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Welcome to SEER

Welcome to the Eleventh Annual Symposium on Experiential Education Research (SEER). The purpose of this Symposium is to provide 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, and the scores tabulated by the co-chairs before final decisions were made and themed sessions assembled. Whether accepted or not, the authors who submitted material should be congratulated for their efforts.

This year, we were pleased to expand SEER to include a research poster session corresponding with the exhibit hall opening reception. This enabled a wider representation of researchers as well as a more interactive format; look for poster sessions in the future. In addition, we were pleased to open with a reception and address for the winner of the Distinguished Researcher Award, Dr. Michael Gass. Congratulations Mike! We are aiming to make this address a regular part of SEER so please keep an eye out for this annual event.

Along with the researchers who submitted their work for review, we also wish to recognize others for their efforts in making the Symposium a reality. First, the AEE and its various staff members including Evan Narotsky, Kate Lincoln, Peter Mason, AEE Chief Executive Officer Paul Limoges, the 2011 conference host committee for their support and coordination of SEER, the JEE editorial team (Pat Maher, Glyn Thomas, Phil Mullins, and Simon Beames) for their support of SEER, and the AEE Council on Research and Evaluation (CORE) for its ongoing support. Much appreciation also goes to the scholars who graciously served as reviewers of the submitted abstracts: Keith Russell, Deb Sugerman, Courtney Stewart, Amy Shellman, Bruce Martin, Jill Overholt, Kate Bishop, Stacy Taniguchi, Frank Vernon, Brent Bell, Edward Udd, Andrew Bobilya, Marni Goldenberg, Kath Pinch, and Garrett Hutson. Finally, special recognition goes to Kath Pinch for serving as SEER Co-Chair from 2010-2011.

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, our efforts would be far less significant.

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

Jayson Seaman, Co-Chair (2009-2011 term)
Alan Ewert, Co-Chair (2011-2012 term)

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SEER 2011 ABSTRACT

Exploring the impact of a wilderness-based positive youth development program for urban youth

Christine Lynn Norton, PhD, LCSW & Toni Watt, PhD

Introduction

Young people today face a multitude of challenges, especially when growing up in an urban environment. Risk factors such as poverty, exposure to gangs, drugs, and community and family violence threaten healthy development (Lerner & Galambos, 1998). The positive youth development approach attempts to build developmental assets to combat these personal and environmental challenges by providing youth positive, asset-building experiences and meaningful, supportive relationships. This study explores the impact of a positive youth development program that utilizes mentor-supported wilderness expeditions to build developmental assets among urban youth.

Literature Review

Positive youth development (PYD) has become an important perspective in child and adolescent development, and is based on the notion that young people are capable of healthy growth and functioning if they develop and are provided with the appropriate internal and external resources, or assets. The Search Institute's (SI) research on PYD (Scales & Leffert, 2005) identified these specific building blocks of healthy development—known as developmental assets. According to Scales & Leffert, internal assets include a youth's personal commitments, values and competencies while external assets include the youth's support systems as well as how they view responsibility. Both internal and external developmental assets can be strong predictors of future success (i.e. reduction in violence, drug use, likeliness to stay in school) because avoiding risky, delinquent behaviors in adolescence decreases the risk for these same types of behaviors in adulthood (Benson, Scales, Hawkins, Oesterle, & Hill, 2004).

The PYD approach, and developmental assets in particular, creates a comprehensive framework for understanding what young people need to thrive; yet while specific developmental assets have been identified, research has shifted to looking at what types of programs, experiences and relationships can actually build these assets. Current studies have shown that positive youth development occurs in outdoor and adventure programs (Passarelli, Hall, & Anderson, 2010; Whittington & Mack, 2010; Thurber, Scanlin, Scheuler, & Henderson, 2007; Russell, 2006); however, this research is scarce and, other than Russell's study of young offenders, has not included specific outcomes of 'wilderness-based youth development programs' that target youth who are experiencing major obstacles to youth development, such as living in poverty, in single-parent households with little education, and in dangerous neighborhoods with low quality schools (Larson, 2006). In order to address this disparity in the research and further the goal of positioning outdoor and adventure programs within the PYD framework (Sibthorp, 2010), this

study explored the positive impact of a wilderness-based youth development program on urban youth who were experiencing some of these obstacles.

Methods

This quantitative study examined the positive youth development impact of the Relate Expedition, a weeklong wilderness expedition for under-resourced teens led by Big City Mountaineers (BCM) in several different regions of the United States. BCM provides wilderness opportunities to under-resourced urban teens age 13 to 18, and cultivates relationships between teens and caring adult mentors who serve as one-on-one volunteers in the wilderness program. This unique 1-to-1 ratio of adults to teens in the context of a wilderness expedition was created to increase developmental assets in the youth participants by providing *both* outdoor experiential opportunities and positive, caring adult relationships.

In order to assess the impact of BCM's Relate Expedition on positive youth development, this study analyzed pre-to-post-to-90 days post-test data using the Search Institute's 40 Developmental Assets Profile (DAP). The DAP is a quantitative survey that is appropriate for youth in grades 6 to 12 and measures all eight external and internal asset categories (Support, Empowerment, Boundaries and Expectations, Constructive Use of Time, Commitment to Learning, Positive Values, Social Competencies, and Positive Identity). The 2010 BCM DAP pre- and post-program survey results were returned by 159 teens (N=159). These teens were 37.7% Hispanic, 24.5% African-American, 11.3% Asian, 8.8% Caucasian, 2.5% Native American, 1.9% Middle Eastern/North African, and 9.4% Other/Mixed ethnicity. The teens ranged in age from 13-22 with an average age of 15.97 years, and the sample was 56.6% male and 42.1% female. Statistical analysis of data via SPSS tested for significant mean differences and comparisons utilizing **independent** and **paired** samples t-**tests and ANOVAs.**

Results

The results of the DAP surveys consistently showed that BCM had a positive impact on Internal and External Assets, with statistically significant changes in all eight Internal and External Assets pre-to post-test, as well as continued improvement in mean scores from pre-to-post-to 90 day post-tests. The follow up DAP survey results collected 90 days post-program were only returned by approximately 25-30% of participants; however, *even 90 days after the program, there was statistically significant overall improvement in Internal and External Asset scores* from the pre-test scores. The results also showed that *internal and external asset post-test scores increased slightly 90 days post-program,* though not at a statistically significant rate. Results found that BCM programming tends to increase assets in most categories in both males and females, though males tend to fare a bit better than females, especially in improvements in internal assets. Overall, Hispanic teens increased in more asset categories than African American teens, with statistically significant differences occurring in the 5 of the 8 asset categories. While these differences between gender and race/ethnicity are important, a full exploration of them is beyond the scope of this abstract.

Discussion

In order to fully grasp the importance of this study, it is essential to understand the specific components of the various asset categories. While a complete overview of them all is beyond the scope of this abstract, the findings of this study provide compelling evidence that outdoor and adventure activities can foster both internal *and* external developmental assets in diverse youth who are facing obstacles that are considered risks to positive development. This is especially true in the areas of positive identity, constructive use of time and social competencies—three asset categories that exemplify not only pro-social behavior and empathy, but also a positive view of oneself. This means BCM programs influence not only how young adults make choices, but also how a young person sees him or herself, which may impact how they build future relationships. Given these findings, it seems that outdoor and adventure programming can play a key role in addressing the developmental needs of underserved youth through a new type of 'wilderness-based youth development program' that pairs adult mentors with youth one-on-one in the context of wilderness expeditions. This may prove to be a viable and replicable program model, as it provides both the personal growth experiences and positive relationships necessary to foster positive youth development.

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SEER 2011 ABSTRACT

Getting All Students to the Top of the Mountain: A Study of Sustaining School Reform and the Legacy of Outward Bound

Alison Rheingold

Introduction

Public schools in the U.S. are under unprecedented pressure to demonstrate academic gains for all students (Ravitch, 2010). The current climate of accountability, as dictated by the federally mandated No Child Left Behind legislation, is widely renounced as an obstacle to genuine reform - particularly in urban, under resourced schools – rather than as the hoped-for antidote to the achievement gap (Darling-Hammond, 2007). Despite these challenges, some schools have managed to sustain, and even thrive, within the tensions of attempting innovative pedagogical practices while adhering to standards.

King Middle School, in Portland, Maine – an Expeditionary Learning school - is one of these thriving schools. Over the last 23 years, King transformed from a tracked, underperforming school to one that focuses on "getting all students to the top of the mountain."[1] Students demonstrate academic achievement by outpacing both the city and state on standardized tests, while consistently producing high-quality, meaningful products and performances that are the result of multi-month long interdisciplinary projects (so called *learning expeditions).*

A major factor in implementing and sustaining reform at King is work the school engaged in from the late 1980s and early 1990s with Outward Bound and then, starting in 1992, with the burgeoning Expeditionary Learning Outward Bound[2] movement. As a means to change from a "school for some to a school for all", the school's principal and willing teachers began a process of "upsetting the ruts" of the teaching and learning status quo and the school's culture.

Expeditionary Learning - a whole-school reform model that emerged out of collaboration among OB and prominent school reformers - is implemented in over 160 U.S. public schools. The approach focuses on school culture, student engagement and learning expeditions. Much of the EL-related research examines outcomes, specifically analyzing standardized test scores and graduation and drop out rates (e.g., Borman, Hewes, Overman, & Brown, 2003). This research, in part, shows a relationship between test scores and the length of implementation: the longer a school implements EL, the higher the scores. More research, however, is needed to understand the factors that sustain EL over time, how the core principles of the model are enacted, and the unique features that draw on the legacy of OB.

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[1] All phrases in quotation marks are remarks made during interviews with King staff.

[2] This organization has since changed its name to Expeditionary Learning.

The purpose of this study was to ethnographically explore how OB principles and practices - both prior to the start of EL and once the model was launched - impacted school reform at King, specifically attending to not just *how* reform was implemented, but processes that helped *sustain* change over time. I examined the following question: How have OB principles and practices played a role in the historical trajectory of King Middle School, across 23 years of reform?

Methodology and Methods

My research resides within a sociocultural framework, entailing a historical analysis of current processes (e.g., Roth & Lee, 2007). I employed historical ethnographic methods to examine not just *that* OB played a role in King's reform, but *how* OB/EL principles and practices shaped discourse and the overall situation encompassing the transformation of this school (Clarke, 2005). Because "the past continues to speak to the present…[and that] all that we take for granted as 'natural' is a product of both historical and contemporary processes" (Tuchman, 1995, p. 310) it would be insufficient to only examine current processes.

King Middle School was chosen because: 1. It was one of the original ten EL demonstration schools; 2. It is held up as a model within the EL network; 3. It is the most diverse middle school in Maine (36% English Language Learners and 55% Free and Reduced Lunch) and yet has the highest scores on standardized tests, placing it squarely in the national debate surrounding 'gap reduction;' and 4. King has received local and national accolades, including the principal receiving the 2010 Maine Principal of the Year award.

As part of a larger study on student engagement, I conducted ethnographic fieldwork at King over the span of 16 months. Fieldwork consisted of: Closely observing a group of 7th graders during a four-month learning expedition; participant observation for 25 days alongside a key informant; and semi-formal interviews with (1) staff who have been at the school since the late 1980s and (2) EL staff central to the organization's inception who worked closely with King during the late 1980s and into the 1990s.

As per a grounded theory approach, analysis took place concurrently with data collection, and included: initial and focused coding of fieldnotes and interviews; the constant comparative method; theoretical sampling; and theory-building (Charmaz, 2006).

Results and Discussion

I focus here on one aspect of my findings – impact on staff – because of themes that emerged around professionalism, the longevity of teachers' and administrators' tenure and the collective commitment to help all students at King achieve academic success.

OB retreats in the late 1980s and early 1990s contributed to a collaborative staff culture and the creation of metaphors related to school transformation. For example, one teacher reminisced about his own experience saying:

> Everyone was a little cynical about teambuilding…but it opened up communication. When you are standing out in 40 degree November rain, belaying somebody…and that

person would <u>not</u> be out in the rain, period, never mind being on a side of a rock. It creates a vehicle for more honest and open conversation – it breaks down those barriers and gets rid of some of the defensiveness.

Additionally, the metaphor 'getting all students to the top of the mountain' endures across two decades of reform at King. It captures the spirit of OB (i.e., helping all participants on a wilderness course be successful) and translates it into the academic realm. As an EL staff person recollected, this metaphor stemmed, in part, from an OB course for school leaders in the early 1990s. On this course, explicit connections were made between this groups' process of assisting all members – despite radically different physical abilities – successfully negotiate steep terrain and reasons for de-tracking their own schools.

These, and other, OB metaphors are part of King's discourse. For example, another teacher invoked a different metaphor to describe how current people at King collaborate, in service of student learning:

> It goes a little bit back to the OB philosophy…if you are on a boat with ten people in Penobscot Bay for two or three weeks, you get to know that person…if one person's a navigator for that day and one person is on the tiller and you disagree…you have to work it out. But, your goal is to get to Hurricane Island and you're heading in the wrong direction and here come the storms and you can get blown off course - that is the flavor of [our school].

Finally, because King adopted EL alongside the launching of the model, staff at King innovated reforms as they were implemented. Tyack and Cuban (1995) ask the question "how do schools change reforms" rather than the more typical "how do reforms change schools" (p. 60)? In this way, King staff express ongoing pride at being a "break-through school," continuing to exemplify what a sustained EL implementation looks like. The recognition generated through having one's own work elevated to model status has contributed to a culture of professionalism that stems from the collaborative work launched during OB retreats 20 years ago. This professionalism influences sustained reform, by contributing to teachers' longevity, ownership of the EL model and a dedication to always perfecting the craft of designing and implementing learning expeditions.

My findings indicate that OB principles and practices have had a lasting impact on King. The endurance of OB metaphors across older and newer staff points to a legacy that is part of the fabric of King: professional discourse and collaboration centered on the critical goal of supporting all students' achievement.

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SEER 2011 ABSTRACT

Exploring Personal Risk Management Outcomes of Short-Term Adventure Programming on College Students

Jay Whitacre, Curt Davidson, Kiboum Kim & Dustin Smucker

Introduction

Each year, thousands of students attending major universities across the country enroll in a short-term, outdoor adventure courses during a semester. Many of these outdoor adventure courses, or programs, involve activities such as rock climbing, canoeing, kayaking, skiing, etc. These courses are usually taken as "elective" credits and are often marketed as "skill acquisition" courses, which is attractive to potential students. A recent study by Ward and Yoshino (2007) supports this and has identified 16 themes emerging from similar courses, including sense of accomplishment, teamwork, environmental stewardship, and self-improvement. Beyond this study, however, little investigation has been conducted regarding the types of outcomes students experience as a result of participation in short-term outdoor adventure programs for credit.

Literature Review

Outdoor adventure education is strongly based on the notion and presence of risk involved in the activities. Ewert & Hollenhorst (1989) found that the higher proficiency level an individual reaches in an activity the more likely he/she is to take greater risks during that activity. Participation in adventure activities has been linked with fostering personality qualities towards positive personal changes (Celsi, Rose, & Lehigh, 1993) The effects of a positive adventure experience can allow individuals to excel in areas of their lives where they may have previously had negative feelings. As participants move successfully through an adventure experience, they may generally expand the limits of how much risk they are willing to take (Sibthorp, Paisley, & Gookin, 2007; Celsi, Rose, & Leigh, 1993; Ewert & Hollenhorst, 1989).

College adventure programs have been thought to have small to moderate effects on students who participated (Neill, 2002). In addition to these moderate impacts, the undefined outcomes of these college adventure programs add to the unknowns when conducting and researching specific experiences. With these issues in mind, the primary purpose of this study was to identify potential outcomes that students participating in short-term, college adventure programs may experience in areas such as personal risk management.

The subject of risk has long been of interest to the adventure education field. The topic of risk in adventure education has been divided into the categories of perceived risk and real risk (Ewert, 1989). Adventure programming has inherent real risk and uncertainties that are involved with the actions of traveling and living in the outdoor environment. Perceived risk becomes the more relevant risk in adventure activities due to the fact that instructors/facilitators typically have a great deal of training that puts emphasis on managing these risks and being aware of the precautions needed to minimize those risks.

Existing studies indicate a myriad of personal growth and developmental outcomes that can be achieved while participating in adventure programming (Breitenstein & Ewert, 1990; Driver, Nash, & Haas, 1987; Ewert et al., 2000). Previous research of longer courses (five days or more) have specifically shown that participation in these courses can produce meaningful outcomes for participants (Hattie, Marsh, Neill, & Richards, 1997). However, short courses have usually been excluded from the literature. From the existing literature, six variables were identified and explored. The variables include personal risk management, communication ability, healthy living, future intention to participate in future adventure programming, personal management, and self-management. For the purpose of this study, personal risk management has been explored specifically.

Methods

The study was a pre – posttest design, utilizing undergraduate students who were enrolled in 1-credit, entry-level, skill-based outdoor adventure courses. These courses were conducted by a student-run, outdoor program housed at a major four-year university. The instrument was constructed utilizing a five-point Likert scale ranging from *strongly disagree* to *strongly agree* and took approximately five minutes to complete. The instrument was created by the authors after reviewing existing instruments that were developed to study similar constructs such as risk propensity and lifestyle decisions (Schuman & Presser, 1996; *Dillman, Smyth, & Christian, 2009*). The participants were asked to put their date of birth and gender on the survey, which was used to match the pre and post surveys after course participation.

The instrument was administered to 216 college student participants. Incomplete surveys or surveys without identity numbers were discarded from the research. The study successfully compiled 130 useable responses from the participants.

Results

The exploratory factor analysis and reliability test were conducted prior to testing the research hypotheses. The factorability of the initial 36 items was examined. As a result of the correlation matrix, five out of 36 items were excluded from the following analyses since they have coefficients of .3 or less. After deleting these five items, the communalities were all above .4 and the Kaiser-Meyer-Oklin (KMO) value was .87 which exceeded the recommended value of .6 (Tabachnick & Fidell, 2001). In addition, Bartlett's test of Sphericity was also significant (χ^2_{465}=3451.95, $p < .001$). Principle components analysis was used to identify factors among these 31 items. The six factor solution was preferred because question items were initially developed to measure six variables. It was also supported by analysis of the scree plot (Tabachnick & Fidell, 2001). As a result, approximately a total of 58% variance was explained by these six factors. Internal consistency for each factor was examined by calculating a Cronbach's alpha (Kerlinger & Lee, 1999). Three items were deleted because they were asking about an irrelevant concept or were highly correlated with other items in the factor, resulting in a total of 28 items that were utilized in this study - 7 items in Risk Management. The calculated alphas were ranged between .73 and .82.

The paired samples *t* test was employed to examine mean differences between measures of pre and posttest for each variable. While all posttest scores in each of six variables increased from their pretest scores, the mean differences in four variables were statistically significant. These variables include: Personal Risk Management (χ=1.01, **SD**=2.74, *p* < .001, Cohen's *d* =.37); Communication Ability (χ=.65, **SD** =2.05, *p* < .001, Cohen's *d*=.33); Healthy Living (χ=.62, **SD**=2.64, *p*<.01, Cohen's *d*=.24); and Future Intention (χ=.29, **SD**=1.62, *p* < .05, Cohen's *d*=.18). However, the mean difference in Self-Management (χ=.15, **SD** = 2.56, *p* =.495 and Direction in Life (χ=.25, **SD** = 2.07, *p* =.164) were not significant.

Discussion

Many university departments are dedicated to supporting students through personal and psychological duress. The results of this study suggest that facilitated adventure programming can positively influence students' collegiate experiences in the area of personal risk management. It is vital for academic advisors, counseling center staff, and other student advocate units to become aware of the outdoor recreation options available on their campuses. As students are challenged to manage busy calendars, make healthy lifestyle choices, and develop meaningful social support, this study indicates that participation in short-term adventure courses can lead to gains in their personal risk management.

Further investigation is needed to understand the benefits experienced by the participants on these types of courses. However, this study has broadened our understanding of what outcomes short-term adventure programs may be achieving within a college setting. Studies conducted to explore the longevity of these outcomes would be particularly important toward understanding how beneficial these programs are to university populations.

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SEER 2011 ABSTRACT

Item Response Modeling in Adventure Programming: Impetus for its application and an example using the Life Effectiveness Questionnaire

Kara Sammet

Introduction

The two main purposes of this presentation are: (1) to explore the impetus for applying item response modeling (IRM) to adventure programming evaluation and research; and (2) to provide an example of IRM concepts and techniques using the Life Effectiveness Questionnaire (LEQ) (Neill, Marsh & Richards, 2003).

IRM is an approach to developing and analyzing instruments (e.g., surveys, tests and questionnaires) that incorporates items into the measurement model, thereby changing the unit of measure from the total score to the item. IRM provides probabilistic "location" estimates and standard errors for each item and each respondent along a shared scale of a given construct (i.e., the latent variable). Items are said to be sample invariant when the item response model that is used fits the data.

The LEQ is used for this illustrative example of IRM because it is a standard of instrumentation for adventure education and therapy programming. Developed using classical test theory (CTT), the LEQ is specifically designed to meet the practical and substantive evaluation needs of adventure programs (AP), and is well-known and widely used by personal and social development programs around the world.

Impetus for Application of IRM in Adventure Programming

Funding Values and Expectations
Ranking and funding of AP is increasingly predicated on quantitative, evidence-based outcome assessments (Gass, 2005; Russell, 2006). The research and evaluation arm of the Association of Experiential Education (REAP) has responded to the changing stakes of the accountability movement, in part, by urging its members to align their research with this and other federal funding criteria.

With program viability at risk, the need for high-quality measurement tools that contribute to the rigor of outcome evaluations has increased. However, the multiple and complex outcomes of AP have never been easy to operationalize and measure (Sibthorp, 2000). The difficulty of developing and validating appropriate, high-quality measures is not historically unique to AP, though. Indeed, the systematic creation--or lack thereof--of good outcome measures has been called the "Achilles heel of evaluation research on instructional innovation" (Raudenbush, 2005, p.29). IRM represents a resource for enhancing the quality of AP instrumentation to meet the evolving values and expectations of funders.

Standard of Instrument Development in Competing Fields
IRM is most well known as the standard of instrument development for high-stakes tests of cognitive abilities; it has been used for international (PISA) and US national (NAEP) educational testing for over thirty years. However, IRM is also used to develop behavioral and attitudinal measures for education and health fields that share desired outcomes with AP and that compete for the same sources of funding. For example, IRM is used to develop instruments for use in out-of-school education settings (DRDP, 2011; funded by CA Dept. of Ed.); health behavior change interventions (Watson, Baranowski & Thompson, 2006; funded by NIH); delinquency (Piquero, Macintosh & Hickman, 2002); quality of life (Prieto, Alonso, Larmarca & Wright, 1998); and leadership (Gnambs & Bernad, 2011). IRM is also used to examine mediators of change, such as self-efficacy (Liu & Wilson, 2010) and perceived benefits/barriers to physical activity (Heesch, Mâsse, Dunn, 2006; funded by National Cancer Institute).

Meaningful Data and its Use
Hattie et al. (1997) point to numerous studies in which AP researchers find no quantifiable, statistically significant pre- to post-course change, but nonetheless claim to find qualitative evidence of change. A construct-based, IRM approach (Wilson, 2005) to instrument creation may address a source of this dissonance by improving the precision of items that are used to measure constructs. The direct connection that IRM provides between the latent variable, items and respondents can improve the meaningfulness and interpretability of measurement data. Ideally, this data will be used to find even small, course-related changes, as well as to advance theoretical models in adventure programming.

Item Response Modeling of the LEQ

IRM analyses of LEQ data (N= 3634) from Neil's (2008) original sample were conducted with the software program *ConQuest*. The LEQ contains 24 items that can be analyzed as a single composite scale, or as eight sub-scales with three items per scale. The composite approach is applied here to a unidimensional partial-credit model (Masters, 1982), which fit the data well. IRM analyses expand on what is known from CTT methods by suggesting that: (i) the content of the LEQ does not effectively cover all respondents; (ii) the conditional standard error of measurement is low for most respondents (which corresponds to a high reliability of .93), but high for respondents who report having very little or very high life effectiveness; (iii) the eight-point response option is not fully utilized; and (iv) differential item functioning (DIF) for gender (male vs. female), age group (<19, 19-24, >24 years), and voluntary enrollment status (vs. non-voluntary) shows no practical effect size.

Substantively, the LEQ does not optimally measure pre- to post-course change in persons who start out with moderate to high amounts of life effectiveness, because all LEQ items are easy for these respondents to positively endorse prior to engaging in any AP activity. The LEQ scale can be improved by adding items that represent high amounts of life effectiveness and by reducing the number of overlapping items that currently measure low amounts of life efficacy. Additionally, response options primarily target respondents as a three- to six-point scale. Each item's response options can be uniquely shortened to ease differentiation.

IRM analyses further show that LEQ items have no prescribed order and a limited difficulty range and, as such, do not contribute to any meaningful interpretation of the life effectiveness construct. Similarly, the numbered response categories of 1-8 provide minimally interpretable information about the construct. Items and response options that are designed to be unambiguous and more interpretable could contribute to validity evidence based on item content and improve usability of the instrument.

Recommendations for Future Research

IRM can be applied to currently-used AP instruments to examine evidence for reliability as well as validity evidence based on instrument content and internal structure. IRM can also be used to ascertain how CTT-created instruments might be improved at the item level. Most importantly, however, a construct-based IRM approach can be employed to design new, AP-specific instruments that produce data that is more precise, meaningful and usable for researchers and practitioners alike. Researchers should increase efforts to develop unbiased instruments by conducting DIF analyses for gender and age, as well as for race/ethnicity, socio-economic status, country of origin and other pertinent sub-groupings. Optimally, IRM-created instruments specific to adventure education and therapy programming will offer a strategic advantage in determining outcomes, procuring funding and focusing program delivery.

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SEER 2011 ABSTRACT

Construction of Insight and Liminality Scale: Application to Experiential Education Programs

Jasmine M. Goodnow
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Introduction

For many, the goal of experiential education is to effect change in participants. Similarly, travel has often been considered an avenue for personal growth such as insight and self-discovery (Borella, 2006; Cousineau, 1998; Goodnow & Ruddell, 2009; Moir-Bussy, 2004.) A better understanding of the components of the travel experience that lead to insight will be valuable to experiential educators as they seek to recreate those elements in their own programs. However, there have been few empirical attempts to identify the causality of this change.

Literature Review

Goodnow (2008) suggested that it is the liminal qualities of travel that provide the cognitive and psychological space necessary for insight to occur. Liminality comes from the Latin word *limen*, meaning a threshold (Russell, 2005) or time and place of transition (Turner, 1966). When defining travel, White and White (2003) suggested three phases: separation, limen, and reintegration. Within this liminal space, travelers can figure out answers to questions and gain knowledge and insight into self (Goodnow, 2008; Kaplan & Kaplan, 1989; Noy, 2004a; Noy 2004b; Shaffer, 2004).

In order to test the hypothesis that the construction of liminality during travel produces insight, a reliable measurement tool from which valid conclusions can be inferred is needed. Drawing on findings from Goodnow's (2008) study of adventure travel narratives, the purpose of this research is to develop a Travel, Insight and Liminality Scale that will be useful in testing the proposed relationship between liminality and insight in experiential programs.

Methods

Goodnow (2008) sampled 50 randomly-selected, published travel narratives (5-10% of the currently available population) containing travelers' accounts of journeys and experiences told in the author's own voice. These narratives were explored using content analysis in an attempt to fully understand the variables being studied and to retain the richness found within the text (Krippendorff, 1980). The content analysis involved a systematic reading of texts through adherence to a codebook. Development of the codebook was a lengthy process consisting of several phases including a pilot test, modification, and a second pilot test, yielding an inter-rater reliability of r >.80 (Goodnow). The current study builds on the codebook and results of the content analysis to create a measurement instrument.

Following Nunnally and Bernstein's (1994) three steps of construct validation, items were constructed to measure insight (14 items) and to measure three levels of liminality: being away physically (1 item), being away cognitively (1 item), and being away psychologically (4 items). Data were collected from travelers to Costa Rica during the summer of 2009. PASW (SPSS) 18 was used to conduct reliability and exploratory factor analyses with varimax rotation for the insight items and the liminality items independently.

Results

Respondents (N=146) ranged in age from 14 to 68, with an average age of 26.8 and SD=10.8 and the majority of respondents (58.2%) were female. While the majority of respondents were from the United States, the sample represented 21 different home countries. Trip length ranged from 3 days to 6 years (covering multiple countries) with a mode of 1 week (33.3%). Half of the respondents (50.7%) were travelling from one to two weeks. Group sizes ranged from solo travelers (18.8%) to groups as large as 44 persons. The mode for group size was 2 people (34.4 %), with the majority of respondents (65.0%) travelling in groups of three or fewer people.

Cronbach's alpha for the 14 insight items was .93, while Cronbach's alpha for the six liminality items was .76. Exploratory factor analysis of the insight items yielded two factors. Factor one, explaining 37.5% of the variance, contained nine items and had a Cronbach's alpha of .92. Factor one loadings ranged from .54 to .84. Factor two, explaining 24.3% of the variance, consisted of five items with a Cronbach's alpha of .79. Factor two loadings ranged from .58 to .79. Together the two factors explained 61.8% of the total variance.

Exploratory factor analysis for the liminality items also yielded two factors. Factor one, explaining 47.0% of the variance, contained four items and had a Cronbach's alpha of .85. Factor one loadings ranged from .78 to .89. Factor two, explaining 23.0% of the remaining variance, consisted of only two items and had a Cronbach's alpha of .55. The two items had factor loadings of .78 and .87. Together the two factors explained 70.0% of the total variance.

Discussion

The goal of this study was to develop an Insight and Liminality measurement tool. The application of this measurement tool is twofold: 1) to determine the liminal qualities of travel experiences and experiential education programs; 2) to test the relationship between liminal space and insight in experiential education programs that was previously identified only in adventure travel narratives.

Goodnow's (2008) work constructed liminal space as having three dimensions, being away physically, cognitively, and psychologically, with being away psychologically as the most important, yet most elusive, liminal dimension. The scale items for liminality were based on these three dimensions, however, in this study liminality loaded on only two factors. One factor contained the items addressing being away psychologically and explained the most variance (47.0%). The second factor contained the items addressing being away physically and cognitively. This seems to support Goodnow's (2008) conclusion that being away psychologically was the most important dimension of liminality. Perhaps this is due to the fact

that being away physically and free from daily routines are inherent parts of travel, whereas freeing the mind from cultural and cognitive blocks (Adams, 1974) and creating the cognitive space to think in new and novel ways is harder to achieve due to cultural comfort zones (Kelly, 2009). Future research should explore this relationship further to help study abroad faculty construct an experience with a high degree of psychological liminality. Constructing liminality may include limiting student's exposure to cellphone and internet access, including Skype, email, Facebook and other social media that may help maintain the culture of home. Limiting contact may increase the liminal nature of the study abroad while decreasing the cultural comfort zones by encouraging engagement and immersion in the host culture.

The 14 insight items in this study were originally conceived as comprising three dimensions: self-discovery, how to live a satisfying life, and spirituality (Goodnow, 2008). In this study, as with the liminality items, the insight items loaded on only two factors. The first factor contains items related to self-discovery and living a satisfying life, while the second factor contains items relating to spiritual insight. These domains were renamed self-insight and spiritual insight.

Future research should focus on testing the measurement instrument in several settings including faculty-led study abroad, extended field experiences, and short-term wilderness programs to confirm results. Additionally, results of this study should be compared with data from interviews (of travelers and study abroad students) already conducted to begin to assess construct validity. Finally, future research should focus on using the scale to test the proposed hypothesis that liminality facilitates insight experience.

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SEER 2011 ABSTRACT

Using Systematic Feedback and Reflection to Improve Adventure Education Teaching Skills: A Mixed Methods and Phenomenographic Analysis

Rick Richardson, Darius Kalvaitis, Donna Delparte

Introduction

This study investigated how systematic feedback and instructor reflection could improve adventure education pedagogy by using a mixed methods research design incorporating phenomenographic analysis. The primary research question asked: what improvement effects did adventure educators perceive on their outdoor teaching skills from feedback and self-reflection? This research contributes to knowledge of teaching methodologies and will interest outdoor educators who want to use reflective practice to improve their instructional skills.

Literature Review

The literature lacks evidence-based models of evaluation and reflection to improve the pedagogy of outdoor educators (Phipps, Hayashi, Lewandoski, & Padgett, 2005). This study extends prior research (Phipps & Claxton, 1997; Phipps et al., 2005) by adding a qualitative descriptive analysis of adventure educators' receptivity toward instructional evaluation and improvement. This research employed instruments used in two previous studies of 'instructor effectiveness,' the Instructor Effectiveness Questionnaire (IEQ) and the Instructor Effectiveness Check Sheet (IEC) (Phipps & Claxton, 1997; Phipps et al., 2005). The IEQ was used to measure the quality of outdoor educators' teaching, while the IEC facilitated instructor reflection, with an eye to future improvement. These studies yielded statistically significant evidence of improving adventure educators' instructional techniques.

Mixed methods research has been identified as a methodology suited to adventure education settings (Baldwin, Persing, & Magnuson, 2004; Martin & Leberman, 2005), particularly for measuring the perceptive and affective changes associated with participant attitudes. Phenomenography is a useful analytical perspective because it can describe and postulate on the variations between the experiences and perceptions of groups of individuals (Marcari, Light, Calkins, & Streitwieser, 2008; Marton, 1981); it is a methodology that has been under-utilized in outdoor education research and can be applied to theories of reflective practice (Johns, 2004; Thompson & Thompson, 2008).

Methods

This study employed a concurrent, multiple baseline sampling design for collecting quantitative data from the IEQ and IEC instruments, as well as qualitative data from a series of focus group interviews. The experiences of adventure education instructors (n=21) at an outdoor education center in western Canada were recorded over a 7 week period. The first week served

as a pilot study for face validity testing. The instructors worked with a different group of 10 students and one teacher/parent chaperone each week. A total of 54 groups (540 students) participated in a standardized five day "General Program," of three activity instruction blocks per day. Chaperones (n=44) acted as the observer and completed two IEQ forms per week: one at midweek, as a pretest treatment observation of the instructor's teaching, followed by a second posttest observation at the end of the week. The second IEQ measurement captured changes in teaching effectiveness as a consequence of the feedback provided by the pretest IEQ results, plus the instructor's use of the IEC as a self-reflective tool. Instruments used a 5 point Likert scale for 57 questions covering 9 instructional constructs (Structure, Communication, Perception, Motivation, Arousal Levels, Feedback, Group Processing, Action/Practice, and Leadership). Questions were the same for each instrument and space was left for evaluative or reflective comments. A quantitative change in instructor effectiveness was tracked over a 6 week period, based on mean IEQ scores expressed as percentage changes over time. Qualitative data sources included 9 weekly focus group interviews with instructors. The weekly interviews probed instructors' perceptions of learning experiences associated with feedback and reflection while using the IEQ and IEC. Nine individual interviews were conducted at the end of the study to probe additional variations of experience.

Results

Quantitative
One hundred fifteen IEQ and 61 IEC surveys were collected; 36 sets of paired pre and posttest IEQ's were analyzed with SPSS 17.0. A statistically significant increase of 8.32% (t= -5.635, df=35, $p< .0001$) in instructor effectiveness was observed over the study period, based on the difference between mean IEQ pre and posttest scores subjected to paired samples t-tests. All but 2 of the 21 instructors' mean scores indicated a positive improvement. Instructors consistently rated themselves lower (mean=61.5%) on their IEC self-evaluations, compared to chaperones mean pretest scores (76.2 %) and mean posttest scores (83.9%). Mean scores of the 9 instructional constructs increased from pre (76.2%) to post (83.9%) tests. All construct category scores, except Action-Practice and Leadership, were statistically significant. Of the constructs, Perception scored the lowest (62.8% pre and 72.4% post), yet exhibited the most improvement (+12.1%), along with Structure (+13.8%). Variations between scores based on gender, as well as variations in scoring if an observer was either a teacher or a parent, were analyzed and found to be small and not statistically significant.

Qualitative
NVivo 9 qualitative data analysis software was used for content analysis of interviews, to triangulate findings between quantitative and qualitative data, and to provide a visual descriptive model of observed phenomena (Figure 1). Major coded themes included evaluation, feedback, debriefing, and reflection. Individual interview comments did not reveal any noteworthy data not already addressed in focus groups. Feedback from teacher chaperones was regarded as more helpful and detailed than feedback from parent chaperones. Numerous focus group comments addressed the positive effects of receiving evaluative feedback, reflecting upon it, and then implementing changes. Instructors were, however, critical of any evaluative instrument's ability to capture the full essence of experiential teaching/leadership. They preferred the focus groups for sharing ideas and experiences.

Discussion

Quantitative
Measureable improvements in instructor effectiveness were comparable with previous research (Phipps et al., 2005). Construct scores from both studies concurred on highest scores for Leadership and Motivation, indicating quality instruction, yet differed on Arousal, Action-Practice, and Group Process. The larger variety of groups and observers participating in this study could account for the differences. Lower mean IEC scores, compared to IEQ results, suggested instructors engaged in critical reflection. Regular opportunities for feedback and reflection, with the focus group as a key element for sharing experiences, may have accounted for the quantitative results.

Qualitative
Quantitative improvement scores aligned with positive instructor interview comments. The proposed reflection process model (Figure 1) has a cyclical, feedback mechanism akin to other experiential teaching/learning theories (Drury, Bonney, Berman, & Wagstaff, 2005; Joplin, 1981). Multiple channels for repeated, systematic feedback promoted continuous reflection. Focus groups are recommended to enhance reflective practice of outdoor educators.

Figure 1. *Reflective Processing for Outdoor Educators: A Descriptive Model*
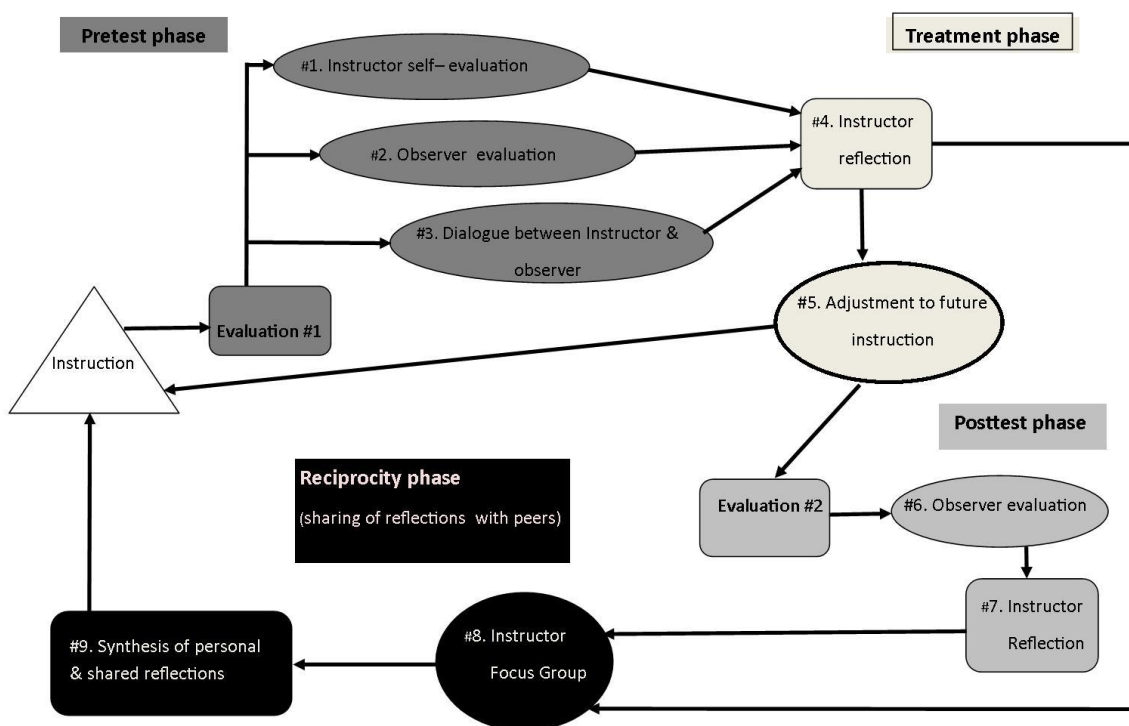

Figure 1. Reflection is a continuous process, both individual and shared. Multiple opportunities for feedback and reflection are solidified by sharing with peers in a focus group

Phenomenographic interpretation identified some variations in the instructors' understandings of reflective practice. Two general categories were proposed based on analysis of interview data: (1) instructors who focused on the process of reflection for self-improvement alone and (2) instructors who went further to explore the mechanisms that guided their reflections. Varying levels of metacognitive processing separated these two groups. Instructors who could give examples of less effective teaching methods in individual interviews also tended to write critical comments on their IEC forms and speak more often during focus groups, which suggested a higher level of processing. Metacognitive awareness of what reflective practice entailed increased overall as instructors began moving from the *what* and *how* of teaching to the *why*. They used framing and debriefing more consistently and rigorously in their lessons and reported success and satisfaction applying these strategies.

Quantitative instruments and qualitative methods used in this study's context promoted systematic feedback and reflection to improve teaching skills, but they were not as effective for uncovering the subjects' varying conceptualizations of reflective practice. Future research should explore metacognitive aspects of reflection with instruments adapted to gathering additional phenomenographic data.

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SEER 2011 ABSTRACT

The Forgotten Love Affair: Romanticism and Experiential Education

Jay W. Roberts

Introduction

The popular history of experiential education has some well-trod and often repeated territory. A survey of the theoretical work in the field points to the influence of early American progressivists—particularly John Dewey and his oft-cited *Experience and Education.* Practitioners often reference Kurt Hahn as influential to the development of particular sub-fields such as outdoor and adventure education. Beyond historical figures themselves, the "experiential learning cycle" has emerged as a sort of emblematic model of a variety of approaches (Seaman, 2008). While some have noted the limitations of such historical framing of the field (Brookes 2003; Fenwick, 2001; Roberts, 2008; Seaman, 2008), it has become somewhat of a taken-for-granted "folk history." One sometimes gets the impression that experiential education is a "three-legged stool" held up by Dewey, Hahn, and the experiential learning cycle as popularized by David Kolb (1984; 2001). Smith and Knapp (2010), for example, in their introduction to a recent book on the theoretical history of the field, point to Dewey and Hahn as "laying the foundation for contemporary experiential education" (p. 6). In addition, Seaman (2008) argues that the "experience-learn-reflect" cycle has become so commonly accepted it amounts to an "article of faith" in the field (p. 14). Yet clearly, each of these "legs of the stool" have their own intellectual antecedents they rest on. And beyond this narrow history exists a whole host of influential figures and movements that are just now being unearthed (Fenwick, 2001; Roberts 2011; Smith and Knapp, 2010). Given this backdrop, this paper aims to explore one particular intellectual history that has gone almost entirely ignored in the literature of experiential education: Romanticism. I will argue, on conceptual grounds, that what Hay (2002) dubbed "the Romantic current" is hugely influential to both the historic and contemporary constructions of experiential education. Further, the lack of awareness of the Romantic influence on both the theory and practice of experiential education has led to a certain operational and conceptual naiveté in regards to the influence of this particular intellectual history. The paper concludes with a commentary on the possibilities and limitations of this "forgotten love affair" as well as an argument for the importance of conceptual work as a research agenda in the field moving forward.

Romanticism and Experiential Education in Context

"Comprehensive" theoretical histories in the field of experiential education are somewhat few and far-between. Recent works include the *Theory and Practice of Experiential Education* (Warren et al, 1995; 2008), the *Sourcebook of Experiential Education* (Smith & Knapp, 2010) and, perhaps the less well-known, *Experiential Learning: A Theoretical Critique from Five Perspectives* (Fenwick, 2001). The enigmatic qualities of the "field" as a whole make coherent and comprehensive intellectual histories difficult at best. Experiential education crosses over a wide-swath of educational practice including (but

not limited to) outdoor education, environmental education, adventure education, place-based education, service learning, wilderness therapy, and problem-based learning. Many of these curriculum projects have distinct histories of their own. Yet there is also a sense, drawing again from the three-legged stool of Dewey, Hahn, and the experiential learning cycle that experiential education is a "something" rather than an "anything." Regardless of how one chooses to bound the scope of the field, an examination of current scholarly work in "mapping" its intellectual history yields surprisingly little recognition or discussion of the influence of Romanticism to the field.

In terms of Romanticism, it is difficult to legislate a single accepted use of a term. Berlin (1999) describes it as a "dangerous and confused subject, in which many have lost, I will not say their senses, but at any rate their sense of direction" (p. 1). Various writers have described the mood, movement, or ideals of the Romantic period in vastly different, and sometimes contradictory, ways. Yet Berlin also goes on to argue "there *was* a romantic movement; it did have something which was central to it; it did create a revolution in consciousness; and it is important to discover what this is" (*emphasis in text*, p. 20). Peter Hay (2002), in his work *Main Currents in Western Environmental Thought,* spends the better part of his introductory chapter detailing what he calls "the romantic movement." Jerome McGann (1983), in a highly influential work in literary studies, dubbed the Romantic Period as an ideology and went on to claim "informed persons *do* generally agree on what is comprised under the terms Romantic and Romantic Movement" (p. 18, emphasis in text). Within education, E.D. Hirsch (1996) details what he calls a Romantic "Thoughtworld" that he argues forms the intellectual foundations of progressive education. Thus, while Romanticism has been described in varying and sometimes contradictory ways, it seems equally clear that a set of socio-historical conditions gave rise to a worldview of enormous power and influence—one that Berlin described as a "great achievement… that, unlike most other great movements in human history, … succeeded in transforming certain of our values to a very profound degree" (p. 139). It is somewhat surprising then that given the influence of Romanticism on Western thought, its influence has remained more or less unexplored in the field of experiential education. Indeed, this paper will argue that it is in Romanticism that we find the single strongest intellectual antecedent to current curriculum projects in experiential education. Furthermore, experiential education has been operating in somewhat of a conceptual "blind-spot" in terms of its Romantic legacy, yielding naïve conceptual understandings and operational practice as to the limitations of its assumptions.

The Sublime Mistress

John Muir once noted that the solitude of the wilderness "is a sublime mistress, but an intolerable wife" (quoted in Nash, pg. 126). Embedded within this rather striking quotation lies several problematic issues with the Romantic legacy. The emphasis on the sublime, the distinct separation between "nature" and "culture," and the gendered construction of the radically autonomous and "heroic male" are all well documented issues within Romantic and so-called Neo-Romantic thought. The emphasis on the sublime as an aesthetic category often places nature and natural experiences in direct opposition to the domestic and the "everyday." We can see evidence of the legacy in experiential education with its emphasis on adventure education, wilderness expeditions, and "exotic" service learning experiences. In addition to the notion of the sublime and following from Rousseau, Romantic constructions in education often place nature

and culture in opposition—favoring the freeing role of nature over the de-based and corrupting influences of culture and civilization. Ropes courses, environmental education centers, and even service learning projects all have the potential to set-up a binary between the normal (and constraining) activity of school and the unusual (and more freeing) activity beyond the four-walled classroom. Finally, a key theme in Romantic writing in the 19th century was the heroic and autonomous male voice as evidenced in the passage from Muir above. There is ample evidence that the "experiencing subject" in experiential education is often normed to this construction of identity. In short, each of these well-documented limitations of 19th century Romantic thought can be seen in present-day experiential education. And yet, despite the power of its influence, the legacy is unacknowledged. As Reinold Niebhur once remarked, "every philosophy is under the illusion that it has no illusions because it has discovered the illusions of its predecessors."

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SEER 2011 ABSTRACT

An Exploration of the Mechanisms of Awe Experienced in Outdoor Settings

Joel R. Agate

Introduction

One emotion that may be experienced in outdoor and natural settings is a feeling of awe. Psychologists (Keltner & Haidt, 2003), educators (Myers, 2007), sociologists (Dillon, 2002), and religious scholars (Halstead & Halstead, 2004) have identified awe as an important and meaningful emotion. Theory (Keltner & Haidt, 2003) and research (Shiotam Keltner & Mossman, 2007) both suggest that outdoor spaces, particularly natural or wild areas, are likely settings for experiences of awe. Awe, however, has received little attention from leisure scholars. In the current study, the researcher has sought to explore awe from a leisure perspective.

Literature Review

Awe is described as a powerful emotion that is experienced when one is confronted with stimuli that are vast and that require one to engage in the psychological process of accommodation (Keltner & Haidt, 2003). Researchers have indicated that people, when asked to recall experiences of awe, most frequently reported experiences in nature and outdoor spaces and that those who reflected on and described such experiences expressed an immediate desire to return to the outdoors (Shiota, Keltner & Mossman, 2007). Leisure scholars have frequently identified awe in adventure recreation settings and described it as a source of peace and strength (Fredrickson & Anderson, 1999; Heintzman, 2006). Scholars in the fields of psychology, education, and religion also recognize awe as a meaningful emotion that may contribute to a high quality of life (Halstead & Halstead, 2004; Keltner & Haidt, 2003; Sundararajan, 2009). Little is known, however, about the mechanisms of awe, or what factors facilitate this emotion (Keltner & Haidt, 2003). The purpose of the current study was to explore the mechanisms of awe in the outdoors in order to provide a more complete description of those things that induce and foster feelings of awe during outdoor recreation experiences.

Methods

Because case study research allows for exploration and explanation (Yin, 2003), a collective case study was employed to investigate the mechanisms of awe in the outdoors. Cases were selected using a theoretical sampling method (Patton, 2002) based on research which indicates that people who spend time in the outdoors (Shiota, Keltner & Mossman, 2007) with significant cognitive and psychological resources (Sundararajan, 2009) and those who are spiritually inclined (Halstead & Halsteat, 2004) are likely to be prone to experiences of awe. Three cases were selected for the current study: Boy scout leaders from a troop housed in a religious organization, aging adults enrolled in a lifelong learning class teaching outdoor skills, and college students enrolled in a backpacking class. An initial sample of five participants was drawn from each case, resulting in a total sample size of 15 participants.

Semi-structured interviews ranging in length from 44 to 83 minutes (average length = 61 minutes) were conducted to gain an understanding of how participants interpret awe and what stimuli have contributed to experiences of awe in the outdoors. Interview questions were strategically developed to examine the mechanisms of awe and were written with the assistance of a panel of experts in leisure and positive psychology. Data were analyzed using inductive analysis and a constant comparative method (Denzin & Lincoln, 2000). A process of open coding was employed to identify relevant topics within the data, after which axial coding was used to structure emerging topics into main themes and sub-themes, which were then synthesized into an overall theme (Strauss & Corbin, 1990). An external auditor reviewed relevant portions of the data and assisted in the formulation and revision of topics and themes. The external auditor and the use of member checks also helped to ensure the validity and reliability of findings. As per Henderson (2006), additional measures were taken to strengthen the transferability and trustworthiness of the findings.

Results

The following overall theme emerged from the data: various environmental, individual, and social factors contribute to experiences of awe in the outdoors. Three main themes contributed to the development of this overall theme. These were: (1) awe in the outdoors may be facilitated by things one sees; (2) awe in the outdoors may be facilitated by things one does; and (3) awe in the outdoors is influenced by individual characteristics. Each of these main themes consisted of multiple sub themes that provide further description of the theme. Themes and subthemes are listed in the table below.

Table 1

Mechanisms of Awe Described by Participants

Main themes	Sub-themes
I. Things one sees	a. Natural phenomena (e.g. acts of God, sunrises/sunsets, geography) b. Characteristics of the environment (e.g. beauty, vastness, simplicity) c. Accomplishments of others (e.g. cliff-dwellings) d. The unexpected (e.g. exceeding expectations, the element of surprise) e. Genuine experience (i.e. pure interactions with nature)
II. Things one does	a. Personal Investment (e.g. summiting the mountain) b. Getting out (e.g. no distractions, going into the wilderness) c. Frame of mind (e.g. Personal awareness, letting down your defenses)
III. Individual characteristics	a. Openness (e.g. varying thresholds for awe) b. Social orientation (e.g. presence of others influences experience) c. Personal interests (e.g. curiosity) d. Spirituality/Faith (e.g. explanation of events)

Discussion

Keltner and Haidt (2003) pointed toward "the mystery of [awe's] mechanisms" (p. 312) and indicated that discovering them would be a way to contribute to human wellbeing. The current study provides what may be considered a starting point for further exploration of the mechanisms

of awe. Keltner & Haidt (2003) also indicated that, "experiences of awe can change the course of a life in profound and permanent ways" (p.297) and that natural objects that surpass one's previous experience, such as those that are encountered during outdoor recreation and adventure education, are more likely to facilitate feelings of awe than familiar ones. While study participants indicated that awe cannot be created in the sense that it can be forced upon a person, there are certain types of experiences that may be more likely to induce awe. Those involved in experiential education may be in a unique position to use an understanding of the mechanisms of awe to facilitate such experiences and to help participants prepare themselves psychologically to experience feelings of awe when in settings that may induce such emotions. Further research is needed to develop a more concrete understanding of the mechanisms of awe. Additionally, future research that explores the consequences and functions of awe may help to shine further light on the importance of such emotional experiences. Researchers might also explore how outdoor recreation providers and experiential educators may facilitate personal growth through providing opportunities for awe.

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SEER 2011 Abstract

Journaling and Sense of Community: Perceptions of Wilderness Trip Participants

Mary Breunig, Lynn Anderson, Tim O'Connell, Garrett Hutson, Sharon Todd, & Anderson Young

Introduction

One anticipated outcome of many outdoor education curricula (OEC) programs, particularly those that include wilderness trips, is the development of positive interpersonal relationships and group experiences that lead to enhanced sense of community (Mitten, 1999). Sense of community has been characterized as the "feeling an individual has about belonging to a group and involves the strength of the attachment people feel for their communities or group" (Halamova, 2001, p. 137). The purpose of this study was to understand the relationship between university students' participation in an OEC and changes in their perceptions of sense of community over time.

Literature Review

McMillan and Chavis (1986) identified four core factors in sense of community. First, *membership* refers to group cohesiveness. Second, *influence* is a bidirectional factor of sense of community. Individual group members must feel that they have some modicum of power to sway the group as a whole, while being open to the group's authority. Third, *integration and fulfillment of needs* calls for a certain level of conformity to group norms. Finally, *shared emotional connection* is fostered through a common past and/or identification with the community's history. While many OEC anecdotally claim community building as a program outcome, too few have empirically studied it.

Methods

The study employed a mixed-methods approach to data collection, involving 124 students. Questionnaires, focus groups, and journals were used. The focus of this particular presentation is on the results from the journal data (124 journals in total).

Participants

Participants were undergraduates from a 4-year comprehensive university enrolled in a 13-day OEC (spring of 2008, 2009, 2010). Students spent five days in a residential outdoor education setting, six days on a wilderness canoe trip, and two days back in the residential setting. Students were assigned to one of 21 trip groups designed to be as equivalent as possible in terms of gender, personalities, experience, and skill level. Development of community was one goal, among others, of this OEC. Students were asked to complete daily trip journals. Each day, students were asked to rate their trip group's change in sense of community, in comparison to the previous day, on a scale of -5 to +5 (huge negative change to huge positive change). Immediately following their rating, they were asked to identify what they believed accounted for the change (or lack thereof). In addition, students were given prompts to help frame their open-ended journal

entries (e.g., anything seen or learned that affected the way you felt about self, others, Adirondacks, or the natural world).

       Data Analysis

Quantitative analysis of the daily sense of community ratings was completed using repeated measures ANOVA with PASW (formerly SPSS). Qualitative data analysis was inductive and emergent in nature and guided by the theoretical framework of grounded theory (Bogdan & Biklen, 2003). Data analysis of the qualitative data began with a read through of all journals by one member of the research team using a process of constant comparison and the identification of underlying uniformities, inductively comparing the data, examining the relevant literature, and generating a precursory theory of the relationship between participation on wilderness trip experiences and perceived sense of community. Categories and themes that emerged out of participants' journal entries were thus compared and then identified, resulting in the establishment of numerous thematic codes.

Results

Participants' sense of community ratings showed a consistent small to moderate positive change in sense of community over the course of the OEC. Results of the repeated measures analysis of variance showed no significant fluctuations over time. Qualitative data analysis revealed two primary and interconnected themes that highlight: 1) The ways sense of community emerges during a 13-day OEC; and 2) Factors that enhance the development of sense of community. The first theme illuminates descriptions of group membership, group influence, integration and fulfillment of needs, and shared emotional connection. For example, group membership was described through moments of laughter and happiness: "I'm so happy to be on this trip with these 7 people and I haven't laughed like that in years." Examples of shared emotional connections were often described through depictions of group identity that fluctuate and change with a history of shared experience. One participant remarked, "We had many ups and downs and we ended on a good note." The second theme emerged more as a process as sense of community seemed to be fueled by nature, challenge, communication, and sense of place expression. For example, shared challenge appeared to unify groups. One group member reflected, "Although these challenges arose (flipping the canoe, bear bag snags), we still overcame them and are more unified than before." Finally, rival explanations and negative cases were revealed within both primary themes (i.e., examples of too much structure) and help to show how OEC can, at times, potentially limit sense of community for some participants.

Discussion

The results from the analysis of journals reported here resonate with the results from our larger study, that the OEC program enhanced participants' sense of community (Breunig, O'Connell, Anderson, Todd, Young, & Anderson, 2010) and with McMillan and Chavis' four core factors of sense of community. These results also document the intended outcomes of the outdoor pursuits program studied. They also support the program structure and delivery, which has been designed to promote community-building among participants. In fact, many program alumni cite their experiences in these outdoor pursuits trips as a seminal part of their university experience, and maintain lifelong friendships with group members. Although common sense would suggest that all participants would feel enhanced sense of community as a result of participating in outdoor

pursuits trips, there exists too little evidence regarding the application of the theory of sense of community (McMillan & Chavis, 1986) to the broader recreation and leisure field. We believe that the results from this study and the larger study as a whole are contributing to Ewert and McAvoy's (2000) "call" for additional research related to outcomes of participation in wilderness group programs. Further, while journals are often used as a component of OEC programs, outcomes specific to their deliberate use has been inadequately documented. There is a paucity of research regarding the ways in which journals impacts students' interactions with/in the natural and social environments that the wilderness offers (Hammond, 2002). The intent of this study was to deliberately employ journals as both a reflective tool for student use and as a conscious research design element to assess participants' sense of community. Given this, we remain curious about further exploring how journals might effectively serve that dual function. As we know, journals can be an effective medium for facilitating reflection on field courses but are not necessarily and certainly not automatically so (Bennion & Olsen, 2002). However, from our experiences working in the field, and through a review of related literature, it seems that too often students are simply handed a journal and asked to write about their field experience with little or no structure provided (Dyment & O'Connell, 2003). We believe that further exploration of the ways in which journals are employed is thus warranted.

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SEER 2011 ABSTRACT

Whose Responsibility is it? The Hierarchical Contract in Co-Instruction

Franklin Vernon

Introduction

Little attention has historically been paid to the outdoor adventure education (OAE) labor arrangement of wilderness co-instruction and the manner in which staff negotiate meaning, learning, and growth within their 'living work' (Vernon, 2010) labor experiences. While some decontextualization of staff into operationalized traits has aided research and training (e.g., Kalish, 1976; Priest and Gass, 1997), recent inquiry has uncovered, much as Kesselheim (1981) stated three decades ago, the lifeworld of wilderness instructors is made up more of politics and interactive relationships than enacting disembodied skills (e.g., Ambrozaitis, 2010; Gondek, 2008; Marchand, 2009; Vernon, 2011).

In this abstract I will briefly articulate one aspect of the wilderness co-instructor's lifeworld, the hierarchical labor contract. Co-instruction may be understood as "the pairing of two individuals to share in the negotiation of professional obligations, social roles, and personal requirements" (Vernon, 2011, p. 376) while shaping a wilderness expedition experience for both students and staff, and is a default labor arrangement among many wilderness expedition programs (Wagstaff, 1997). It is common practice to employ instructors within a hierarchical labor arrangement for legal, educational, and training purposes; however, this study uncovered problematic aspects deserving of further attention.

Literature Review

While not ubiquitous as a global labor arrangement in OAE, assigning instructors into small leadership groups is nevertheless common practice among many sectors of the field. This practice appears to stem primarily from legal concerns (Wagstaff, 1997), although social, psychological, labor, and educational benefits have also been identified (Schoel, Prouty, & Radcliffe, 1988; Sharpe, 2005). To aid in navigating risk management decision-making these instructor groupings are typically organized hierarchically (e.g., a 'lead' and 'assistant'), yet the marking of superordinate and subordinate simultaneously implicates multiple aspects of the instructional group structure (Carspecken, 1996). How co-instructors negotiate personal, social, and professional requirements within an institutionally mandated hierarchical framework beyond the narrow – but legally necessitated – expectations regarding risk management is therefore of academic and practical interest.

Method

During the 2009/2010 winter, five individuals – Bethany, Jeremy, Jennifer, Peter, and Erin – each took part in three 90-minute in-depth interviews (Seidman, 2006) while focusing on a

specific lived experience of co-instruction. A minimum of eight 10+ day wilderness expeditions worked within a co-instruction arrangement was required to take part, two of which had occurred within the two years prior to our interview. All interviews were transcribed and analyzed to ascertain the essential and thematic aspects (van Manen, 1997) of the co-instruction lifeworld. After an in-depth understanding was gleaned, these data were then analyzed through reconstructive horizon analyses aligned with Carspecken's (1996) typologies of power within sub- and superordinate relationships.

Results

First, my interviewees' narratives uncovered a common desire to bound the reach of hierarchical titles to what Jeremy referred to as the *kibosh power*: "I don't think it happens very often, but if there's a disagreement about whether or not something is safe, in the end the lead [co-instructor] got to make the decision" (P1, I1, 9). Beyond these relatively sporadic occurrences where titles mandated specific responsibility schema, my interviewees valued egalitarian interactions, or, as put by Erin, co-instructors "should operate more on a give-and-take" (P5, I3, 7) relational pattern.

Despite valuing an open democratic labor arrangement while assenting to certain risk management considerations, my interviewees did not always experience co-instructing as such; power-laden interactions were commonplace within the co-instructor relationship. Carspecken (1996) identifies four types of power, defined here as a superordinate obtaining a behavior from a subordinate without her/his consent or assent to the basic truth claims in the action: they are *cultural-normative*, *coercive*, *contractual*, and *charisma* power. The two types that arose from my analyses were *cultural-normative* and *contractual*, although the two other types are most certainly occurring outside the purview of this study. *Cultural-normative* power refers to a superordinate flaunting cultural norms (e.g., a parent-child relationship) to obtain behaviors from a subordinate, and *contractual* refers to a superordinate flaunting the terms of a contract to obtain behaviors from a subordinate; I will provide a brief, relatively straightforward example of each to illustrate.

Cultural-Normative power: As her course progressed, Jennifer "stopped having a real presence within the group from a leadership standpoint…[she was] feeling really bad in general and mad at Paul for not asking [her] to share more. He would just keep going; and [she] didn't step up, [she] just let him continue on in that pattern" (P4, I2, 12). Although Paul was technically the 'lead' instructor, and therefore may have been flaunting their contract in systematically denying Jennifer a leadership presence, she was told in a confrontation that Paul was grappling with a belief that "women didn't have any place in the outdoors, because they weren't strong enough, they weren't as strong as men" (P4, I2, 18). As such, Jennifer felt that Paul flaunted a cultural norm of sexism to silence her as his co-instructor and thus maintain leadership control.

Contractual power: Bethany described 'lead' instructors she knew whom "are the instructor on the boat and they see themselves as having two babysitting co-instructors. [For example,] it's the Fred show with his two adults that are along for the ride for liability purposes, and he pretty much acknowledges that he's going to do everything" (P2, I3, 17). Bethany sensed, then, that Fred flaunted the labor contract of lead-assist in order to maintain control of the course,

effectively denying any legitimate responsibility to his co-instructors.

Discussion

Entering a co-instruction labor arrangement requires a contractual assent to a sub- and superordinate hierarchy, and I argue this hierarchy must be clearly defined. First, I am in agreement with my participants; institutional titles should come into play in risk management settings wherein consensus is not possible (whether by disagreement, time constraints, etc.). Furthermore, these occurrences should be documented as a tool for tracking where, how, and why co-instructors must enact unilateral decision-making.

Second, given the porous and intense nature of OAE programming, it is not clear administrators could anticipate and prescribe co-instruction relational arrangements beyond the aforementioned role delineation – besides, such a strategy rarely captures and supports the unique, situated relational demands on course. Unfortunately, few tools are available that empower our staff to openly and democratically negotiate the terms of their own relationships in an ongoing manner. Therefore, it would appear beneficial to promote co-instructional lessons as parts of staff trainings or handbooks as a way to initiate the process of collective co-instructional knowledge among our programs.

Third, instructional staff and participants alike are acting and interacting as individual and collective to negotiate and maintain a legitimate participative community (Wenger, 1998); I have indicated that power invades this space with some regularity, disfiguring the educational potential, and this should not be too surprising (Carspecken, 1996). However, we may ameliorate this issue through prioritizing open, critical democratic discourse when holistically embraced as scholarship, management, curriculum, and practice. While not discounting the importance of approaching our field from multiple perspectives and methods, further systematic and robust in-depth qualitative inquiries into the OAE lifeworld may add nuance and complexity to our theoretical understandings, as well as uncover neglected or hidden aspects, such as power, which are currently part of the web of social interactions – and therefore shared curriculum – of our courses.

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SEER 2011 ABSTRACT

Personal, Environmental, And Social Predictors Of Camp Staff Burnout

Andrew W. Bailey
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Introduction & Literature Review

Many adults have fond memories of summers spent working as camp staff. Many can also recall the exhaustion that set in halfway through the summer, perhaps leading to withdrawal or ineffective leadership. Camp managers take seriously the effects of burnout on their staff, as well as the subsequent effects on the campers. While staff burnout is a popular topic in camping resources, there is relatively little research supporting the vast amount of theoretical (Paisley & Powell, 2007) and anecdotal (c.f. http://www.acacamps.org/campmag/0609ypvaughn) evidence. Burnout literature from the service field is instructive, but is not entirely applicable to the unique, short-term context of summer staff employment. The purpose of this study was to determine the personal, environmental, and social contributors to camp staff burnout.

Burnout has been defined as a syndrome that occurs among individuals who work with people in some capacity and feel they are no longer able to give of themselves (Maslach, Jackson, & Leiter, 1996). Previous research indicates that burnout arises from a combination of factors, including: personality traits (Vega, 2007), work environment (Micklevitz, 1999), and perceived amount of social support (Lambert, Altheimer, & Hogan, 2010; Voekl, Austin, & Szymanski, 1986). This study builds upon that research through an investigation of the direct and indirect contributions of these factors and the establishment of an exploratory model of camp staff burnout.

Method

Surveys were distributed to 124 camp staff at four camps during the summer of 2010. Just over half (51%) of these staff were female and the average age was 20 years old. Staff completed a questionnaire the last day of staff training and again just before their last week of work during the summer. The initial questionnaire addressed demographics, socio-economic status (SES), job expectations, personality traits, and general well-being (GWB). The final questionnaire collected data pertaining to their daily routine, social engagement, level of perceived group cohesion, level of burnout experienced, and GWB. GWB was the only factor measured at both time points for pre-post comparison. Surveys were administered by a camp administrator, sealed immediately and mailed to the researchers conducting the analyses.

Job expectations were measured with 3 items, assessing the level of expected physical and emotional stress they would undergo, and if those expectations were appropriate retrospectively.

Personality was assessed using Webster's (2003) Self-Assessed Wisdom Scale (SAWS), a 40-item questionnaire measuring five personal characteristics: 1) Experience, 2) Openness, 3) Reflectivity, 4) Sense of Humor, and 5) Emotional Regulation. General well-being was assessed with the World Health Organization's 5-item Well-Being Index, addressing physical, emotional, and psychological well-being over the last month (Ware, Kosinski, & Keller, 1995). Ten individual items assessed frequency of routine activities (i.e. journaling, physical activity, time spent outdoors, meeting with a mentor, etc.) and perception of work environment (i.e. time off, feeling valued, having choice in work tasks). Group cohesion was measured with the Group Cohesion Scale (25 items; Treadwell, Lavertue, & Kumar, 2001). This scale assesses interaction and communication, member retention, decision-making, vulnerability among group members and consistency between group and individual goals. Finally, job burnout was assessed using the Maslach Burnout Inventory (Maslach & Jackson, 1981), a 23-item questionnaire measuring burnout as evidenced by 3 subscales: Emotional Exhaustion (10 items), Personal Accomplishment (8 items), and Depersonalization (5 items).

Data were entered into SPSS 17 and analyzed through hierarchical regression with burnout as the dependent variable. *Personal* items (i.e. personality, SES, camp experience) were entered in the first stage, followed by *Environmental* items (i.e. daily routine, work environment), and *Social* items (i.e. group cohesion). Given the strong association of group cohesion and burnout, a structural equation model (SEM) was conducted to determine the direct and indirect impact of individual factors on group cohesion and burnout. The SEM was conducted in an exploratory manner, beginning with the inclusion of all factors and systematically reducing the model until the strongest fit was identified.

Results

Hierarchical regression analysis indicated that group cohesion was the strongest predictor of job burnout in summer camp staff. Personal items had no significant impact on job burnout ($F = .738$; $p = .679$). Environmental items had a strong effect on burnout scores, accounting for 41% of the variance ($F = 3.339$; $p = .002$). Group cohesion accounted for an additional 10% of the variance ($F = 11.09$; $p = .002$) and was the only factor to remain significant with all variables in the model.

To determine the relative impact of individual factors on job burnout, a SEM was conducted with group cohesion leading to burnout and all other factors influencing both group cohesion and burnout. The final model (Figure 1) showed a strong fit for the data ($X^2 = 58.535$, $p = .121$; TLI = .923; CFI = .954; RMSEA = .044), accounting for 71.5% of burnout, 34% of group cohesion, and 58% of late season general well-being. Personal items (i.e. Experience, Openness) influenced only group cohesion, while environmental items (i.e. Feeling valued, journaling, expectations, time off) influenced group cohesion and burnout. This reveals important indirect relationships that may be overlooked in regression-based analyses.
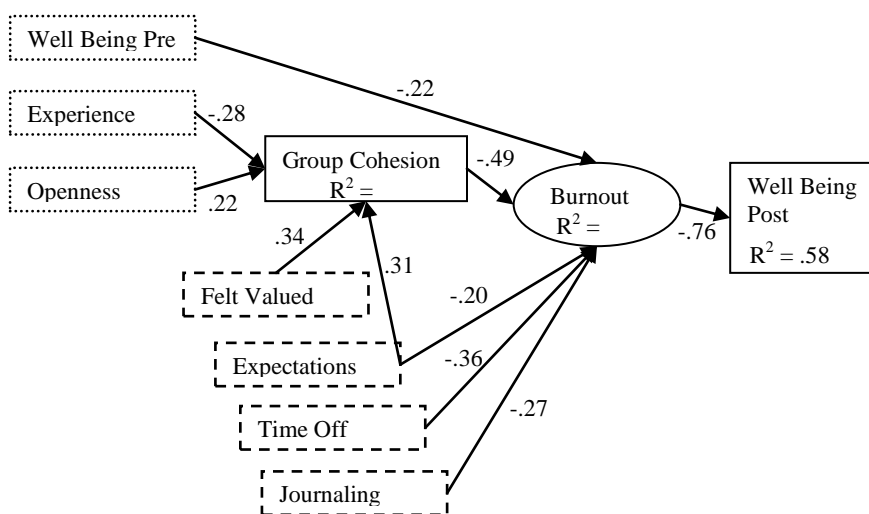
Well Being Pre

Experience   -.28

Group Cohesion
R² =

Openness   .22

-.22

-.49

Burnout
R² =

Well Being
Post

R² = .58

-.76

.34

Felt Valued   .31

-.20

Expectations   -.36

Time Off   -.27

Journaling

Figure 1. SEM for Predictors of Group Cohesion and Camp Staff Burnout.

Discussion

This study suggests that work environment and group cohesion are more pertinent to burnout prevention than are personal characteristics or pre-summer well-being. Group cohesion is conceptually similar to social support, thus confirming the importance of this key factor for burnout prevention (Voekl, Austin, & Szymanski, 1986). It should be highlighted, though, that this measure of staff support includes only one's coworkers, and not any outside support (i.e. family & friends). Furthermore, establishing appropriate expectations and providing adequate time off are consistent recommendations for staff management. However, the mediating influence of group cohesion for personality and work environment factors provides a new perspective on previous research.

Those who have endured many difficult past experiences were less open to others and reported lower group cohesion. Camp staff who come from difficult home environments may need extra encouragement before they feel part of the team. This does not imply that such persons should be avoided altogether, but that their presence may present a challenge to the group dynamic. Their influence could be balanced out by other staff who report exceptional openness or by intentional staff support services. In addition, those who felt valued as a staff member reported greater group cohesion. It is possible that these staff members invested more into the group as a result of feeling like a valued member of the team.

These results are both promising and challenging for camp managers. Staff cohesion and work environment can help prevent staff burnout. That these factors are more malleable than personality is a reason for optimism. Directors should be aware that, while stress cannot be avoided at summer camp, group cohesion & work environment may relieve the process of burnout (Devereux et. al 2009), thus promoting employee well-being and client satisfaction.

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SEER 2011 ABSTRACT

Literacy and Whitewater Adventure Sports: Implications for Career Opportunities

Stephen G. Mogge, Ph.D.

Introduction

For most whitewater paddlers, the journey on a river provides the opportunity to leave literacy (used here to include reading, writing, and information technologies) behind while focusing on the natural environment and physical challenges. However, for those aspiring to a career in the whitewater adventure sports industry, literacy can play a significant role. River guides, explorers, competitors, authors, and business operators all use literacy in unique ways to perform their work and rise to the top of their profession. This presentation includes findings from research conducted with whitewater industry leaders to learn about their uses of literacy. It also includes findings from research conducted in a community college adventure sports program and identifies literacy practices that are part of the curriculum and instruction in whitewater courses. Implications for whitewater adventure sports curriculum are presented.

Literature Review

There have been few studies in the field of outdoor experiential education examining literacy in adventure sports. Most of these have focused on writing, primarily for reflection on experiences (Bennion & Olsen, 2002; O'Connell & Dyment, 2003; Quay, 2003). Recent research in literacy education has examined the literacy practices of professionals and academics in order to understand the literacy requirements for successful participation in different professions and disciplines (Lemke, 2004; Moje, 2008; Shanahan & Shanahan, 2008; Stahl & Shanahan, 2004). Findings from such research in the whitewater industry can be used to enhance the curriculum of K-12 and college programs that promote adventure sports and experiential educational programs. However, the researcher is not aware of any studies that examine the literacy practices of professionals in the whitewater industry as a means of informing the educational preparation of future participants and professionals.

Methods

Research was conducted with whitewater industry leaders and a community college adventure sports program. Research methods included semi-structured interviews with six leading professionals in the field, including authors, competitors, expeditionary explorers, manufacturers, and outfitters to learn about:

- their adventure sports experiences and formal education backgrounds
- how they and their employees use reading and writing in professional activities
- their observations regarding literacy and educational experiences that are critical to success in the field

- their recommendations for adventure sports educators and experiential environmental education programs

The research also involved participant observation in five adventure sports whitewater courses (Introduction to Whitewater Rafting, Whitewater Rafting Techniques, Whitewater Rafting Instructor Development, Whitewater Kayaking Instructor Development, Swiftwater Rescue) to gain first-hand knowledge of students' learning experiences, including the reading and writing practices used in the curriculum. Analysis of syllabi from all adventure sports courses, of curriculum documents from whitewater courses, and semi-structured interviews with faculty teaching adventure sports courses are part of the research. A focus group interview with students of the program was also conducted.

Results

The table below highlights the careers and experiences of the whitewater interviewees.

Whitewater Professional	Professional Accomplishments
Executive Director: Whitewater Park	• Camp Counselor • US National Kayak Team • Four-time National C2 Champion • Olympic Competitor
Owner: High End WW Garment Manufacturer	• Kayak Instructor • US National Kayak Team • Three-time National K1 Champion
Owner: High End WW Garment Manufacturer	• Kayak Instructor • International "Alpine Kayaking" Explorer • First WW explorations of Baffin Isle and Borneo
Owner: Whitewater Rafting and Adventure Company	• One of first and now largest whitewater adventure outfitters on East Coast • Interpretive History Scholar and Leader • Industry Leader
River Safety Expert, Author, River Products Representative	• Early Appalachian river explorer • River safety teacher and author • Guidebook author • Member WW Hall of Fame
Rodeo Competitor, Multi-sport Expeditionary Adventurer	• Professional Rodeo Kayaker • Teacher: World Class Kayak Academy • Adventure sports Marketing Manager. • Summit to Sea Adventures

Interviews conducted with whitewater industry leaders reveal a high level of literacy use in their personal adventure pursuits and across their various industry activities. All of the participants report having had important childhood and adolescent experiences in camps and with family that introduced them to their lifelong vocation. Five of the six participants report having been avid consumers of adventure literature as children. All report that guidebooks, as well as trip reports

and accident reports in magazines, were once critical to river running but these have since been replaced, in large part, by industry and club internet sites, as well as online participant discussion forums. The international competitors identify written accounts of the training regimens of athletes across the sporting world and whitewater in particular (Maximum Whitewater Performance, 2010) as having influenced their pursuits. The expeditionary explorers claim that adventure literature they read as children stimulated their passions early on while months and years of library—and now internet-based—research, studying, and copious note taking on geographic and topographic maps along with regional histories and cultures, were critical to the success of their adventures. Across the six professionals (all business operators) more than a dozen software programs were identified as essential to success, including data and accounting software like Excel and QuickBooks, as well as marketing/sales software.

The industry professionals recommend that raft guides—the most common occupation in the industry—should read widely in order to communicate with the cross section of customers. Reading books on local culture and history as well as current events magazines helps a guide to enhance a river experience for customers. Most of the professionals agree that pursuing a business degree along with their whitewater background would be an advantageous educational path for industry aspirants to follow. All agree that good writing is essential to their work. Successful customer communications, multimedia networking, and the ability to win expeditionary sponsorships rest on successful writing.

As a whole, the community college adventure sports program includes a comprehensive array of literacy assignments outside of the field-based courses. These include: Risk Management Plans, Marketing Plans, Personnel Management Plans, Budget and Financial Business Plans, Personal Strategic Plans, and Career Plans. A required Humanities course introduces students to adventure literature. The program also includes internships in the adventure sports industry.

Relative to other disciplines like Back Country Living, Climbing, and Skiing, the Whitewater curriculum includes fewer texts and written assignments but has many more written quizzes, tests and lesson plans than the other disciplines. However, the reading, writing and information technology activities and assignments could be better integrated into the experiential learning dynamic of each course. They are often peripheral activities which many of the students ignore.

Students in the community college adventure sports program held a range of perceptions about their prospects for future careers in the industry, some realistic and others ill-informed. Few had seriously considered any role that literacy would play in future jobs and careers in the industry.

Discussion

If the experiences of whitewater industry leaders can serve as a guide for future industry participation, then understanding their literacy use should likewise prove helpful. Industry leaders read widely, including adventure literature and current events. They are researchers of their field and are consumers of industry-related literature. They use the latest database and multimedia communications tools available and consider good writing essential.

Though many are identified as non-traditional achievers, students in whitewater adventure sports

programs would be well served to expand the role that literacy plays in their pursuits. These students should be reading adventure sports literature, current events, and cultural-historical information related to the regions they explore. They should be geographic and geologic researchers. They should become proficient in multimedia and business technologies and develop their skills across different writing genres. Finally, adventure sports programs should incorporate effective strategic literacy practices into the various experiential and reflective learning models that they use to prepare students.

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POSTER BRIEFS WILL GO HERE

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 of interest.

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. 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, discussant remarks are offered each year by leading scholars, practitioners, and leaders in the field of experiential education. This provides a unique opportunity for substantive dialogue around current research.

Beginning in 2008 SEER partnered with the Council on Research and Evaluation (CORE) in 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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