended questions.

## Results

Results reflect high education and income levels for this primarily Caucasian, heterosexual population.

For the question: Is there a difference in body image between women who have participated in short-term outdoor adventure experiences and women who have not? Both qualitative and quantitative data support the affirmative. The qualitative data indicated that most women in this study (72%) who participated in short-term outdoor adventure experiences say their participation has made a difference. Specifically results show that the more they participate in short-term outdoor adventure experiences, the more important it is to be physically effective. While not statistically significant, Table 1 shows that the mean for the BCS is higher for women who participate in outdoor adventure experiences. The consistency of this trend implies the need for further study with a larger population.

Table 1. A Comparison of BCS mean as reported by the short-term adventure group, control group, and West-Smith's study group.

| Study Group | M | m1 | m2 |
|---|---|---|---|
| Control group | 3.31 | Sex = 4.10 <br> Breathing = 3.81 | Weight = 2.57 <br> Chest = 2.80 |
| West-Smith's group | 3.42 | Sex = 4.18 <br> Exercise = 3.87 | Hips = 2.93 <br> Weight = 2.84 |
| Short-term adventure group | 3.51 | Sex, Eyes = 4.06 <br> Hair = 3.89 | Weight = 2.83 <br> Trunk = 3.05 |

*Note*. Abbreviations used are $M$ = mean, m1 = highest average mean, and m2 = lowest average mean.

Positive correlations were found between levels of experience in outdoor adventures and
- the importance of being physically attractive and effective (PC .361*);
- level of physical effectiveness (PC .412**);
Positive correlations were found between the importance of perceived physical attractiveness and
- being physically attractive (PC .445**);
- being physically effective (PC .559**);
Positive correlations were found between the BCS and perceived level of attractiveness (PC .604**).

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*Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).*

No correlation was found between level of experience in outdoor adventures and
- perceived level of physical attractiveness (PC .180) or
- the adventures and the BCS (PC .023).

The results of this study imply that for this population of women, as the value and significance of the body's capabilities develop, consciousness and appreciation of the body amplifies, and self-perceptions of physical attractiveness increase, and provide evidence that as a woman participates in outdoor adventures it is likely that she will realize her body's strength and capabilities, recognize and claim for herself the importance of being proficient, competent, and strong, and come to appreciate the importance of having a positive perception of her body's appearance.

The qualitative results substantiate a connection between participation in outdoor adventure activities and positive body image. The participants define physical effectiveness as having intrinsic motivation, and physical capability. Participants report that being physically attractive means one possesses a combination of physical ability, inner confidence, expressed self-assuredness, and physical proportion. Participants indicated that for them attractiveness and effectiveness are interconnected.

## Discussion

For the question: What effect does participation in short-term outdoor adventure experiences have on women's body image? This study demonstrates the potential positive impact short-term adventure experiences can have on a woman's body image perceptions through increased awareness of her body's effectiveness, and amplified cognizance of the importance of being both attractive and effective. This study reveals an important link between participation in outdoor adventures and women's perceptions of the importance of being both physically effective and attractive. As experience with outdoor adventures increase so does the importance of being physically effective and attractive. As the importance of being physically effective and attractive increases so do self-perceptions of physical effectiveness and attractiveness. These findings provide evidence that participation in short-term adventure experiences may positively impact body image by encouraging a realization of the importance of the body's effectiveness. By instilling awareness of physical competence and capability some women are likely to re-define what it means to be attractive and as a result improve how they feel about how they look. Further study is recommended.

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# A Brief History of the Symposium on Experiential Education Research (SEER)

*Keith Russell (SEER Co-Chair 2006-2008)*

The Symposium on Experiential Education Research (SEER) is a research symposium that provides an outlet and venue for researchers in the field of experiential education to present, share, dialogue, and further develop their research ideas.

The first SEER took place at the Association for Experiential Education's (AEE) 2001 International Conference in Charleston, West Virginia. Fittingly, it was Dr. Alan Ewert of Indiana University who conceived of and led the effort to establish that first SEER. A widely published researcher and author in the field of adventure-based education, Dr. Ewert is also known for his distinguished career in academia, three decades as an Outward Bound instructor, as holder of the Patricia and Joel Meier Outdoor Leadership Chair, past editor of the *Journal of Experiential Education,* and as fellow and past president of the prestigious Academy of Leisure Sciences. In providing the leadership to launch SEER, Dr. Ewert was giving back to the field that he has helped develop throughout his academic and professional career. The symposium occurs concurrently with the International AEE Conference each year and involves the presentation of research papers from leading international scholars in the field of experiential education. The process by which papers are selected for SEER begins each spring, when a call for papers is released in the *JEE,* on listservs, and other outlets, asking researchers, graduate students, and practitioners to submit their abstracts to a blind, peer-reviewed process that is facilitated by the co-chairs of SEER. After receipt of the abstracts the affiliations are stripped from each paper and they are sent out for blind review to a panel of researchers in the field. Abstracts are reviewed for relevance to the field of experiential education, research methodology, and logic and clarity in writing. The papers are then ranked, and the top abstracts are selected for presentation at the Annual International AEE Conference. In addition to presentation, the abstracts are published as a booklet, which is distributed at the conference and in the spring edition of the *Journal of Experiential Education*. Reading these abstracts is a great way to glimpse current research interests and cutting-edge research methodologies in the field.

In Little Rock, Arkansas (2007), the SEER program was modified to 90-minute, theme-based sessions. In this way, papers were grouped by topic in order to better promote SEER to practitioners and other conference attendees so they could attend sessions that were of interest to them.

Each presenter is allotted 20 minutes to present his/her research, which typically includes an introduction, a description of the methods employed, and the results and conclusions developed from the research. In 2007 and 2008, four countries were represented in the papers, adding an international perspective to the proceedings. Session attendees, which included both researchers and practitioners, noted that they enjoyed the new format, and discussions indicated an interest in the subject areas. We hope that these shorter theme-based sessions will continue to be of interest to attendees and the broader membership of AEE. In addition to the papers presented, opening remarks and closing remarks are offered each year by leading scholars, practitioners, and leaders in the field of experiential education.

Beginning in 2008 SEER partnered with the Council on Research and Evaluation (CORE) to explore ways to support the needs of AEE members and expand research in the field.
As the field continues to grow and evolve in a social, political, and economic context, research will play a vital role in helping maintain and further the mission of experiential education in helping children, youth, families, and communities. To this end, research in educational, therapeutic, recreational, and other experiential learning settings are all welcome in SEER.
It is our hope that SEER will be one of the many mechanisms for helping further AEE's mission in the years to come.

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