

Abstracts

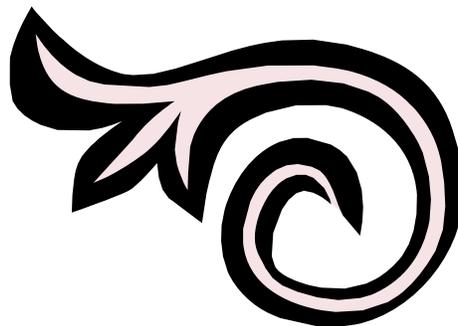
from the

Symposium on Experiential Education Research (SEER)

presented at the

**33rd AEE
Annual Conference**

*Tucson, Arizona, USA
November 3-6, 2005*



Welcome to SEER

Welcome to the Fourth Annual Symposium on Experiential Education Research (SEER). The purpose of this Symposium is to provide you with a formal setting for the reporting of research findings germane to the fields of Experiential Education. Toward that end, all the research presentations were blind reviewed by a panel of referees. There were 15 submissions for the 10 available presentation slots. Whether accepted or not, the authors who submitted material should be congratulated for their efforts. In many cases, their works were not selected because of the strict time constraints and not because of any deficiencies in the quality of their work.

Along with the researchers who submitted their work for review, a number of other entities and people deserve a note of thanks for their efforts in making this idea a reality. First, the AEE and its various staff members including Evan Narotsky and AEE Executive Director Kris VonWald and the 2005 conference host committee for their support and coordination of SEER.

Much appreciation goes to the many scholars and academicians who graciously served as reviewers of the submitted abstracts: Aram Attarian, Lee Gillis, Cheryl Estes, Denise Mitten, Alison Voight, Mike Gass, Dave Calvin, Keith Russell, Karen Barak, and Nina Roberts. We would also like to thank Keith Russell and Dan Garvey for providing for the opening and closing comments to the Symposium and Steve Simpson and Jeff Jacobs for providing summaries and reactions to the sessions.

And finally, a special thank you is given to the attendees of the Symposium, as it is on you and the other members of the experiential education community that this Symposium is focused. For without you and the various educational endeavors you provide within the experiential education rubric, all of our efforts would be for naught.

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

Alan Ewert
Jim Sibthorp
SEER Coordinators, 2005

Opening Address Symposium for Experiential Education Research

Publishing to the choir or digging deep: Implications of a snapshot of experiential education research. By Keith C. Russell, Ph.D., University of Minnesota.

I set out to critically examine experiential education (EE) research to determine the type of research being published in the *Journal of Experiential Education (JEE)*. I chose this task because of my interest in several challenges that have been set forth by leaders in the field in past years at this Symposium and other conferences. These challenges have asked researchers to employ more quantitative methods, address process variables, and to employ more rigorous research designs. In examining research done in the past year, I am essentially testing to see if research in EE has undertaken these challenges. To do this, I identified refereed articles published in 2004 and 2005 that I then categorized as to: a) research approach, b) whether primary data collection was evident in the manuscript, c) methods employed, d) the research topic and subjects, and e) findings generated from the studies. Also of interest were the occupational backgrounds and academic departmental affiliations of the authors. Finally, using “experiential education” as a key word, two specific databases were searched (Educational Resource Information Center (ERIC) and PsycINFO) to explore the breadth of EE research in broader psychology and education journals. Implications and subsequent questions generated from this exercise are offered as conclusions for continued discussion.

Research in Experiential Education from 2004-2005

I chose to take a current “snapshot” of refereed articles published in the *JEE* from 2004 – 2005. I identified a total of 14 refereed articles in volumes 27(1), 27(2) and 28(1) that I reason represent current interest areas and research approaches. It was interesting to note the trends, diversity, and breadth of research being conducted under what is loosely defined as “experiential education.” Numerous definitions of EE exist in the literature, and it is not the point of this paper to review these. To frame the discussion I will utilize the Association for Experiential Education’s (AEE) definition, which is: “Experiential education is a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values” (AEE, 2005). Therefore, the intent of *JEE* would be to publish research in this area, and specifically “to present scientific and conceptual inquiries into the study and practice of experiential education and its various subfields” (AEE, 2005). The purpose of this exercise was to explore the previously mentioned challenges, and to also ask those associated with the Symposium on Experiential Education Research (SEER) what are the current scientific and conceptual inquiries in EE, what are we learning from them and how do they relate to practice, and what academic and other backgrounds are represented by the researchers. A limitation and disclaimer to this discussion is that I am not trying to conclude that three issues of a journal define a research paradigm and strategy for a field. Also of note, is that the studies will be described in general and not directly cited as I choose to examine a body of research, rather than review each individual article for its merit or findings.

Research Approaches and Methods

In the 14 articles reviewed, qualitative approaches were used in 10 of the 14 articles. Three studies were described as quantitative and one was a mixed design. Digging a little deeper, the methods used in these 14 studies were classified as: a) journal content or qualitative analysis, b) survey assessment, c) literature reviews, and d) recorded transcriptions of group discussions. The predominantly qualitative approach employed by researchers suggests that the exploration of learners in “direct experience and focused reflection,” as our definition clarifies for us, deems qualitative methodology more appropriate for this inquiry. Social constructions like experience and reflection situated within complex social and environmental milieus are difficult to define, measure, and interpret. In the qualitative articles reviewed, authors were examining phenomena from a critical theory perspective, inducing meaning from how specific groups were experiencing a variety of environments, and what outcomes were likely to occur from these experiences. Included in this qualitative classification were articles that were in essence literature reviews that referenced no primary data collection (7 of 14 manuscripts). These articles examined deeply held beliefs and assumptions about facilitation, risk, and challenge courses in experiential education. The authors were directly critiquing these beliefs and assumptions, and offering various challenges to practitioners and researchers, asking them to critically examine their own practice.

Qualitative research is becoming more accepted within academic institutions, with annual international conferences (e.g. International Institute for Qualitative Methodology), and several journals in education and mental health fields solely dedicated to qualitative research (e.g. *Qualitative Health Research*). Though much slower to act, federal agencies are also re-examining funding qualitative research, given that complex community and school contexts are not appropriate for randomized controlled studies often required for funding. Researchers in EE may be uniquely situated to begin accessing some of these funding sources. These research approaches also reflect the original intent of the AEE’s founding members who are now considered to be pioneers in their field. That intent was based on a widespread dissatisfaction with the status quo in education, and other social services and a growing awareness of the value of programs like Outward Bound. The goal was to question and ultimately change existing paradigms in how we teach and learn. It seems that our field has firmly trained that critical eye inward, and that researchers are continuing to embrace qualitative paradigms of research.

The review also identified two quantitative and one mixed design study. Each article chose to explore the process (experience and reflection) and its relation to outcome (knowledge, skills, and values), and did so using different methods. The value in this approach is that it can isolate a process variable or two and explore its relationship, either quantitatively or qualitatively, to an outcome variable of interest. In a quantitative study, the difficulty researcher’s face is that the process variable under question only explains a very small percentage of the variance in outcome (say 10%). In a mixed method design, the difficulty lies in trying to directly link a qualitatively observed process or outcome variable to one that is assessed quantitatively. Research in this area requires quantitative skills in developing and testing models, skills that many in EE research either do not

possess, or find little value in using. The lack of quantitative research in EE has been noted before (see Gass opening address from SEER 2004), and the current trend doesn't seem to be any different from years past. Though quantitative modeling approaches are more sophisticated and now easier to apply to complex social phenomena (e.g. Hierarchical Linear Modeling and Structural Equation Modeling) there still remains a lack of research interest in this area. Most funding sources require some type of quantitative evaluation and outcome to demonstrate success. Coupled with the evidence-based paradigm of program operation which is now firmly entrenched in the social service lexicon (see National Education Association, Substance Abuse and Mental Health Services Administration, Department of Education), quantitative research will be mandatory for programs to remain viable. This remains a compelling issue for EE research.

Research Topics, Subjects, and Findings

The research topics explored in the 14 studies included nine categorized areas that ranged from music education to wilderness therapy. The research subjects ranged from higher education/post-secondary students to cancer survivors. The authors represented nine specific academic disciplines which ranged from Parks, Recreation and Tourism to Educational Psychology, and seven authors were consultants or practitioners. Though these areas were diverse, there was a common theme in the topics and issues covered in these studies: each of the seven primary research articles (where data was collected and analyzed) addressed a program or process that was adjunct or in addition to an on-going program or process. For example, one study examined a trip that grew out of a semester long educational program; one study examined internships, where students were tested on the degree of interest and engagement in these experiences outside their typical learning environments; and one study examined an experience that was in addition to routine care for cancer survivors. Adjunct programs and experiences which are "added on" to mainstream programs seem to be a common thread in research and evaluation published in *JEE*. This theme also carries with it interesting implications which will be discussed in more depth in the conclusions. Also, seven out of twelve articles focused on facilitation and journaling, two key areas that have received a lot of attention over the past several years in EE journals. This shows that researchers are critically examining two core process mechanisms that carry with them several assumptions about practice based largely on historical pragmatism.

When examining the findings from the primary research studies, most, if not all reported findings that were positive or beneficial to research subjects. Experiences were valuable, outcomes were gained, and the therapy or treatment worked. This is an age-old issue in the publication of research in journals--that only positive outcome and significant differences get published, and those with insignificant results do not. I find this issue especially interesting because a lot of the research reported in the *JEE* is qualitative, and I wonder if we as researchers are critically examining our programs, or are we looking for that which is positive and ignoring that which we may not want to see.

Conclusions

Using the key words “experiential education,” I searched the ERIC and the PsycINFO databases to determine the volume of research that has been conducted since 2000. I also tried to exclude JEE articles and limit the searches in other ways to focus the results. In the ERIC database, I narrowed it down to 2,328 studies using EE as a keyword, and 947 articles in PsycINFO. There is a large and growing interest in EE in psychology and education as evidenced by this large body of research. Are we as researchers that publish regularly in *JEE* aware of this research? Are practitioners aware of this research? Does it inform our research or practice? There is also considerable association activity around the EE field. Organizations like the National Society for Experiential Education have annual conferences and have published several articles and texts. What role or impact do these movements have on EE practice and research?

Most of the research in the *JEE* is qualitative and/or theoretical. Whether that is a good or bad thing is up to researchers and practitioners in EE. Research in these journal issues primarily addressed add-on or adjunct type of programs that are often the first to be cut when financial tightening occurs. The reality of the demands by external constituencies that fund most of the programs is that they want to assess the value of the programs and they want to see quantitative information. This is nothing new to anyone in the field. I ask this question to engage dialogue on the subject: Are we as researchers doing practitioners and the field a disservice by focusing our efforts on qualitative inquiry and theoretical development through literature reviews, or is this information valuable to maintaining and improving practice? Are practitioners reading these theoretical pieces and practicing participatory/action research and implementing some of these ideas, or are researchers simply publishing to the choir? Finally, there is a lot of research done under the guise of EE and I wonder if we as researchers and practitioners are seeing it or using it? I think some of these questions resonate to a larger issue for the Association for Experiential Education as well as the *Journal of Experiential Education*—what are we, who are we, and where are we going? Though existential in nature, small empirical glances may encourage dialogue and help us address these and other questions about EE and the value it has for our constituencies.

Examining action and participation in experience: From different meaning to differentiated facilitation

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Experiential education principles maintain that its effectiveness derives in part from individual learners' willing intention, participation and reflection (AEE, 2002; Wurdinger & Priest, 1999). Models of experiential learning underwriting these assertions (e.g., Boud, Keogh, & Walker, 1985; Coleman, 1976; Kolb, 1984; Walsh & Golins, 1976) are predominantly based on the notion of "an independent learner, cognitively reflecting on concrete experience to construct new understandings, perhaps with the assistance of an educator, toward some goal of progress or improvement" (Fenwick, 2001, p. 7).

The largely tacit cultural-historical assumptions in these early, stepwise models remain persistent despite criticism they are mechanistic and reductive (Fenwick, 2001; Michelson, 1999; Quay, 2003; see e.g., Wurdinger & Paxton, 2003; Wyatt, 1997). They also tend to "appeal to the active nature of the subject but only in an idealistically interpreted, mystified form" (Leontiev, 1977, p. 1), a common characteristic of the humanistic "consultancy literature" of the 1970's from which they emerged (Miettinen, 2000). Miettinen argues that Kolb's experiential learning model in particular contributes to the "impoverishment" (p. 61) of a broader conception of human experience, suggesting that the continued use of such perspectives will see adult education "remaining a quasi-scientific academic field without connection to the philosophical, anthropological, sociological and psychological studies of learning and thought" (p. 71). Continuing to extend these "foundational" models may sustain partial and largely unscientific ways of comprehending the relationship between "the learner" and "experience" (cf. Bereiter, 2002).

Research question

This inquiry is aimed at drawing a more extensive theoretical connection between "learning" and "experience" and was guided by the following questions: 1) How is participant experience constructed in a facilitated, small group adventure experience? 1a) How is this construction related to the intentions and orchestrations of the trainer? 1b) How is this construction related to the institutional and social context in which it occurs?

Locus and Methodology

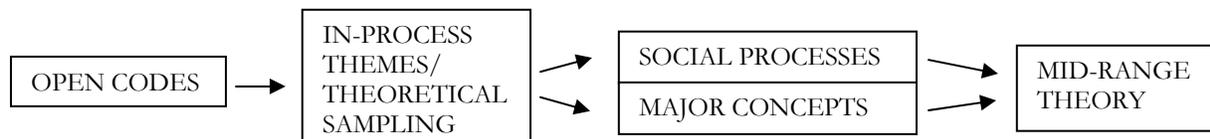
Locus of the study. This study investigated "Adventure Programming" and "Adventure-based Counseling" workshops at Project Adventure, Inc., chosen because of their accessibility and their appropriateness for the research question and research methodology.

Methodology. Grounded theory methodology (Strauss & Corbin, 1998) was used for this study, with *activity* as the unit of analysis (Engestrom, 1987; Leont'ev, 1981). This hybrid approach requires the researcher to maintain a "macro-level," or sociocultural-historical view while simultaneously attending to the particularities and subjectivities of participants engaged in local events (Engestrom, 2003). Member checks (Schwandt, 2001, p. 155) were conducted with participants, trainers, and company directors subsequent to the programs.

Data Collection: Several methods were employed to collect data before, during and after workshops: 1) semi-structured interviews with trainers and participants (Fontana & Frey, 2000); 2) field notes (Emerson, Fretz, & Shaw, 1995) focusing on: (a) the ways in which participants interacted during activities, (b) how events were organized, (c) how participants talked about their actions, (d) any references to other environments invoked to make sense of the current situation; 3)

recordings of naturally occurring talk (Silverman, 2000); and 4) participant interviews, following the action emphasis recommended by Charmaz (2003, p. 316).

Data Analysis. Analysis utilized grounded theory procedures (Charmaz, 2003, p. 313) according to the following schedule:



Results

Two central, linked concepts resulted from this study regarding the multiple ways participants individually and collaboratively construct meaning from their experience: the salience of *participation frameworks* (cf. Goffman, 1974) which are evidenced in actions, and the enactment of *participation structures* (Lave & Wenger, 1991; Rogoff, Topping, Baker-Sennett, & Lacasa, 2002) corresponding in part with the trainer’s notion of “group” as the basic unit in the adventure experience.

Participation frameworks and actions. Adults attending Project Adventure workshops construct meaning and act on the basis of participation frameworks, which derive from their ongoing participation in sociocultural activity. *Frameworks* are jointly *occupational* and *social/cultural* (Bourdieu, 1980). Participation in an event depends in part on which framework is primary in a given situation. Furthermore, participant *actions* are guided by these frameworks, both evidencing participants’ individual meanings and forming the conditions in which other participants act (Leontiev, 1977).

Participation structures. Participation structures—the material and narrative conditions constituting experience—are more or less effective at contributing to participants’ development depending on the extent to which they a) correspond with primary participation frameworks, and b) lead participants’ developmental trajectory (cf. Lave & Wenger, 1991). Different participation structures were found to be salient for different participants, even in the same situation. With regards to collaborative structures, trainers’ own frameworks include the implicit recognition of “group.” Trainers’ perception therefore importantly serves as an objectified ideal, in effect operationalizing a developmental trajectory for participants. This finding deepens Hovelynck’s (2003) recognition that facilitators create and intervene in participant experience in largely relational ways.

Discussion

Although these findings support the longstanding recognition that active learners construct their own meaning from experience, they do not support the claim that experiential education is effective for this reason (AEE, 2002; Lindsay & Ewert, 1999). Subjects’ active participation seems to be a phenomenological principle of learning independent of whether or not “experiential” methods of instruction are employed. In this study, participants’ learning was not fully commensurate with the formal system of instruction, as their responses indicated varied program effectiveness and tremendously varied appropriation of intended “content.” It is possible then, that learning is entailed in the structure of experience itself rather than a fully rational outcome occurring subsequent to it.

The particular findings from this study point toward the need to develop programmatic strategies to work with participants’ *development* in a differentiated manner. The perception of “group,” for example, while establishing the conditions for collaboration on the one hand, also carries with it limitations that may foreclose interpretive possibilities and gloss over important actions that provide clues to participant meanings; the exercise of broad frames, metaphors, and

reflection techniques, for example, were not always effective. The author proposes the notions of *differentiated facilitation* and the *zone of proximal development* (Vygotsky, 1978) as complementary strategies for working with participants' development. Although this study was based on a limited number of Project Adventure workshops, these suggestions reflect widely accepted principles in current learning theory (Bereiter, 2002; Bidell, 1988; Cole, Engeström, & Vasquez, 1997; see also Dewey, 1997/1910; Lave & Wenger, 1991; Rogoff, 2003; Wertsch, del Rio, & Alvarez, 1995) and can therefore present important advances to the theory and practice of experiential education.

References

- Association for Experiential Education. (2002). *Principles of experiential education practice*. Retrieved December 13 2002, from <http://www.aee.org/customer/pages.php?pageid=47>.
- Bereiter, C. (2002). *Education and mind in the knowledge age*. Mahwah, NJ: Lawrence Erlbaum and Associates.
- Bidell, T. (1988). Vygotsky, Piaget and the dialectic of development. *Human Development, 31*, 329-348.
- Boud, D., Keogh, R., & Walker, D. (1985). Promoting reflection in learning: A model. In D. Boud, R. Keogh, & D. Walker (Eds.), *Reflection: Turning experience into learning* (pp. 19-40). New York: Kogan Page.
- Bourdieu, P. (1980). *The logic of practice*. Stanford, CA: Stanford University Press.
- Charmaz, K. (2003). Qualitative interviewing and grounded theory analysis. In J. A. Holstein & J. F. Gubrium (Eds.), *Inside interviewing: New lenses, new concerns* (pp. 311-330). Thousand Oaks, CA: Sage.
- Cole, M., Engeström, Y., & Vasquez, O. (Eds.). (1997). *Mind, culture, and activity: Seminal papers from the Laboratory of Comparative Human Cognition*. New York: Cambridge University Press.
- Coleman, J. (1976). Differences between experiential and classroom learning. In M. Keeton (Ed.), *Experiential learning: Rationale, characteristics and assessment* (pp. 49-61). San Francisco, CA: Jossey Bass.
- Dewey, J. (1997/1910). *How we think*. Mineola, NY: Dover.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit Oy.
- Engeström, Y. (2003). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen, & R.-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge: Cambridge University Press.
- Fenwick, T. (2001). *Experiential learning: A theoretical critique from five perspectives*. (Report No. ED-99-CO-0013). Ohio State University: Center on Education and Training for Employment. (ERIC Document Reproduction Service No. ED454418)
- Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research, Second edition* (pp. 645-672). Thousand Oaks, CA: Sage Publications.
- Goffman, E. (1974). *Frame analysis*. Cambridge: Harvard University.
- Hovelynck, J. (2003, March). Making research contribute to the practice of facilitation: Developing program theory through practitioner research. In K. Richards & B. Smith (Eds.), *Therapy within adventure: Proceedings of the second international adventure therapy conference*. Augsburg, Germany.

- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Leont'ev, A. N. (1981). The problem of activity in psychology. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 37-71). Armonk, NY: M. E. Sharpe.
- Leontiev, A. N. (1977). Activity and consciousness. *Philosophy in the USSR: Problems of dialectical materialism*. Progress Publishers. Retrieved April 15, 2005, from <http://www.marxists.org/archive/leontev/works/1977/leon1977.htm>
- Lindsay, A., & Ewert, A. (1999). Learning at the edge: Can experiential education contribute to educational reform? *Journal of Experiential Education*, 22(1), 12-19.
- Michelson, E. (1999). Carnival, paranoia, and experiential learning. *Studies in the Education of Adults*, 31(2), 140-154.
- Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education*, 19(1), 54-72.
- Quay, J. (2003). Experience and participation: Relating theories of learning. *Journal of Experiential Education*, 26(2), 105-116.
- Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.
- Rogoff, B., Topping, K., Baker-Sennett, J., & Lacasa, P. (2002). Mutual contributions of individuals, partners, and institutions: Planning to remember in Girl Scout cookie sales. *Social Development*, 11(2), 266-289.
- Schwandt, T. (2001). *Dictionary of qualitative inquiry*. Thousand Oaks, CA: Sage Publications.
- Silverman, D. (2000). Analyzing talk and text. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research, 2nd edition* (pp. 821-834). Thousand Oaks, California: Sage.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Thousand Oaks, CA: Sage Publications.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Walsh, V., & Golins, G. (1976). The exploration of the Outward Bound process. *Unpublished manuscript*.
- Wertsch, J., del Rio, P., & Alvarez, A. (1995). Sociocultural studies of mind: History, action and mediation. In J. V. Wertsch, P. del Rio, & A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 1-34). New York: Cambridge University Press.
- Wurdinger, S., & Paxton, T. (2003). Using multiple levels of experience to promote autonomy in adventure education students. *Journal of Adventure Education and Outdoor Learning*, 3(1), 41-48.
- Wurdinger, S., & Priest, S. (1999). Integrating theory and application in experiential learning. In J. C. Miles & S. Priest (Eds.), *Adventure Education* (pp. 187-192). State College, PA: Venture Publishing.
- Wyatt, S. (1997). Dialogue, reflection, and community. *Journal of Experiential Education*, 20(2), 80-85.

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GIRLS IN THE WOODS: EXPLORING THE IMPACT OF A WILDERNESS PROGRAM ON ADOLESCENT GIRLS' CONSTRUCTIONS OF FEMININITY

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Background and Significance

Historically, the wilderness and outdoor recreational activities have been portrayed as a masculine domain (Loeffler, 1997; Humberstone, 1990; Warren, 1985). Countless studies reveal that women reap positive mental, physical, and spiritual outcomes from participating in outdoor experiences; yet, little research investigates the outcomes of *girls'* participation in outdoor programs. More specifically, the literature neglects the study of how participation in outdoor wilderness programs challenges conventional notions of femininity.

Simply defined, femininity refers to characteristics that are associated with being female. In contemporary Western society, femininity emphasizes beauty; girls are valued for being compliant, sweet, nice, cooperative, upbeat, and sincere (Brown, 1997, 1998). Notably, the dominant conception of femininity is shaped by white, middle-class, heterosexual model. Researchers in girls' development argue that adherence to traditional femininity silences girls and, consequently, adolescent girls "lose their vitality, their resilience, their immunity to depression, their sense of themselves and their character (Brown & Gilligan, 1992, p. 2). "Normal" feminine behavior exists in contrast to masculine traits—autonomy, power, competitiveness, strength, and authoritarianism—that are socially valued qualities, and perceived as essential for success in outdoor activities. Girls' participation in outdoor activities, then, can offer confusion for girls as they navigate their individuality within these competing paradigms.

Wilderness programs that focus on girls' development can offer avenues for girls to resist social stereotypes, to challenge conventional notions of femininity, and promote positive gender identity development. Understanding how outdoor programs challenge conventional notions of femininity for adolescent girls and how they negotiate these understandings upon returning home offers new insights to the growing body of research on the benefits of same-sex programming. Research on the outcomes of girls' participation and its effects on girls' development and gender socialization offer a dynamic addition to the growing body of research on girls' development and new insights on defining social constructs of femininity.

Research Goal

The goal of this qualitative study was to 1) add girls' voices to the research on the outcomes of participating in an all-female program, 2) expand the research on girls' development, 3) examine how participation in a wilderness program challenged conventional notions of femininity for adolescent girls, and, 4) expand the research on poor and working-class girls' constructions of femininity through the lens of their participation in outdoor recreational programs. This study was also guided by a feminist perspective and feminist methodology. Feminist methods allow the researcher to start with a topic with which she has a personal connection and then use all the data sources available to study it (Reinharz, 1992). Consistent with feminist commitment to promote social change, a goal of this study was to influence program design for girls in wilderness settings.

Research Questions

In order to examine how participation in an all-female wilderness program challenged girls' constructions of femininity, the following questions served as a guide:

- In what ways did participation in an all-girls' wilderness program challenge conventional notions of femininity?
 - How did the girls describe the ways in which this program challenged femininity, both collectively and individually?
- What impacts did participation have on the girls' everyday lives?
 - In what ways are their understandings transferred or used in everyday life?
 - In what ways do they negotiate these understandings after the program concludes?
- How might these understandings or changes influence their long-term decision-making—life choices, ambitions, and goals?

Methods

Subjects in this study consisted of nine girls, ages 13-to-18, who participated in a 23-day canoe expedition in the North Woods of Maine. These nine girls come from poor and working-class families and live in a variety of locations throughout the state of Maine. The family structure of the girls is diverse: some live in two-parent homes, others share time between divorced parents, and some live with other family members.

Two sets of interviews, the primary method used to gather data, were conducted, 4-to-5 and 15-to-18-months, after the expedition. Secondary data sources consisted of a focus group, public presentation, parent surveys, journal entries, reflexive journal, applications, newspaper articles, trip reports, and the graduate thesis that served as a model for this program. During data analysis I used a three-step process for constructing case studies. I first read each transcript and made summary notes about the interview (Phillips, 2000). I then created a case record, which allowed me to condense the raw data into an organized and manageable file (Patton, 2002). During this step, I drew upon established methods of coding and categorizing (Miles & Huberman, 1994) to identify themes and patterns. This consisted of reading each transcript line by line to deduce codes. I then reread each transcript to code according to the research questions. These codes were clustered into themes and allowed me to generate similarities between each girl. The last step consisted of writing a final case study narrative—a holistic portrayal of each girl (Patton, 2002) in order to illustrate the uniqueness of the experience for each individual.

Findings

The findings from this study reveal that girls who participated in an extensive wilderness program challenged conventional notions of femininity in diverse ways. This includes: 1) perseverance, strength and determination, 2) challenging assumptions of girls' abilities, 3) elevated self-esteem and feelings of accomplishment, 4) questioning ideal images of beauty, 5) increased ability to speak out (voice) and leadership skills, and, 6) building significant relationships with other girls.

The girls also spoke extensively about how they drew upon the experience during challenging times in their lives. For instance, several of the girls articulated how the experience helped them improve academically. They rely on the feelings they gained when they need reassurance that they can accomplish a goal. The ability to draw on the strength, determination

and perseverance that they gained has implications for their future as women. Additionally, the girls have learned at a crucial age in their development, how to develop significant relationships with other girls and to build allies with other women. This relationship building can offer valuable skills for maintaining positive relationships with other women as they move from adolescence to adulthood. The experience also helped them look beyond traditional roles and see themselves as capable in a variety of nontraditional occupations. Other aspirations include seeking positions of leadership, learning more about themselves as individuals and challenging conventional notions of beauty.

Implications

This study reveals the importance of including girls' voices in the examination of wilderness programs and offers a clearer understanding of how participation in outdoor programs challenge conventional notions of femininity for adolescent girls. This study illuminates the value of recognizing the complex relationships that shapes one's identity. Although the wilderness and outdoor programs designed for girls and women may challenge social stereotypes, participants return to the social constructs that have significant influence on their development. As these systems are slow to change; thus, it is imperative that practitioners recognize girls' struggles and help them negotiate their re-entry into everyday life.

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- Brown, L. M. (1997). Performing femininities: Listening to white working-class girls in rural maine. *Journal of Social Issues*, 53(4), 683-701.
- Brown, L. M. (1998). *Raising their voices*. Cambridge, MA: Harvard University Press.
- Brown, L. M., & Gilligan, C. (1992). *Meeting at the Crossroads: Women's psychology and girls' development*. New York: Random House, Inc.
- Humberstone, B. (1990). Gender, change and adventure education. *Gender and Education*, 2(2), 199-215.
- Loeffler, T.A. (1997). Assisting women in developing a sense of competence in outdoor programs. *The Journal of Experiential Education*, 20(3), 119-123.
- Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Phillips, L. (2000). *Flirting with danger: Young women's reflections on sexuality and domination*. New York: New York University Press.
- Reinharz, S. (1992). *Feminist methods in social research*. New York: Oxford University Press.
- Warren, K. (1985). Women's outdoor adventures: Myth and reality. *The Journal of Experiential Education*, 8(2), 10-14.

Social Support Development and Wilderness Pre-Orientation Experiences

Prof. Brent J. Bell, University of New Hampshire

The work of any life transition involves specific tasks, often including the re-establishment of social support in a variety of forms (Weiss, 1974). College students are particularly affected by transition, often disrupting established support systems while transitioning into adulthood. To assist with this transition, campuses offer a number of services (e.g., admissions/alumni programs, campus visits, pre-orientation programs, first-year orientation, first-year seminars). Such services are defined in this study as Comprehensive Transitional Programs (CTP). Little is known about how CTP impact social support. This study focused on adapting the Campus Focused Social Provisions Scale (CF-SPS), as an instrument to measure social support, and investigate whether students in different pre-orientation experiences reported different levels of social provisions on the CF-SPS.

The study was conducted at Harvard and Princeton universities because of their similar pre-orientation programs (i.e., wilderness, service, and pre-season athletics) and similar population demographics. A sample ($n = 1601$) of first-year and sophomore students was categorized by pre-orientation experiences and analyzed by numerous demographic variables (e.g., ease of making friends, number of roommates). A factor analysis resulted in a three-factor model for the CF-SPS, resulting in a high overall scale reliability ($\alpha = .94$). A t-test showed no significant differences between schools, but a MANOVA indicated participants on wilderness orientation programs reported significantly higher levels of overall social provision scores and significant differences in all six CF-SPS sub factors. Pre-season athletes reported significant differences on the sub-factor social integration (i.e., belonging to a group sharing your interest and values) ($p < .05$). Service programs reported no significant differences.

A MLR indicated the variable "ease of making friends" as explaining the largest variance of any models ($R^2 = 20\% - 14\%$). Both women and sophomores were more likely to report higher levels of social provisions on campus, except with the variable of social integration. The study proposes new models for social provision development on campus (e.g., the primacy of social integration) and indicates areas for future research. The study was exploratory and limited by lack of specific controls for selection bias and inability to access a control/matched comparison group.

4th Annual SEER Symposium Closing Address
AEE Annual Conference
November 3-6, 2005

Dan Garvey, Prescott College

I will attempt to focus my thoughts around the importance of research and evaluation within the field of experiential education. Before offering my ideas I want to honor and congratulate the participants who presented at this year's conference. The slate of presentations was comprehensive and informative. I can't help but appreciate that our symposium opened with a typical beginning topic on orientation by Brent Bell and ended with Anja Whittington's research on the construction of femininity. This span from orientation to femininity seems appropriately symbolic as bookends to a series of well thought out and important research presentations.

I suppose the importance of research and evaluation might appear self-evident; these activities are important because they help create new knowledge and they allow us to determine if the actions we take are likely to result in the outcomes we desire. If research and evaluation did nothing more than meet these two objectives the activities would be necessary and worthy of support. I believe there are other, perhaps less recognizable positive results associated with research and evaluation activities and I'd like to offer a few additional thoughts for your review and consideration.

Research and evaluation develops habits of the mind.

If we accept that Gardner's ideas of multiple intelligences are at least in part correct we must extend this theory to our field and the professionals within our field. Imagine a continuum of skills that placed those who were entirely interested and qualified to be doing experiential education at one end of the continuum and those who were solely interested and skilled at researching these activities at the other end of the continuum, it would be easy to imagine that any disciple interested in meeting the needs of its participants must acknowledge the needs represented by people all along this continuum. Some of our interests and focus needs to be on those who are the active participants and some of our focus needs to be available for those who are more naturally inclined and effective at reflecting and contemplating upon the activities. Without an active and serious research community, those who have learning styles and training that has prepared them to be the custodians of reflection are not given an opportunity to develop and contribute their skills. We cannot honor the potency of experiential education and fail to recognize that many of us are ideally suited to thoughtful reflection and organized inquiry. This doesn't mean that people are either doers or thinkers; it means that when we find ourselves drawn to either of these foci there should be a well-established opportunity for us to engage our minds in the field of experiential education.

By recognizing and supporting the research function within our field we are helping to nurture the thinkers of the future. Our field will require both doers and thinkers as we move forward in an attempt to help inform the broad theories and practices of education. A commitment to research and inquiry keeps some of our best and brightest tied to our field and allows them to grow and develop within the framework of experiential education.

Research and evaluation are political.

As one attempts to determine the relative efficacy of any activity it become easily apparent that being in control of “what counts as successful” is both important and political. Who gets to claim and name success is a significant factor in the dynamics of power and control. To cite a recognizable example we need only look at the recent fascination and commitment to standardized testing. Through a very calculated set of initiatives our country has been moving from an era when a teacher could assess the value of an education to a new era when standardized statewide or national tests are now the determiners of educational effectiveness. Once one loses the power to state the intended educational outcome and measure success in achieving that outcome the very nature of education can and is controlled by outside interests. Certainly no reasonable educator would create an educational system that produced an 86% failure rate (which is the percentage of non-native English speaking high school students in Arizona who will fail the State graduation exam and who will be denied a high school diploma). What are these standardized test actually measuring when these same students are overwhelmingly successful in their regular high school classes achieving academic GPA’s equal to or better than their native speaking classmates.

Many of us involved with experiential education are faced with a similar need to justify our successes by measurements that might have little to do with our program objectives. Without a sophisticated and educated research group we might be defenseless against inappropriate outcome measurement requirements. I think it would be wrong to evaluate every youth at risk program from the singular perspective of incarceration or recidivism. However, many grants and funding opportunities are apparently only focused on these measurements of success or failure. With a vigorous and well-informed research and evaluation function within EE we can author and support our reports on success. We might be able to convince funders that a change in moral reasoning as measured by the Defining Issues Test might be a better predictor of anti-social behavioral change than whether a youth was rearrested within a six month period following release.

Research activities will allow our field to exert power and influence regarding the success of our programs. Without a cadre of serious researchers we will be required to justify our outcomes through often inappropriate and sometimes irrelevant measurement techniques.

Research links us with a community of scholars.

Although the original intention of the academy has been compromised and sometimes eroded it is still the case that our culture depends on universities and colleges to be the bastions of truth. In public opinion polls colleges and universities are always listed as being trustworthy institutions. In a world where spin has replaced truth, those of us involved in academic scholarship have a sacred obligation to publish new knowledge that is true and honest. For better or worst the only institution in our culture that still attempts to maintain a commitment to truth is higher education. We have seen that company sponsored research, whether funded by the tobacco industry, the chemical industry, or the oil industry has fallen well short of the reasonable standards of honest research. Our research activities on experiential education allow members of our field to be hired as faculty members in fine academic institutions where academic research is honored and protected. This affiliation with other scholars improves our research because of the

general academic milieu that is present at most colleges and universities and the effect this culture of scholarship has on all connected.

Research and evaluation activities focused on experiential education need to reside within academic institutions because this is the appropriate placement for such efforts. Without academic affiliation our research would likely be marginalized and viewed as self-serving or irrelevant. Experiential Education has a long and successful connection with higher education, Indiana University, The University of New Hampshire, Cornell, Princeton and Harvard, The University of Colorado, Prescott College and many other colleges and universities have been epicenters for vigorous research and the creation of new knowledge in experiential education. Without a commitment to research, experiential education falls outside the protective walls of the academy.

Conclusion

I have attempted to describe a few of the less obvious benefits of research within experiential education. I have listened to and read many reports describing the need for more and better research about experiential education and I am sometimes impatient myself with the quality and quantity of our efforts. I am more often grateful for the time and effort that is invested by those who view research as important. In a field that is often defined by the action components of experiential programs it's wonderful to know we also have scholars represented at this Symposium who are dedicating themselves to deep investigation of our activities and our results. I am honored to support my colleagues and on behalf of our field I congratulate them for their commitment to excellence.

The Dynamics of Belaying Two-person Loads in a High Ropes Course Environment

Kathy Haras & Brian Lisson, Adventureworks! Associates Inc.

Rescue training is a required component of most ropes course program risk management plans. Due to the risks involved in vertical rope rescue, additional back-up techniques are sometimes used. These back-up systems are often not evaluated to the same extent as primary systems as they rarely come into play (Holan & Beason, 2002). Because the mainline components in rescue systems often lack the redundancy typically found in regular, day-to-day operating systems, the absence of information on effective back-up systems could result in dangerous situations.

Previous rope rescue studies indicate that traditional one-person load belay techniques will not safely arrest a fall when two people are attached to a single belay rope (Larson, 1990). While this research from the technical rescue community is informative, the variables considered are not reflective of the ropes course environment. Little research has examined the safety and effectiveness of rescue strategies specific to the ropes course environment and no studies have examined the dynamics of belaying two-person loads in a ropes course environment.

The purpose of this study was to:

1. Assess the effectiveness of traditional belay techniques with a two-person load
2. Examine how rope type, top anchor, and belay device affect two-person load belays
3. Measure the drop distance, impact force, and slippage at the belayer during mainline failure of a two-person load.

A belay provides protection against a fall by employing an unloaded rope (belay line) in such a manner that rope may be taken in or let out yet able to hold a load (Larson, 1990). A belay is distinguished from the mainline (working line) that actually raises, lowers, or transports the load. A conditional belay employs a rope that is already under tension to protect against a fall by holding the load should failure occur in some other part of the system (Larson, 1990). Previous studies on one-person loads suggest that a figure 8 holds 1.25 kN – 1.5 kN (Chisnall, 1985; Soles, 1995), a slot device holds 2 kN (Chisnall, 1985; Soles, 1995), a Munter hitch holds 2.5 kN – 3 kN (Chisnall, 1985; Soles, 1995), and a Gri Gri holds 7 kN – 9 kN (Soles, 1995).

A 200 kg load was used to simulate the mass of the subject and attendant plus any equipment and is consistent with other studies of rescue systems. A mechanical hand was calibrated to 335 N – the average maximum ungloved grip strength of a belayer (Mauthner & Mauthner, 1994). The load was attached to both the belay line and mainline and the mainline was used to raise the load 30 cm to unweight the belay line. After recording the initial height of the load, the mainline was cut. Impact force at the belayer, drop distance, and hand slippage were recorded. The procedure was repeated four more times for each combination of factors.

Results for impact force at the belayer, drop distance, and hand slippage were obtained by averaging five observations. For ½” rope, mean impact force ranged from 1.9 kN (carabiner top anchor with Munter hitch belay) to 2.6 kN (spin/static with Munter hitch belay). The lowest mean drop distance was 0.9 m (carabiner top anchor with Munter hitch belay) while the highest drop distance was 1.9 m (spin/static with figure 8 belay). Finally, mean hand slippage ranged from 4.0 cm (carabiner top anchor with figure 8 belay) to 18.2 cm (spin/static with Munter hitch belay). For 7/16” rope, mean impact force ranged from 1.3 kN (carabiner top anchor with figure 8 belay) to 3.1 kN (spin/static with Munter hitch belay). The lowest mean drop distance was 0.8 m

(spin/static with Gri-gri belay) while the highest drop distance was 1.4 m (spin/static with Trango Jaws belay). Finally, mean hand slippage ranged from 0.0 cm (carabiner top anchor with Trango Jaws belay) to 13.4 cm (spin/static with Munter hitch belay).

The two-person load data were subjected to multivariate analysis of variance (MANOVA). The dependent variables were drop distance, hand slippage, and impact force at the belayer with ½” and 7/16 low stretch rope. The independent variables were top anchor (two steel carabiners or spin/static) and belay device (figure 8 or Munter hitch for ½” and 7/16” rope, Trango Jaws and Gri-Gri for 7/16” rope only).

With ½” rope, top anchor and belay device had a significant main effect. There was no significant interaction effect. Follow-up ANOVAs and post-hoc comparison indicated impact force at the belayer was greater when the spin/static was used as a top anchor, and hand slippage was greater when a Munter hitch was used.

With 7/16” rope, top anchor and belay device had a significant main effect as well as an interaction effect. Follow-up ANOVAs indicated impact force was affected by top anchor, belay device, and top anchor by device interaction. Hand slippage was affected by the belay device and anchor by device interaction.

Post-hoc comparisons on 7/16” rope revealed impact force at the belayer was greater when a spin/static was used, and belay devices caused significant differences in hand slippage and impact force at the belayer. Regarding hand slippage, the Trango Jaws slipped least while the Munter hitch slipped most. The Gri-Gri was similar to the figure 8, and the figure 8 was similar to the Munter hitch. Regarding impact force at the belayer, the figure 8 was similar to the Trango Jaws and produced the least impact force, the Gri-Gri produced more force, and the Munter hitch produced the most.

The study found that traditional belay techniques designed for single person loads are inadequate due to significant hand slippage and high impact force on the belayer. Although the top anchor effects impact force on the belayer, drop distances were high in both 7/16” and ½” rope, regardless of top anchor used. While the Trango Jaws showed little slippage, further testing is required to examine its performance with other variables.

As a result of study findings, ropes course instructors and trainers should use alternative belay techniques designed for two-person loads when belaying two people on a single belay line in a ropes course environment. While dynamic rope was not examined, its use is not recommended as drop distances would likely be even higher.

Chisnall, R. (1985). *Rock Climbing Safety Manual* (2nd ed.). Toronto, ON: Ontario Rock Climbing Association.

Holan, J. & Beason, S. (2002). *Rope access equipment testing: The back-up safety system*. Truckee, CA and Boulder City, NV: Ropeworks and US Bureau of Reclamation.

Larson, A. (1990). *Belay competence drop test method for rope rescue systems*. Invermere, BC: British Columbia Council of Technical Rescue.

Mauthner, K. & Mauthner, K. (1994). *Gripping ability on rope in motion*. Invermere, BC: Rigging for Rescue.

Soles, C. (1995, July/August). Single-rope buyer’s guide: Everything you always wanted to know about ropes but didn’t know to ask. *Rock & Ice*, 68, pp. 117-128.

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An Investigation of the Influence of Vicarious Experience on Perceived Self-efficacy

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Perceived self-efficacy is an indicator of maintenance, effort, and performance of various behaviors, including recreational activities. Experiential programming can be structured to enhance participants' efficacy regarding specific activities. This can be done by addressing the four sources of efficacy information (verbal persuasion, vicarious experience, affective state, mastery experiences) that participants' use to make judgments regarding their ability to perform a particular recreation activity.

The purpose of this study was to evaluate the effectiveness of one of the sources of efficacy information, vicarious experience via modeling, in enhancing efficacy beliefs of at-risk youth participating in a wilderness therapy activity. This study also investigated the influence of activity specific efficacy perceptions on both self-regulatory self-efficacy (perceptions of ability to evaluate courses of action, diagnose task demands, and set sub-goals) and perceived performance in the specific activity.

Three groups of youth at-risk participated in three separate rock climbing sessions at the Clemson University Outdoor Laboratory's climbing tower. The participants (n = 38) in this study, both male and female and ranging in age from 6-18, were drawn from a year-round private school for at-risk youth. All students from the school were invited to participate. Prior to arrival at the climbing site, school administrators divided participants into groups according to existing residential housing assignments.

Upon arrival, each group took a rock climbing and self-regulatory self-efficacy questionnaire. This questionnaire included a previous rock climbing experience measure. Then, prior to rock climbing, during climbing 'ground school', one of the groups observed a youth model the rock climbing activity, one of the groups observed an adult model the rock climbing activity, and one of the groups did not observe a model. Immediately after 'ground school' each group took another rock climbing and self-regulatory self-efficacy questionnaire. This questionnaire also included a perceived 'similarity to model' measure. After each participant performed the activity of rock climbing, he or she took a third rock climbing and self-regulatory self-efficacy questionnaire. This questionnaire additionally included a perceived performance measure.

Multivariate analysis of covariance indicated that groups who observed a model had significantly higher rock climbing self-efficacy and self-regulatory self-efficacy than the group that did not observe a model. There was no significant finding with regard to influence of previous rock climbing experience, model type, or perceived similarity to model. Significant relationships were found between self-regulatory self-efficacy, rock climbing self-efficacy, and perceived performance.

Because the participants did not perceive there to be a difference between the models, these results do not provide us with information regarding the influence of perceptions of similarity to the model. These results do show that groups observing a model demonstrate rock climbing during ground school are significantly more likely to show increase in both rock climbing and self-regulatory self-efficacy than groups who do not observe a demonstration.

In light of this research it is apparent that providing a model is an effective tool that can be used to assist participants in achieving the positive outcomes of a rock climbing experience, and potentially those of other therapeutic, educational and recreational pursuits. Further research regarding self-efficacy may indicate that, when facilitating experiential education activities, using a self-efficacy based curriculum provides individuals with the best possible chance of realizing both short-term and long-term benefits.

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Examining Interactions Between Adventure Seeking and States of the Four Channel Flow Model

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This study evaluates the relationships between states of the four channel flow model and adventure seeking traits among whitewater kayakers using a modified Experience Sampling Method. Four study hypotheses were concerned with determining whether the interaction between adventure seeking and the four channel flow model predicts differences in dimensions of subjective experience (flow indicators): (H₁) Among flow indicators, a three dimensional structure to include Affect and Activation, Cognitive Control, and Intrinsic Freedom will be confirmed. (H₂) Adventure seeking will have a significant interaction with the flow channel when predicting a dimension of Affect and Activation. (H₃) Adventure seeking will have a significant interaction with the anxiety channel when predicting a dimension of Cognitive Control. (H₄) Adventure seeking will have a significant interaction with flow and apathy channels when predicting a dimension of Intrinsic Freedom.

Questionnaires were administered on-site to 52 whitewater kayakers on the Cheat River in West Virginia at eight sites varying in river difficulty (Class I-V). Data were analyzed at the level of experience ($n = 409$ experience observations) rather than per respondent. Statistical analyses (principal axis factoring and hierarchical linear modeling) confirmed a three dimensional structure of flow indicators and that the interactions of adventure seeking and the channels of the flow model were significant predictors of an Intrinsic Freedom dimension. Although the adventure seeking trait was a significant predictor of the Affect and Activation dimension, this dimensions and the Cognitive Control dimension were not significantly predicted by interactions with channels of the flow model.

The study results suggest several conclusions which fully support two of four hypotheses. The three dimensional structure of flow indicators was validated by factor loadings and latent measures were well supported by reliability coefficients. Jackson and Marsh (1996) and others have generally confirmed a high number of dimensions rather than combining indicators to form only several dimensions. The application of a nine dimensional structure would be incompatible or impractical to use with many analytical (i.e., HLM, Lisrel) and methodological strategies (i.e., experience sampling 27 flow indicators on a river). Furthermore, the confirmation of the three dimensional structure implies that the use of a higher number of dimensions (i.e., nine) of subjective experience may be redundant and representing subdimensions of the overall structure.

Although results did not fully support the second hypothesis, when controlling for the four channel model, adventure seeking significantly contributed to the prediction outcome of the Affect and Activation dimension. The finding that kayakers had a positive affect and were more mentally excited while in states of flow and anxiety as opposed to states of boredom is consistent with prior conceptualizations and empirical findings of Csikszentmihalyi (1982, 1988) and others. Furthermore, this interpretation is theoretically consistent with Zuckerman's (1994) notion of Thrill and Adventure seeking which

proposes that individuals, high in adventure seeking, seek out those experiences which arouse and excite the self. It should be noted, however, that the small to medium effect sizes for these pairwise comparisons suggests a need for improvement in explanatory power.

With a moderate level of explanatory power, results also demonstrated that, when controlling for the four channel model, the interaction of positive levels of adventure seeking coupled with entering the flow state generated significantly more intrinsic freedom than during a state of apathy. This finding is consistent with the theoretical and empirical expectations of Csikszentmihalyi (1982, 1988) and Jackson and Marsh (1996) and suggested that, when interacting with adventure seeking, optimal experiences were indicated by the freedom to choose involvement in kayaking the Cheat Canyon and the desire to repeat this intrinsically motivating experience. Likewise, this finding is consistent with Moneta's (2004) HLM results which indicated that higher intrinsic motivation is associated with the flow state.

Two interpretations can be made for the finding that the Cognitive Control dimension had no significant fixed effects. One is that this dimension is less characteristic of optimal experience in adventure settings than previously theorized (Csikszentmihalyi, 1982). The second interpretation is that Cognitive Control is not being empirically tapped because there continues to be methodological and operational issues within the four channel model that contribute to measurement error.

The findings that adventure seeking is either interactive with channels of the flow model or able to predict flow indicators while controlling for the model, suggests several implications for researchers and practitioners concerned with the link between the flow state and personality traits. Researchers should attempt to further unveil the salience of the interaction between adventure seeking and the flow model in predicting intrinsic freedom. To accomplish this task, it is recommended that investigators employ research designs that follow the experience from the river to environments with increased exposure to extrinsic activities and where experiences are at their least adventurous points in time and recover once again. Critical to practitioners, this design would allow for a realization of the long-term benefits and outcomes of optimal experience. Practitioners (i.e., Outward Bound, NOLS) should also understand that these findings stress the psychological importance of providing elements of adventure in wildland settings by demonstrating that optimal experience in wildland environments is an interactive process with client personality. Thus, future researchers examining experiential education settings should attempt to determine whether facilitating experiences in the adventure, without simultaneously facilitating for client personality, limits levels of perceived intrinsic freedom necessary to achieve the most optimal of experiences.

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Building a bond with the natural environment through experiential engagement:

A case study of land-based education curriculum in Rural Alaska

Dr TAKANO Takako, University of Edinburgh

In the UK and USA, much of environmental education (EE) theory and practice rests on the assumption that human disconnection from nature is a fundamental problem. ~~–~~Many practitioners and education researchers argue that experiential engagement with nature as a designed educational programme ~~would~~ helps building-to build a bond ~~among-between~~ young people ~~with-and the~~ natural environment. Under this assumption, this form of EE is fundamentally rooted in experiential learning. ~~Concerning the~~In discussing human-nature relationships, ‘Western’ authors generally present the traditional approaches of ‘indigenous peoples’ as models. However, a number of indigenous peoples’ groups in the world, who are assumed to be ‘connected’ with the land already, now organise educational programmes designed to build a bond between young people ~~with-and~~ the land. Nonetheless, very few studies have empirically explored the reason ~~of-for the-these~~ attempts and the nature of these programmes.

In order to fill the gap between what has been discussed and what has been empirically studied, my doctoral research explored educational experiential programmes for young people in different communities in order to investigate the nature of the programmes and the respective groups’ relationships with the natural environment. While it involved seven groups in the UK and North America, this paper focuses on a case study of Russian Mission in Alaska, where the school extensively integrated subsistence activities into the curriculum. The majority of the community residents were Yup’ik people. Their programmes ~~heavily~~ relied heavily on experiences outdoors, and it was explained as the way Yup’ik have traditionally transmitted their knowledge.

The research design was ~~mixed-a mixture~~ of both qualitative and quantitative. The qualitative data came from intensive participant observation, supported by semi-structured interviews with mostly open-ended questions, written surveys, informal talks and conversations. The quantitative approach was also used to analyse the data. The formal interviewees included the programme organiser and instructors (3), participants (11, aged between 12-19), their parents (7), and involved community members (3), and questions linked to environmental experiences and perception were guided by ‘Significant Life Experiences’ research (Chawla, 1998; Palmer, 1996) and Kahn’s environmental ethics research (Kahn, 1999). Many questions were modified ~~based-on~~ according to the geographical, historical,

cultural and social situations of Russian Mission. All semi-structured interviews were transcribed from recordings. The analysis procedures were informed by grounded theory (Glaser & Strauss, 1967), ~~to have with~~ themes ~~emerge-emerging~~ from ~~the~~ data. In addition to a 'realist' approach, a 'narrative' approach (Silverman, 2000) was adopted in analysis in order to understand ~~the~~ data within ~~their-its~~ socially and culturally specific context.

Informed by theoretical perspectives from different disciplines, including Bourdieu (1994) and Engel (1990), the study revealed various themes interwoven ~~with~~in issues of education and the environment such as community empowerment, educational policy and identity. In the light of ~~the~~ main research theme, the study demonstrated that for Yup'ik people being 'on the land' was tied strongly to their identity, and their relationship with the land was expressed as ~~being~~ inseparable from their heritage and a way of life. Apart from observed data, one of exemplifying interview accounts, ~~from a female in her 40s~~, is as follows:

~~A female interviewee in 40s~~...hunting, fishing, trapping and camping is something my uncles, parents and grandparents did. It is important for him [the interviewee's son] to learn and experience how to live on this land. (21 March 2002)

Observations, interview accounts and analysis of data showed that the school programme based on subsistence activities contributed to ~~developing the development of~~ deep relationships among students with their environment, which enhanced the perception of their beings as Yup'ik. By actively involving community values, Russian Mission School became a more integrated part of the community, and there was a sign that the community began to acquire a sense of ownership in educating their young people, ~~something~~ which was previously believed ~~to be the sole~~ responsibility of the school.

While their relationships with the land was demonstrated as strong, it became clear that their approaches to the environment and ~~what they understood by meanings of~~ notions such as 'respect' and 'care' were not necessarily the same as what is generally believed in the 'West'. For the study group, caring was expressed as 'culturally proper interaction' with the natural world, which encompasses spirit and inanimate beings. They did not construct a hierarchy among all 'beings' in the world, and 'respect' was shown to secure the ~~animals' return,- game's return~~.

The study indicated that in the case of Yup'ik people in Russian Mission, subsistence pedagogy, which is highly experiential and embedded in their cultural, historical and geographical context, was ~~a~~ meaningful way to build environmental skills, knowledge and

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Comment [SRG1]: You might want to rephrase this – I read it the first time to mean "game" as in "game of cards", which is probably due to my Western upbringing, not being used to hunting!! Your audience might do the same....maybe "the animals' return" might be better?

connection with the land among students. This implies that experiential education could take a format which is culturally embedded, and in order to connect young people with the natural environment, educational programmes can pay more attention and be sensitive to the locality, not only to its ecology but also its historical and cultural context.

Apart from the main research theme of the human-nature relationship, the students' academic performance has improved since the integrated experiential pedagogy. It may be explained by ~~combined a combination of~~ reasons: - the curriculum was popular among students and they were excited to be at school, the curriculum contexts were suitable and interesting to the students, the improved relationships between the community and the school (due to locally and culturally appropriate education), the improved relationships between the teachers and the students (enhanced through-by experiential activities outdoors, -). The result of all of these factors was that and as a result of all the above, the students' ~~attitudes that~~ were more receptive to academic learning. The link between place-based education and academic attainment is a separate topic and needs further investigation.

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References:

- Bourdieu, P., & Passeron, J. C. (1994). *Reproduction in education, society and culture* (R. Nice, Trans.). London: Sage.
- Chawla, L. (1998). Research methods to investigate significant life experiences: Review and recommendations. *Environmental Education Research*, 4(4), 383-397.
- Engel, J. R. (1990). Introduction: The ethics of sustainable development. In J. R. Engel & J. G. Engel (Eds.), *Ethics of environment and development: Global challenge, international response*. London: Belhaven Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Kahn, P. H. (1999). *The human relationship with nature: Development and culture*. Cambridge, MA; London: MIT.
- Palmer, J. A. (1996). Influences and experiences affecting the pro-environmental behaviour of educators. *Environmental Education Research*, 2(1), 109-121.

Silverman, D. (2000). *Doing qualitative research*. London: Sage.

A Study of Married Couples' Perceptions of Marital Satisfaction in Outdoor Recreation

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Meaningful experiences create memories of situations and help individuals come to self-realizations about their strengths, weaknesses, and potentials by being involved in challenging situations (Taniguchi, 2004). Taniguchi studied single young adults in challenging outdoor settings and discovered that they had revealing experiences about themselves that made the experiences meaningful. The dynamics of marital relationships adds another dimension to the study of meaningful experiences in the outdoor setting. Since many people spend more years in a marriage relationship than being single, their experience in the marriage relationship defines a large part of their personal identity (Whitchurch & Constantine, 1993). This can be understood by a look into family systems theory, where the system (in this case, the marriage) acts as a “dynamic, interconnected system” (Klein & White, 1996). One of the many facets of a marital system is the satisfaction that the partners in the marriage experience. A factor that can affect the satisfaction with the relationship enjoyed by the couple is leisure (Smith, Snyder, & Morisma, 1988). The purpose of this research was to explore whether or not the shared experiences of married couples in certain outdoor recreational activities were meaningful to them and to determine if these shared leisure experiences resulted in changes in perceptions of marital satisfaction. Many constructs have been shown to impact marital satisfaction, yet the impact of outdoor recreation on marital satisfaction has not been formally studied.

This study focused on a sample of six married couples ($N = 12$) who were married for less than four years. Their mean age was 23.6 years ($\sigma = 2.8$). None of the couples had any children. The couples participated in five outdoor winter environment activities: (a) a half day of cross-country skiing, (b) a half day of snowshoeing, (c) an evening of cooking in the cold and snowy outdoors, (d) one overnight snow caving excursion, and (e) a three-day winter campout in the mountains of northern Utah that required a six-mile cross-country ski. The couples were instructed in proper winter camping protocols, proper use of camping and traveling equipment, layering of clothing, health issues related to cold conditions, and avalanche awareness. Focus group discussions were held immediately after each activity. Each married individual was also asked to write a journal account of his or her individual perceptions of each experience within a week after participating in the experience. A researcher also conducted a one-on-one interview with each participant after the fourth activity. To measure the changes in marital satisfaction, the instrument, Relationship Evaluation Questionnaire (RELATE), developed by Busby, Holman, and Taniguchi (2001), was given as a pre-test before participating in any of these five activities and as a post-test after the last activity to each participant.

The qualitative data analysis indicated an emerging theme that the amount of shared outdoor recreational experiences couples previously had together seemed to draw a parallel to the amount of conflict they faced in these experiences. Couples who had participated in similar activities before had almost 25% fewer conflicts during the study's activities. Yet, regardless of the amount of conflict experienced by couples during the activities, marital satisfaction scores did not appear to be associated to this factor. Marital satisfaction seemed to be associated with

couples' abilities to resolve their conflicts. The couple who had the most mentioned number of conflicts (14), due to their participation in the activities, had the highest increase in their marital satisfaction score (+1.0 increase compared to the mean increase of 0.43). They stated that they spent time resolving their conflicts, instead of letting the conflicts remain unresolved. One couple had conflict because one partner was a better cross-country skier than the other and stated so in front of the other couples. The wife stated,

“And that upset him and when we got home, we were able to talk it out. And I think something I've really noticed is that we were both saying we're sorry. He was apologizing for being so touchy and I was apologizing for being so rude. So instead of accusing each other, we were both trying to figure out what we did wrong.”

A couple who indicated only three experiences of conflicts during the activities reported a decrease in their marital satisfaction score (-1.17). They made no mention of resolution to any of these conflicts. All couples stated that the outdoor activities created meaningful experiences for them because the activities created situations for time alone together, time they both valued, and accomplishing tasks together, which enhanced how much they valued their spouse and their relationship.

The implications of the findings of this study may be important to those who work with married couples and their relationship. Marital satisfaction is not dependant on the level of outdoor experience or the activity itself, but on the couple's ability to resolve the conflict. Focus should be on the conflict resolution process in order to improve marital satisfaction. The type of outdoor recreational activity used to create conflict should be considered based upon the couple's previous shared experiences. Similar previous shared experiences seem to result in fewer conflicts and therefore fewer opportunities for conflict resolution.

References

- Busby, D. M., Holman, T. B., & Taniguchi, N. (2001). RELATE: Relationship evaluation of the individual, family, cultural, and couple contexts. *Family Relations: Interdisciplinary Journal of Applied Family Studies*, 50 (4), 308–316.
- Klein, D. M. & White, J. M. (1996). *Family theories: An introduction*. Thousand Oaks, CA: Sage Publications.
- Smith, G. T., Snyder, T. J., & Morisma, B. R. (1988). Predicting relationship satisfaction from couples' use of leisure time. *American Journal of Family Therapy*, 16, 107-109.
- Taniguchi, S. (2004). *Outdoor education and meaningful learning: Finding the attributes of meaningful learning experiences in an outdoor education program*. Unpublished doctoral dissertation. Brigham Young University, Provo, Utah.
- Whitchurch, G. G. & Constantine, L. L. (1993). Systems theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach*, pp. 325-349). New York: Plenum Press.

The Development and Design of an Instrument to Measure Self-Authorship in Outdoor Education

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Self Authorship (SA) is a growing area of interest (Baxter-Magolda, 1998; 1999; 2001; Kegan, 1994) that helps delineate specific skills for helping young people develop into well-adjusted adults capable of dealing with the demands of modern life. The purpose of this study was to identify domains associated with self-authorship and to develop an instrument that could reliably measure the construct. The study was completed in two phases. During the first phase, a case study of the Plast Ukrainian Scouting Organization (Plast) was completed to identify how this organization defines self-authorship. Plast relies heavily on Outdoor Education (OE) methods in its programs and identifies self-authorship as one of its program goals. The domains generated from the case-study were compared to existing self-authorship literature to develop the Self-Authorship Questionnaire (SAQ v.1). The SAQ v. 1 was then administered to 289 young adults between the ages of 18 and 38 ($M = 21.34$). The data was analyzed using Principal Factors Analysis (PFA) to determine if distinct factors were evident in the instrument. Four distinct factors which were identified converted into four sub-scales: (a) Situational Coping, (b) Interpersonal Leadership, (c) Self-Efficacy and (d) Knowledge Creation. The items comprising the four identified sub-scales were retained and included in the second version of the Self-Authorship Questionnaire (SAQ v.2). Implications for the use of the SAQ v. 2 in OE program evaluation are presented.

References

- Baxter Magolda, M.B. (1998). Developing self-authorship in young adult life. *Journal of College Student Development*, 39, 143-156.
- Baxter Magolda, M.B. (1999). *Creating Contexts for Learning and Self Authorship: Constructive-Developmental Pedagogy*. Nashville, TN: Vanderbilt University.
- Baxter Magolda, M.B. (2001). *Making Their Own Way: Narratives for Transforming Higher Education to Promote Self-Development*. Sterling, VA: Stylus.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.

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Changes in Perceptions of Fear in a Short-term, College Outdoor Adventure Program

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The Association for Experiential Education (2005) has indicated that the role of the experiential educator includes “setting suitable experiences, posing problems, setting boundaries, supporting the learner, insuring physical and emotional safety, and facilitating the learning process.” Often, our efforts to meet these goals involve some element of risk – social, emotional, physical, real or perceived – for the participant. The concept of risk is considered a legitimate educational tool emphasizing the need for change in the participants’ behavior, actions, or thought process. The participant’s reaction to risk is a basis for much of the learning that occurs in these settings (Hunt, 1999; Priest, 1999). When utilized, either in a positive or a negative context, the experience of risk is manifest in some degree of fear, a construct that has been lightly explored in the literature. As a psychological and physiological reaction to risk, fear is a natural phenomenon; essential for personal survival, i.e., “fight or flight” reactions (Priest & Gass, 1997). While the field of experiential education burgeons on the experience of fear through uncertainty, challenge, risk, etc. – in part because of the learning and euphoria that is experienced (by participant or instructor) when those fears are faced and overcome – unfortunately often only the negative aspects of fear are recognized and there is significant potential for abuse to exist (Ewert, 1986).

Background

As a research construct, fear in an adventure setting has only been addressed by a few researchers, in limited settings, and with a low diversity of populations (*Outward Bound courses* – Ewert, 1986; 1988; 1989; Ewert & Young, 1992; Young & Ewert, 1992; *a residential camp* – Quinn, 1996; *a two-week college outdoor education practicum* – Young, Quinn, & Steele, 1994). The bulk of the research has served to confirm more intuitive hypotheses about fear in participants of experiential education courses, i.e., that fear exists in participants during the course or program; and to categorize those fears as Social, Personal, or Physical. According to Simonov (1975), fear is a function of Perceived Risk, Information Supplied, and Information Required. It would follow that simply participating in an adventure course would reduce one’s overall fears. Indeed, Ewert’s original studies on fear (1986; 1988) utilized a pre-/post-/post-test design where participants’ perceptions of fear did change during the course of an Outward Bound extended expedition; however, the authors found no studies that examined the change in fear on short-term trips (less than seven days) or in college outdoor adventure courses.

Purpose of Study

To that end, the current study was designed to investigate the extent that participants’ fears changed or adjusted during the course of a short-term, college adventure experience. Based on earlier research, we also hypothesized that perceptions of fear and the change in perceptions pre-/post-trip would vary depending on personal characteristics such as sex, education level (determined by year in school), type of course, the level of outdoor experience and comfort in the outdoors (clearly related to knowledge of the outdoors and adventure activities), and whether participants had any prior relationships with fellow participants on the same trip.

Methods

Two types of courses through the recreational outdoor adventures program at a large Midwestern university were sampled ($N = 95$): a recreational trip and a for-credit skills course. The recreational trips (36 participants) included such activities as rock climbing, whitewater rafting, backpacking, and coastal kayaking. The for-credit trips (59 participants) included beginning and intermediate rock climbing, mountain biking, whitewater rafting, and backpacking. Trip length varied from three to six days with a preliminary meeting the week before. The instrument used in this study was a version of the Outdoor Situational Fears Inventory (OSFI) developed by Ewert (1986) and modified by Young, et al. (1994) into a ten-point, Likert-type response questionnaire designed to assess the participant's social, physical, and personal/emotional fears. Each item represents a fear experienced by participants; the higher the score, the more intense the perception of fear. Information on sex, education, outdoor experience, comfort level, and relationships with others on the same course was collected. This study used a non-randomized, pre-/post-test design; 78 usable responses were obtained.

Repeated measures one-way analyses of variance were conducted on the Grand means and the sub-category means (Social, Personal, Physical) to test for overall differences. Repeated measures two-way analyses of variance were then utilized to examine the effects of the independent variables (sex, education, outdoor experience, type of trip, comfort level, and relationships with others on the same course) on the Grand and sub-category means. Tukey's HSD post-hoc tests were utilized on those variables with more than two levels.

Results

Data analysis confirmed several of our initial hypotheses. Results indicated significant pre-/post-test differences on the Grand means ($F_{1,77} = 26.46$; $p < 0.001$) and for each of the sub-category means: Social ($F_{1,77} = 20.87$; $p < 0.001$); Personal ($F_{1,77} = 24.14$; $p < 0.001$); and Physical fears ($F_{1,77} = 7.52$; $p = 0.008$). In each category, post-trip means were lower than pre-trip means. Perceptions of fear also differed between sexes, outdoor experience levels, comfort levels, and trip types. Specifically, significant differences between *Sexes* were reported on the Grand mean ($F_{1,74} = 7.39$; $p = 0.008$) and the Social ($F_{1,74} = 5.02$; $p = 0.028$) and Physical ($F_{1,74} = 10.67$; $p = 0.002$) sub-category means. *Outdoor Experience Levels* were significantly different on the Physical ($F_{4,71} = 3.15$; $p = 0.019$) sub-category means. According to Tukey's HSD, only those participants with no outdoor experience and those with more than 15 nights experience differed significantly ($p = 0.013$). *Levels of Comfort* also differed significantly on the Grand ($F_{2,73} = 5.37$; $p = 0.007$) and Physical sub-category ($F_{2,73} = 7.09$; $p = 0.002$) means. Post-hoc tests indicated that those with "a lot" of comfort differed significantly from those with "some comfort" and those with "quite a bit." *Type of Trip* was significantly different on the Personal sub-category mean only ($F_{1,76} = 4.29$; $p = 0.042$). We also examined the interactions between each independent variable and the overall means. It was found that the only significant interactions between *Relationship with Others* and the Personal Fear sub-category ($p = 0.014$) and *Type of Trip* and the Personal Fear sub-category ($p = 0.002$). In other words, participants who knew other participants prior to the trip showed a greater change in the Personal Fear sub-category than those who had no prior relationships. Similarly, the participants on the recreational trips showed a greater change in the Personal Fear sub-category than those on the for-credit trips. It should be noted that *Education Level* did not affect fear perception or the change in perception.

Implications and Conclusions

Due to the relative importance assigned to risk, fear, and uncertainty in our programs, it is vital to understand the effects of an individual's personal characteristics on their perceptions of

fear. The results from this study appear to confirm prior research concerning perceptions of fear. First, individual perceptions of fear do change over the course of the outdoor adventure experience. Second, a participant's sex does affect their perception of fear. Third, high levels of outdoor experience and comfort are associated with lower levels of fear. Finally, the results of this study provide important evidence, in an area previously with little research, on the effects of short-term college outdoor adventure trips and courses on fear perceptions. However, future research should now seek to understand the effects of fear on the learning environment: how are the customary outcomes traditionally claimed by adventure recreation/education affected by participants' fears? Further research should also focus on how additional variables (e.g. group size, instructor differences, and trip purpose etc.) coincide with changes in fear perceptions. The long-term results of fear research may yet yield important findings for the practitioners and professionals in the experiential field.

References

- Association for Experiential Education (n.d.). *What is Experiential Education?* Retrieved March 15, 2005, from www.aee.org/customer/pages.php?pageid=47
- Ewert, A. (1986). The therapeutic modification of fear through outdoor adventure recreation activities. *Bradford Papers Annual, 1*, 1-10.
- Ewert, A. (1988). Identification and modification of situational fears associated with outdoor recreation. *Journal of Leisure Research, 2*, 106-117).
- Ewert, A. (1989). Managing fears in the outdoor experiential education setting. *Journal of Experiential Education, 21*, 19-25.
- Ewert, A. & Young, A.B. (1992) Fear in the outdoor environment. In G. vander Stoep (Ed.) *Proceedings of the 1991 Northeastern Recreation Research Symposium*. April 7-9, 1991. Saratoga Springs, NY. USDA Forest Service: Northeastern Forest Experiment Station.
- Hunt, J. S., Jr. (1999). Philosophy of adventure education. In J. C. Miles & S. Priest (Eds.), *Adventure programming* (pp. 115-122). State College, PA: Venture.
- Priest, S. (1999). The semantics of adventure programming. In J. C. Miles & S. Priest (Eds.), *Adventure programming* (pp. 111-114). State College, PA: Venture.
- Priest, S. & Gass, M. (1997). *Effective leadership in outdoor programming*. Champaign, IL: Human Kinetics.
- Quinn, (1996). *An instrument to measure perceived anxiety in a resident outdoor adventure education setting*. Unpublished doctoral dissertation. The Ohio State University, Columbus.
- Simonov, P. V. (1975). Psychophysiological stress in space flight. *Foundations in space biology and medicine*. (Vol. 2, Book 2).

Young, A.B. & Ewert, A. (1992). Fear in outdoor education: The influence of gender and program. In K. Henderson, (Ed.) *Proceedings of the CEO Outdoor Education Research Symposium*, January 17-19, 1992. Martinsville, IN. Cortland: Coalition for Education in the Outdoors.

Young, A.B., Quinn, T., and Steele, T. (1994). The relationship of continuum scaling scores and certainty scaling scores on the Situational Fear Inventory. In L. McAvoy, A. Stringer, and A. Ewert (Eds.) *Coalition for Education in the Outdoors Second Research Symposium Proceedings*, January 14-16, 1994. Martinsville, IN., Cortland: Coalition for Education in the Outdoors.

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GIRLS IN THE WOODS: EXPLORING THE IMPACT OF A WILDERNESS PROGRAM ON ADOLESCENT GIRLS' CONSTRUCTIONS OF FEMININITY

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Background and Significance

Historically, the wilderness and outdoor recreational activities have been portrayed as a masculine domain (Loeffler, 1997; Humberstone, 1990; Warren, 1985). Countless studies reveal that women reap positive mental, physical, and spiritual outcomes from participating in outdoor experiences; yet, little research investigates the outcomes of *girls'* participation in outdoor programs. More specifically, the literature neglects the study of how participation in outdoor wilderness programs challenges conventional notions of femininity.

Simply defined, femininity refers to characteristics that are associated with being female. In contemporary Western society, femininity emphasizes beauty; girls are valued for being compliant, sweet, nice, cooperative, upbeat, and sincere (Brown, 1997, 1998). Notably, the dominant conception of femininity is shaped by white, middle-class, heterosexual model. Researchers in girls' development argue that adherence to traditional femininity silences girls and, consequently, adolescent girls "lose their vitality, their resilience, their immunity to depression, their sense of themselves and their character (Brown & Gilligan, 1992, p. 2). "Normal" feminine behavior exists in contrast to masculine traits—autonomy, power, competitiveness, strength, and authoritarianism—that are socially valued qualities, and perceived as essential for success in outdoor activities. Girls' participation in outdoor activities, then, can offer confusion for girls as they navigate their individuality within these competing paradigms.

Wilderness programs that focus on girls' development can offer avenues for girls to resist social stereotypes, to challenge conventional notions of femininity, and promote positive gender identity development. Understanding how outdoor programs challenge conventional notions of femininity for adolescent girls and how they negotiate these understandings upon returning home offers new insights to the growing body of research on the benefits of same-sex programming. Research on the outcomes of girls' participation and its effects on girls' development and gender socialization offer a dynamic addition to the growing body of research on girls' development and new insights on defining social constructs of femininity.

Research Goal

The goal of this qualitative study was to 1) add girls' voices to the research on the outcomes of participating in an all-female program, 2) expand the research on girls' development, 3) examine how participation in a wilderness program challenged conventional notions of femininity for adolescent girls, and, 4) expand the research on poor and working-class girls' constructions of femininity through the lens of their participation in outdoor recreational programs. This study was also guided by a feminist perspective and feminist methodology. Feminist methods allow the researcher to start with a topic with which she has a personal connection and then use all the data sources available to study it (Reinharz, 1992). Consistent with feminist commitment to promote social change, a goal of this study was to influence program design for girls in wilderness settings.

Research Questions

In order to examine how participation in an all-female wilderness program challenged girls' constructions of femininity, the following questions served as a guide:

- In what ways did participation in an all-girls' wilderness program challenge conventional notions of femininity?
 - How did the girls describe the ways in which this program challenged femininity, both collectively and individually?
- What impacts did participation have on the girls' everyday lives?
 - In what ways are their understandings transferred or used in everyday life?
 - In what ways do they negotiate these understandings after the program concludes?
- How might these understandings or changes influence their long-term decision-making—life choices, ambitions, and goals?

Methods

Subjects in this study consisted of nine girls, ages 13-to-18, who participated in a 23-day canoe expedition in the North Woods of Maine. These nine girls come from poor and working-class families and live in a variety of locations throughout the state of Maine. The family structure of the girls is diverse: some live in two-parent homes, others share time between divorced parents, and some live with other family members.

Two sets of interviews, the primary method used to gather data, were conducted, 4-to-5 and 15-to-18-months, after the expedition. Secondary data sources consisted of a focus group, public presentation, parent surveys, journal entries, reflexive journal, applications, newspaper articles, trip reports, and the graduate thesis that served as a model for this program. During data analysis I used a three-step process for constructing case studies. I first read each transcript and made summary notes about the interview (Phillips, 2000). I then created a case record, which allowed me to condense the raw data into an organized and manageable file (Patton, 2002). During this step, I drew upon established methods of coding and categorizing (Miles & Huberman, 1994) to identify themes and patterns. This consisted of reading each transcript line by line to deduce codes. I then reread each transcript to code according to the research questions. These codes were clustered into themes and allowed me to generate similarities between each girl. The last step consisted of writing a final case study narrative—a holistic portrayal of each girl (Patton, 2002) in order to illustrate the uniqueness of the experience for each individual.

Findings

The findings from this study reveal that girls who participated in an extensive wilderness program challenged conventional notions of femininity in diverse ways. This includes: 1) perseverance, strength and determination, 2) challenging assumptions of girls' abilities, 3) elevated self-esteem and feelings of accomplishment, 4) questioning ideal images of beauty, 5) increased ability to speak out (voice) and leadership skills, and, 6) building significant relationships with other girls.

The girls also spoke extensively about how they drew upon the experience during challenging times in their lives. For instance, several of the girls articulated how the experience helped them improve academically. They rely on the feelings they gained when they need reassurance that they can accomplish a goal. The ability to draw on the strength, determination

and perseverance that they gained has implications for their future as women. Additionally, the girls have learned at a crucial age in their development, how to develop significant relationships with other girls and to build allies with other women. This relationship building can offer valuable skills for maintaining positive relationships with other women as they move from adolescence to adulthood. The experience also helped them look beyond traditional roles and see themselves as capable in a variety of nontraditional occupations. Other aspirations include seeking positions of leadership, learning more about themselves as individuals and challenging conventional notions of beauty.

Implications

This study reveals the importance of including girls' voices in the examination of wilderness programs and offers a clearer understanding of how participation in outdoor programs challenge conventional notions of femininity for adolescent girls. This study illuminates the value of recognizing the complex relationships that shapes one's identity. Although the wilderness and outdoor programs designed for girls and women may challenge social stereotypes, participants return to the social constructs that have significant influence on their development. As these systems are slow to change; thus, it is imperative that practitioners recognize girls' struggles and help them negotiate their re-entry into everyday life.

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- Brown, L. M. (1997). Performing femininities: Listening to white working-class girls in rural maine. *Journal of Social Issues*, 53(4), 683-701.
- Brown, L. M. (1998). *Raising their voices*. Cambridge, MA: Harvard University Press.
- Brown, L. M., & Gilligan, C. (1992). *Meeting at the Crossroads: Women's psychology and girls' development*. New York: Random House, Inc.
- Humberstone, B. (1990). Gender, change and adventure education. *Gender and Education*, 2(2), 199-215.
- Loeffler, T.A. (1997). Assisting women in developing a sense of competence in outdoor programs. *The Journal of Experiential Education*, 20(3), 119-123.
- Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Phillips, L. (2000). *Flirting with danger: Young women's reflections on sexuality and domination*. New York: New York University Press.
- Reinharz, S. (1992). *Feminist methods in social research*. New York: Oxford University Press.
- Warren, K. (1985). Women's outdoor adventures: Myth and reality. *The Journal of Experiential Education*, 8(2), 10-14.