The Impact of Outdoor Pursuits on College Students' Perceived Sense of Community

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Abstract

A primary purpose of one form of leisure experience—outdoor pursuits programs—is the development of positive interpersonal relationships and group experiences that lead to enhanced sense of community. However, there is a distinct lack of research related to psychological sense of community and involvement with nature. The purpose of this study was to understand the relationship between college students' participation in outdoor pursuits trips and changes in their perceptions of sense of community over time. Both quantitative and qualitative data were collected. Findings from this study indicated that there was a significant increase in sense of community as a result of participation in outdoor pursuits trips.

KEYWORDS: Outdoor Pursuits, Sense of Community, Mixed Methods

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Introduction

Leisure experiences are thought to influence the attitudes and behaviors of participants (Coalter, 1998; Johnson & McLean, 1994; Kleiber, 1999). Specifically, leisure that is social in nature encourages interaction among people and contributes to sense of community (Yuen, Pedlar, & Mannell, 2005). Backcountry or wilderness settings may be particularly conducive to the development of sense of community given the social nature of outdoor pursuits trips alongside the "stripping away" of distractions that occurs in primitive and wilderness settings (McAvoy, Lais, Anderson, & Schleien, 1995). The "back to basics" nature of wilderness trips may help to facilitate sense of community, group cohesion, and personal development.

A primary purpose of many outdoor pursuits programs is the development of positive interpersonal relationships and group experiences that lead to enhanced sense of community (Mitten, 1999). Sense of community has been characterized as the "feeling an individual has about belonging to a group and involves the strength of the attachment people feel for their communities or group" (Halamova, 2001, p. 137). However, Hill (1996) noted a distinct lack of research related to psychological sense of community and involvement with nature. Additionally, a review of the literature has provided little conclusive and recorded evidence to explicitly support an outcome of increased sense of community as a result of engagement in outdoor recreation activities. Outdoor recreation research in North America has been predominantly focused on psychological factors related to individual participation with little emphasis placed on the relationship between leisure and the group experience, including sense of community (Yuen, et al., 2005).

The purpose of this study was to understand the relationship between college students' participation in outdoor pursuits trips and changes in their perceptions of sense of community over time. The study employed a mixed-methods approach to data collection, involving ninety-eight students in total. Questionnaire data were collected during the summers of 2006 and 2007. Students from the summer of 2006 also participated in later focus group sessions in an effort to identify what factors contributed to students' perception about sense of community. These multiple sources of data (surveys and focus group sessions), alongside an examination of the relevant literature, has resulted in a precursory theory of some of the factors that contribute to and/or detract from psychological sense of community on wilderness trips.

Literature Review

Anecdotally and in popular travel literature, wilderness travelers often report enhanced feelings of connection and esprit de corps from trekking with groups of people whom they may have only just met. They say these feelings of connectedness result from the mini-community created when traveling together in a natural setting. Some suggest being in an environment that places physical and emotional demands on the individual increases the need not only for self-reliance, but also for reliance on others in the group (Haras, 2003). This next section will explore the following key concepts in more detail: wilderness leisure experiences and sense of community.

Wilderness Leisure Experiences

Wilderness and backcountry areas are settings that can help individuals and groups to grow (Ewert & McAvoy, 2000; O'Connell, 2002). Herein the term wilderness is not restricted to designated wilderness areas, but to largely undeveloped natural areas that resource managers might classify as "primitive" or "semiprimitive" on a recreation opportunity spectrum (USDA Forest Service, 1982). Such areas are chosen by wilderness trip leaders for their potential to be experienced as "wilderness" and to facilitate the aims of their programs. Wilderness experience programs are typically designed to promote personal growth, leadership, and education through outdoor activities and outdoor living (Russell & Farnum, 2004). As Ewert and McAvoy note, "People have been visiting and traveling through wilderness and wilderness-like areas, within the framework of organized groups, since the inception of humankind" (p. 13). For centuries, even millennia, wilderness was viewed as a place of desolation and hardship; more recently, however, wilderness has been seen as a place not only for personal enjoyment, but also for group growth and development (Bandoroff & Scherer, 1994; Easley, Passineau, & Driver, 1990; Nash, 2001; O'Connell, 2002; Russell & Hendee, 1999).

Much more recently, a growing body of literature asserts the positive potential of wilderness leisure experiences. These programs have been associated with such benefits as increased self-efficacy (Propst & Koesler, 1998); lowered recidivism rates for at risk youth (Wilson & Lipsey, 2000); improved self-concept and leadership qualities (Hattie, Marsh, Neill & Richards, 1997; O'Connell, 2002); and a more internal locus of control (Hans, 2000). Outdoor leisure experiences have been shown to enhance students' curricular learning in school settings through direct experience (Horwood, 2002); to help people improve interpersonal skills (e.g., engaging in group work; Russell & Burton, 2000); to provide opportunities for kinesthetic, affective, and sensory learning (Lieberman & Hoody, 1998); and to provide a venue for peoples' moral and spiritual exploration and growth (Haluza-Delay, 1999; Russell & Burton). Increasingly, wilderness has become a place where a group goes to work on being a group and to develop community and overall functioning (Ewert & McAvoy, 2000). The benefits and outcomes of group wilderness experiences often have deep, profound and lasting influences on the lives of participants (Hattie et al., 1997).

Sense of Community

Many wilderness experience programs focus primarily on facilitating positive interpersonal relationships and group experiences that foster a sense of community among participants (Mitten, 1999). The development of a strong sense of community is a common theme found in the mission statements, goals, and objectives of many wilderness trip programs. However, that said, people are most likely not making overt attempts to form connections or build community while engaged in leisure experiences such as a wilderness trip (Borgmann, 1992). Borgmann argues that certain leisure activities are composed of *focal practices* that provide a center of orientation which radiates into the surrounding social context, gathering people

together around a shared objective. The community building project is not what interests people; rather, it is the leisure activity itself (e.g., the wilderness trip) that holds the charm (Yuen et al., 2005).

A community is often defined by its members (Bellah, Madsen, Sullivan, Swindler, & Tipton, 1985), as well as by the community's long term commitment to its members (Shafer & Anundsen, 1993). In their study on sense of community and camping, Yuen et al. (2005) identified that the short-term community nature of a leisure experience, such as camp, may be more in line with a *proto-community*. Proto-communities encompass all aspects of community except for the shortened time span in which it develops (Shaffer & Anundsen).

Sense of community has been characterized as the "feeling an individual has about belonging to a group and involves the strength of the attachment people feel for their communities or group" (Halamova, 2001, p. 137). Lounsbury and DeNeui (1995) suggest a positive relationship between sense of community and group members' involvement in basic living or survival matters. This feeling of "getting back to the basics" is often an inherent perception held by individuals on wilderness trips. Participants have to focus on fundamental human needs such as travel, shelter, and food. The shared sense of purpose and the shared goals (i.e., mission and reciprocal responsibility) that result from participation on a wilderness trip experience lend themselves to the development of this sense of community (Jason & Kobayashi, 1995).

McMillan and Chavis (1986) identified four factors core to sense of community: membership, influence, integration and fulfillment of needs, and shared emotional connection. First, *membership* refers to group cohesiveness, which has been defined as the "bond that links group members to the group, the degree to which the members are attracted to one another and the group, and the unity a group has towards its members" (Wilson, 2002, p. 238). This cohesiveness is one of the key factors in the development of sense of belonging to a group (Griffin & Pennscott, 1991). *Membership* is made up of five key attributes: emotional safety, boundaries, common symbol systems, personal investment, and sense of belonging (McMillan & Chavis). Specifically, a person who feels safe in sharing his/her thoughts and concerns (emotionally safe) is clearly "in" the group instead of "out" of the group (boundaries), understands shared symbols such as inside jokes (common symbol systems), invests considerable time and energy to the group (personal investment), and feels connected to the group (sense of belonging) will experience a heightened sense of membership (McMillan & Chavis).

Second, *influence* is a bidirectional factor of sense of community according to McMillan and Chavis (1986). Individual group members must feel that they have some modicum of power to sway the group as a whole (e.g., in decision making or in setting priorities), while being open to the group's authority. As McMillan and Chavis note, "Members are more attracted to a community in which they are influential" (p. 7).

Third, *integration and fulfillment of needs* calls for a certain level of conformity for a group to function. Successful community is able to fit people together so that each person meets other members' needs while meeting his/her own; the individual/group relationship must be fulfilling for group members (McMillan & Chavis, 1986).

Finally, *shared emotional connection* is fostered through a shared history and/ or identification with the community's history. The creation of shared emotional connection through extensive interaction between group members and intensity of the group effort lends a higher degree of "groupness" as well (Mullen & Cooper, 1994). This higher degree of groupness in turn leads to social attraction between members of the group, and a concomitant emotional attachment to the group (Hogg & Abrams, 2001). Not only is the group more cohesive, but group members feel a sense of emotional connection and group self-esteem. Group members will support each other more than a member of an "out-group," and will be friendlier toward members of their own group.

With so many wilderness experience programs claiming community building as a focus, but so few studying the results, the primary purpose of this study was to examine sense of community of wilderness trip participants. It was hypothesized that sense of community would increase over time as a result of participating in a wilderness leisure experience. Additionally, the intent of the study was to better understand what factors contribute to and detract from sense of community, partly to discern the degree to which McMillan and Chavis' (1986) four elements discussed above are obtained in outdoor programs, and partly to determine if other factors are in play. Results should provide wilderness trip providers with concrete ideas about how to better design these outdoor leisure experiences to encourage sense of community.

Methods

This methods section will provide an overview of the participant pool, data collection procedures, and instrumentation followed by an account of the process of data analysis.

Participants

Participants were primarily sophomore and junior recreation majors from a 4-year comprehensive college in upstate New York enrolled in a 13-day Outdoor Education Practicum course during the summers of 2006 and 2007. Required of students regardless of their specialty (outdoor, therapeutic, management, or general recreation), the course focused on teaching outdoor living skills using both a large centralized camp and smaller decentralized trip groups as sites. Students thus spent seven days in a camp-like resident outdoor education setting and six days on a wilderness canoe trip in New York's Adirondack Park.

Students were assigned to one of fourteen trip groups designed to be as equivalent as possible in terms of gender, personalities, experience, and skill level. Students who were already good friends were intentionally separated, resulting in trip groups of five to seven students initially best described as acquaintances. These assignments were done by the course instructor, in consultation with the trip group leaders but with no input from the students themselves. This process of balancing trip groups without student consultation is fairly common practice, particularly in university programs similar to this one. One student staff, who had previously taken the course, and one senior staff were also assigned to each group. The vast majority of senior staff members had been involved in the course for 10 to 30

years, were well-trained, and were comfortably familiar with the course structure, its objectives, and their expected roles.

Group membership was assigned the evening of Day 3 of the course. Although some community building activities occurred during the initial days of the course, they were primarily "ice breakers" aimed at the total camp group. Community building within trip groups, the focus of this study, did not begin until the third evening when the groups of acquainted individuals were formed. Trip group members met frequently over the next two days to review their assigned trip routes, plan their equipment and food needs, set group and personal goals, and work together to practice their technical skills in a Campcraft Olympics as well as their problem-solving and communication skills in low ropes initiatives. On the morning of Day 6, the groups embarked on their 6-day canoe trip, returning to the base camp on the morning of Day 11 for two days of debriefing as a larger centralized camp. These final two days included tasks such as cleaning and storing equipment as well as trip group meetings and activities, all-camp discussions, and closing ceremonies (e.g., a final banquet where trip groups presented each member with awards, a final evening program with trip group skits, and a closing campfire or candle lighting ceremony preceded by an anonymous "touch someone who..." affirming activity).

Data Collection

This study employed multiple methods, using questionnaires at three points during the program to gather quantitative questionnaire data and qualitative focus groups several months later to gather retrospective qualitative data.

Questionnaire data collection. In the summers of 2006 and 2007, a total of 101 students participated in the outdoor pursuits program. Ninety-eight students in total from those two years completed two different surveys: the Perceived Sense of Community Scale (Bishop, Chertok, & Jason, 1997), and the Group Cohesion Evaluation Questionnaire (Glass & Benshoff, 2002) on three separate occasions during the two-week outdoor practicum experience. Each student participated in the study only once, 48 students in 2006 and 50 students in 2007. Instruments were administered by senior staff members the first night trip groups were formed (Day 3) and the first night the trip groups returned to base camp (Day 11); the course director implemented the third administration on the last morning of the course (Day 13).

According to Halamova (2001), the Perceived Sense of Community Scale (PSCS; Bishop, et al., 1997) is one of few available scales that measures psychological sense of community regardless of group context. The PSCS consists of 30 items measured on a 5-point scale, ranging from "not at all true" (1) to "completely true" (5). The 30 items can subsequently be broken down into three subscales. The first, Mission, composed of 12 items revolving around group goals and responsibilities (e.g., "There is a sense of common purpose in this group"), captures the *integration and fulfillment of needs* element of community as theorized by McMillan and Chavis (1986). The second, Reciprocal Responsibility, with 12 items reflecting how group members look out for and depend on each other (e.g., "Members know they can get help from the group if they need it"), relates to McMillan and Chavis'

notion of *influence*. Finally, Harmony, made up of 6 reverse-coded items exhibiting a theme of how well group members get along with each other (e.g., "Some people feel like outsiders at meetings"), relates to *shared emotional connections* as proposed by McMillan and Chavis.

The Group Cohesion Evaluation Questionnaire (GCEQ) was used to measure *membership*. Originally developed for use with challenge courses, the GCEQ consisted of nine items measured on a 4-point Likert scale (1 – not at all like me/my group, 2 – a little like me/my group, 3 – a lot like me/my group, and 4 – exactly like me/my group). Glass and Benshoff (2002) confirmed the existence of a 9-item scale with acceptable reliability.

Focus Group Data Collection

In November 2006 (the first year of the study), all 48 students enrolled in the course during the summer of 2006 were invited to participate in follow-up focus group sessions. Twenty-three student participants voluntarily chose to be involved. Students were assigned to one of the three focus groups of 7 to 8 participants according to membership in their original wilderness trip group. Although participants may have been less willing to bring up certain issues in front of fellow trip group members who were directly involved in situations, groups were kept as intact as possible in the spirit of a "trip group reunion" and to increase credibility and dependability of the data (i.e., one group member's comments might spark other members to elaborate, clarify, or reinforce them). However, because not all original trip group participants chose to participate in the focus group sessions due to scheduling conflicts or previous commitments, each focus group was comprised of two "incomplete" original trip groups. Six members of the research team facilitated the focus group sessions (two members each) for approximately one hour. One person served as the primary facilitator, while the other served as note-taker.

During the focus group session, students were queried about the following:

- What was your favorite part of your Raquette Lake experience? *Follow-up probe, if necessary:* What was your favorite part of your canoe trip?
- 2. On a scale of 1-10 with 1 being "no sense of community" and 10 being "strong sense of community," rate your trip group experience. Why? How? (*Use the following probes*)
 - a. What are some aspects of the trip that led you to feel that way? Specific examples?
 As then "hubble out " probe for How? and When? and What coursed

As they "bubble out," probe for How? *and* When? *and* What caused that feeling?

- b. Thinking about the senior staff who led your canoe trip, what things about them promoted a positive sense of community on the trip? Any specific examples? Was there anything they did that detracted from the sense of community?
- 3. Do you have any suggestions on how to improve the sense of community on the canoe trip?

Data Analysis

Questionnaire Data. Data were coded and entered into the Statistical Package for the Social Sciences (SPSS), and scores were calculated for the PSCS (overall Community index) and its three subscales (i.e., Mission, Reciprocal Responsibility, and Harmony). An overall score was calculated from the GCEQ and used to represent membership. Scores were created for these variables for each of the three data collection points (i.e., Day 3, Day 11, and Day 13), resulting in 15 key variables for use in subsequent analyses.

Reliability coefficients were calculated for these instruments and subscales. Repeated measures analyses of variance (ANOVA) were conducted to detect significant change in students' perceptions of sense of community as recorded by the PSCS, its three subscales, and the GCEQ over the course of the two-week program. Post-hoc differences among the three data collection points were examined by paired t-tests with Bonferroni adjustments for multiple comparisons.

Focus Group Session Data. The qualitative portion of the study was guided by the conceptual framework of grounded theory (Gay & Airasian, 2003). Data from the focus group sessions were fully transcribed. The qualitative research software Atlas.ti was employed to manage the data.

The process of data analysis was inductive and emergent in nature and guided by theoretical framework of grounded theory (Bogdan & Biklen, 2003; Taylor & Bogdan, 1998). Data analysis of the qualitative data thus began with a read through of all transcriptions by one member of the research team. Transcriptions were read in the spirit that Berg (2004) suggests: "as a passport to listening to the words of the text and understanding better the perspective(s) of the producer of these words" (p. 269).

Analysis in grounded theory consists of a process of constant comparison and the identification of underlying uniformities (Schwandt, 2001). This process of inductively comparing the data and examining the relevant literature generated a precursory theory of the relationship between participation on wilderness trip experiences and perceived sense of community.

Categories and themes that emerged out of participants' responses to the interview questions were thus compared and then identified, resulting in the establishment of numerous thematic codes. The qualitative research software package Atlas.ti was employed to code the data in accord with the categories and themes that resulted from the above processes. These selected passages are called "quotations" within the Atlas.ti program. Certain categories and themes were added as each passage was coded and read through and compared again. The process of data analysis additionally involved merging some of the codes based on the process of constant comparison.

Finally, to check the fit between what the researcher "saw" in the data and what actually occurred in the field, a dependability audit was conducted by a second member of the research team to assess for the credibility, transferability, dependability, and confirmability of the research findings (Henderson, 2006). This "auditor" read through a sample of the data in the preliminary analysis stages as a way to check the dependability or reliability of the major codes identified by the researchers (Lincoln & Guba, 1985). The auditor was provided with a sample of

the data (three focus group transcriptions) which seemed to represent a range of the perceptions and behaviors during the study, plus a list of the research questions being posed in the study. The auditor was asked to give impressions of the major codes or variables evident in the data.

Results of the dependability audit showed strong agreement between the analysis done by the researcher who first read through the transcriptions and the auditor on the major codes. Although slightly differing vocabulary was used to describe the emerging themes and codes, the substantive meaning aligned very well (e.g., group cohesiveness versus group connectedness) throughout the sample of data audited.

Results

The results from the questionnaires and focus groups will be presented separately in this section, followed by an integration of the findings in the discussion. Pseudonyms will be used throughout the presentation of results and discussion.

Questionnaire Results

As previously mentioned, a total of 101 students participated in the outdoor pursuits program, with 98 agreeing to participate in the quantitative portion of the study (97% response rate). The students' ages ranged from 19 to 52 (M = 22.9) and 56 percent were female.

Reliability analyses were conducted for the GCEQ and PSCS. The GCEQ had an acceptable Cronbach's alpha of 0.96. For the PSCS, Cronbach's alphas registered 0.96 for the overall scale, 0.93 for the Mission subscale, and 0.96 for Reciprocal Responsibility. However, the Harmony subscale's reliability (0.59) was at a much lower level of acceptability as suggested by Nunnally (1978). Although the reliability coefficient for the Harmony subscale was low, the authors chose to include the results, but note that they must be interpreted with caution.

Means and standard deviations were calculated for the overall Community, Mission, Reciprocal Responsibility, Harmony, and overall Cohesion scores at each of the three data collection points (Table 1).

		Day 3		Day 11			Day 13		
Measure and variable	Ν	М	SD	М	SD	М	SD	df	F
Community (PSCS)	97	3.56ª	0.71	3.96 ^b	0.73	4.16 ^c	0.64	2	43.56**
Mission	96	3.34ª	0.82	3.74 ^b	0.83	3.95°	0.74	2	39.66**
Reciprocal Responsibility	97	3.50ª	0.91	4.05 ^b	0.89	4.28 ^c	0.73	2	44.69**
Harmony	92	4.15 ^d	0.58	4.25	0.64	4.34 ^e	0.67	2	4.30*
Cohesion (GCEQ)	92	3.02ª	0.65	3.33 ^b	0.72	3.50°	0.58	2	21.25**

 TABLE 1: DESCRIPTIVE STATISTICS, REPEATED MEASURES ANOVAS, AND

 POST-HOC ANALYSES FOR PSCS AND GCEQ

Note. *p<.05. **p<.001.

Values with different superscripts (^{a, b, c}) are significantly different at the .001 level. Values with different superscripts (^{d, e}) are significantly different at the .05 level. Table 1 also indicates the results of the repeated measures ANOVA from the PSCS for the overall Community scale, the Mission, Reciprocal Responsibility, and Harmony subscales, as well as for the Cohesion scale used to measure *membership* from the GCEQ. The repeated measures ANOVA indicated there were significant differences in each of the scales over the three data collection points. The results from the overall Community scale, Mission, Reciprocal Responsibility, and overall Cohesion scale were significant at the *p*<.001 level, and there was also a significant difference in the Harmony subscale at the *p*<.05 level.

Paired sample t-tests with Bonferroni corrections were used in the post-hoc analyses of the variables of interest in this study (see Table 1). With the exception of the Harmony Scale, there was a significant increase at the p<.001 level in each of the scales from Day 3 to Day 11, Day 11 to Day 13, and Day 3 to Day 13. There was a significant increase in the Harmony scale from Day 3 to Day 13 at the p<.05 level. However, there were no significant gains from Day 3 to Day 11 or from Day 11 to Day 13, indicating that students only experienced significant gains in Harmony over the full duration of the wilderness experience and two days back in the organized camp setting.

Focus Group Results

Most of the students who participated in this study ranked their overall perceived sense of community as "high" by the end of their wilderness trip experience and spoke about which aspects about the trip experience positively contributed to this "high" perceived sense of community during the follow-up focus group sessions. Participants reported several factors that contributed to sense of community and also reported factors that detracted from sense of community.

Factors contributing to sense of community. According to participant reports, group-oriented activities, preparing and eating trip group meals, trip challenges, and debriefing activities were cited as factors that contributed to psychological sense of community. Additional factors reported by participants included: the feeling of "getting away from it all;" meeting new people; holding a common goal; and traveling in the Adirondacks.

"Group activities" and group identity were cited frequently as factors that contributed to psychological sense of community. For example, Chris said, "I think [about] how we bonded. How our trip group came together every single night and just sat around playing cards and talking." Similarly, Jake stated, "I think a lot of it that actually happened was doing the activities together. Every day we did stuff together with our group, just getting to know each other. I think having just your trip group people." Leah followed with, "Yeah, it sounds kind of weird I guess, but it's good not to have other people around. It helped [establish] a group [identity]."

Group members helping each other in group activities, "pulling their weight," and feeling connected through group activities were other salient themes in this category. For example, Jill said,

I thought it was really cool, when we were on the trip, whether or not we were having a good day or a bad day, we were all together anyway and we were all in that together, so it was kind of cool, and we had that sense of group. Kate responded to Jill's comment by saying,

Yeah, because even at the end of the day, our whole thing was really putting the bear bags up together, and it was like the most fun ever and it shouldn't have been. It was ridiculous. But it [shared group "work" activity] was always so much fun, just to be together and laugh.

Students said that eating and preparing meals, particularly on trips, was another positive contributing factor that enhanced their feelings of sense of community. Jamie stated, "My favorite part of the trip and camp was the meals. Everyone was together." A student responded to this comment adding, "I agree with what Jamie said about the meal times on the trip were good because we were always coming together, and it was always a nice time, because we end up talking about the day." These everyday living activities helped create a sense of group membership.

In addition to group activities and meals, students felt that challenges from the trip experience were an important contributing factor to positive feelings of community. Pat asserted that the weather and physical challenges contributed to his feeling a sense of community, stating:

We hiked, and half the time we hiked we used our water shoes. The trails had like six inches of water in them. And we had so many challenges, and I was like, I can't wait. And about two months later after our trip, I was like, I accomplished that. I just went through six days of miserableness and I came out of it, and I'm still smiling and it changed me as a person completely. Like I wasn't sure who I was at that point, and I totally know who I am now. And I came back for that reason, to do this with new student staff to see that happen with people. I think that's amazing.

A number of students also cited the importance of reflection and debriefing, particularly pertaining to some of the culminating activities from the two-week experience. Nate reported,

We did this [final] ceremony thing, where like we were all sitting in a circle and we had our eyes closed and like a group of people would get up and touch people for different things that someone was reading out. And there were more men crying than I have ever seen in my entire life, like everyone really got in to it, there really wasn't any non-participators in that activity and I cried. That was my favorite part.

The trust level exhibited during debriefing and other trip and group activities exemplified the sense of safety that developed within the groups.

Other factors that were cited by participants as enhancing a sense of community included the feeling of "getting away from it all," meeting new people, holding a common goal, and traveling in the Adirondacks. For example, Phil said that:

Getting to know other people that are in the rec. program [added to my experience] because I came in as a transfer and one of my classes was OEP, so I was kind of just thrown right into it, and it was just great to get to know so many people in the Rec department really helped in that transition from the whole community college into a four year program. Phil reported that the nature of this type of "remote" wilderness experience helped him feel more integrated into the recreation department "community" as a whole, not just during the trip but after. Ed responded that there was something special about the place itself, the Adirondack environment, that seemed to add to the development of community and the group.

Factors detracting from sense of community. There were also several factors that participants cited as detracting from psychological sense of community. Not enough debriefing, inadequate time together post-trip, not enough time out on the trip, being in the big boat, unequal contributions from all group members, and "too much challenge" were cited by student participants.

Many participants expressed that there was inadequate debriefing to encourage sense of community among trip group members. Will reported,

We didn't have too much of a debriefing session, like our leader would ask us like, he'd throw ideas out there, or questions like how could we do this better or how can we unload. We really wouldn't get our group together and go through the debriefing process.

Clare concluded:

I think if we had a debrief session maybe half-way through, we could have solved some of the problems that we sort of ignored all the time, by guessing other peoples' needs and then it would all be out in the open instead of our little [cliques].

Inadequate time together in camp following the trip was another factor that detracted from a sense of community. A number of participants asserted that the two days back in camp post-trip are too stressful and lead to decreased sense of community. In reference to those two post-trip days, Mike said:

Not that I'm just overwhelmed, but if I'm going to do something, I want to give my hundred percent, but I couldn't give my hundred percent and that pains me because there wasn't enough time in there to get all the stuff done that I could.

Another emerging factor that detracted from sense of community was not enough time out on the wilderness trip. Carl felt that the time on trip was too short, concluding, "I understand that there are time constraints on a trip, but it kind of felt like there wasn't much time to understand your surroundings. You know, we have fourteen miles to go today and get here by this time."

Being in the "big boat" was another detractor to sense of community. One of the trip groups opted to take a 24-foot cedar strip canoe [called the "big boat"] instead of tandem boats, and one student from that group reported that "sometimes in our group on the big boat we fought." She wondered if paddling in tandem boats would have contributed more positively to feelings of community among group members.

Unequal contributions of group members was another factor that emerged from the participants' responses. Melissa expressed her concern that unequal contributions from individuals within her trip group detracted from sense of community, asserting:

Individuals in our group who I felt were not putting as much effort into it as I was [detracted from my feeling a strong sense of community] or things were not getting done that I was doing; then again there were probably times when people felt that way about me.

A final factor that detracted from sense of community was the perception that, at times, there was too much challenge on the trip. According to student reports, bad weather (or bugs, for that matter) that was constant and intense detracted from sense of community. Other difficult challenges such as a canoe tipping, according to one student report, also detracted from sense of community.

In summary, it should be noted that there were certain factors that participants reported as being both a positive contributing factor to sense of community and a factor that detracted from sense of community (e.g., big boat and too much challenge). This is not surprising given that individuals perceived the experience differently. For example, during the focus group session, one student said that paddling in the "big boat" detracted from her feeling a sense of community because group members were in "too close" proximity to each other while another student responded that he felt that the "close quarters" contributed to his feeling very connected to his group. Challenging physical activities inherent to outdoor pursuits such as portaging canoes and equipment were cited by students as creating sense of community.

Discussion

As highlighted in the results, many of the students from 2006 that participated in the focus groups spoke positively of their experiences of being a trip group member, generally rated overall sense of community as "high" by the end of their experience, and reported (through the quantitative data) that sense of community increased as a result of participating in outdoor pursuits trips. The students emphasized how their in-camp experiences and being out on trip heightened the connectedness among group members. Questionnaire participants also reported that they experienced positive increases in the various components of sense of community identified by McMillan and Chavis (1986; i.e., membership, influence, integration and fulfillment of needs and shared emotional connection). A discussion of how the outdoor pursuits experience affected these facets of community for students is followed by recommendations for practice and research, as well as limitations to this study.

Membership

The nature of wilderness recreation experiences, and in particular outdoor pursuits trips, creates a medium in which groups form and helps establish group *membership*, one of the primary elements of community (McMillan & Chavis, 1986). In this study, **analysis of questionnaire data found that membership** (measured as cohesion using the GCEQ) increased significantly from Day 3 to Day 11 to Day 13. Focus group findings suggest that the structure of the outdoor pursuits program and the challenges of the canoe trip itself immediately created aspects of membership as cited by McMillan and Chavis. According to participant reports from this study, trip groups provided a sense of safety, a group with which students could identify, and allowed members to develop unique methods of every-day living (e.g., preparing meals and "just being together"). These aspects of being in a group are congruent with the construct of membership (McMillan & Chavis).

The findings from this study are consistent with those of Lyons (2003), who suggested that routine behaviors developed by groups promote membership by helping to create boundaries, which enhances feelings of community. In addition, in outdoor pursuits trip groups, boundaries are usually established quite quickly as these trips occur in remote environments where contact with other people might not happen for days at a time. Membership in this type of leisure group takes on a level of intimacy that likely enhances sense of community membership more so than in other kinds of groups. The findings in this study regarding a significant increase in feelings of membership also support Ewert and McAvoy's (2002) conclusion that "short-term wilderness experiences appear to be useful in building team morale, cohesiveness, and functioning" (p. 18). Cohesiveness in a group setting such as outdoor leisure experiences encompasses an individual group member's relationship not only to the group leader, but also with other group members, and the group as a whole (Griffin & Pennscott, 1991).

Influence

McMillan and Chavis' (1986) second element of sense of community, *influence*, is reflected both by individuals being able to sway the group as well as the group's ability to impact the individual. Operationalized as the Reciprocal Responsibility sub-scale of the PSCS on the questionnaire, *influence* was found to increase significantly from Day 3 to Day 11 to Day13. Focus group results supported this finding. Participants reported several factors that reflect this aspect of sense of community, such as individuals helping each other, "pulling their weight," trusting in others, and feeling connected through group activities.

While students were unable to choose the specific trip group to which they were assigned, they noted that the group-oriented activities such as pre-trip group initiative problems contributed to their feeling of sense of community as did shared tasks. Because of their close physical proximity and the need to work together to accomplish tasks, students were persistently in a position to observe the results of others' actions (Russell & Farnum, 2004) and to learn and grow and self discover as a result. The group setting and communal living environment provide a unique platform for social learning interactions to occur and for the development of sense of community (Russell & Farnum).

When some individuals chose to focus more on themselves and not be influenced by the group as a whole, sense of community suffered. For example, people contributing unequally, or not "pulling their weight" detracted from participants' sense of community. Forsyth (1999) refers to this as social loafing, or allowing others to do the group's work while appearing to contribute. Students reported that this inequity often led to personality clashes, as some students felt they contributed more while others contributed less. During day-to-day activities, participants needed to work together to get group tasks accomplished, from cooking dinner to setting up tarps to conducting group debriefs. These task-oriented goals facilitated social learning and sense of community by encouraging communication among group members and sharing learned knowledge (Russell & Farnum, 2004). Students often had to collaborate on jobs in order to meet basic needs. Performance of these activities leads to observational learning and, at the same time, mutual collaboration is promoted (Russell & Farnum).

Integration and Fulfillment of Needs

On the questionnaire, the Mission sub-scale of the PSCS was used to measured McMillan and Chavis' (1986) third element of community: *integration and fulfillment of needs*. Results found a significant increase in mean scores from Day 3 to Day 11 to Day 13. Many of the factors identified by focus group participants that impacted sense of community were also related to *integration and fulfillment of needs*. This is most clearly illustrated by comments made about factors such as group activities, shared goals (i.e., *mission*), and trip challenges that suited group ability levels. Challenging activities inherent to outdoor pursuits such as portaging canoes and equipment were cited by students as creating sense of community, as these activities provide immediate and direct feedback on the group's success in meeting that challenge. Participants in this study identified these shared goals as contributing directly to feelings of community.

While some of these challenges unfold naturally as part of the trip and the group development process, others were intentionally included as part of the program design. This is consistent with the contention of Mitchell, Dowling, Kabanoff and Larson (1988) who suggested that developing community is best achieved through conscious, intentional efforts. Trip activities that contained an appropriate level of challenge positively affected sense of community, while challenges that were too great negatively impacted community, as some group members were unable to reach their goals and/or felt overstressed. For example, one student reported his trip group was too goal-oriented, creating tension that detracted from his feeling a sense of community. Other students mentioned the "close quarters of the big boat," which was an intentional choice by the group. Although physical proximity was initially thought to be a key aspect of community (Sarason, 1974), too much closeness can create interpersonal conflict, particularly in a wilderness setting in which it is sometimes difficult to find personal space away from the group.

Unintentional or overly rigorous challenges also affected feelings of community. According to student reports, challenging weather promoted sense of community, but only if the challenge was for a short duration and not too intense. However, bad weather that was constant and intense detracted from sense of community. Other unintended challenges (e.g., a canoe tipping, according to one student report) also detracted from sense of community. Students may have perceived these challenges as interfering with their own goal attainment (i.e., arriving to a camp site earlier), leading to conflict and decreased feelings of community.

Fine and Holyfield (1996) would consider the wilderness trip to exemplify the concept of what they refer to as dangerous leisure—a leisure experience that relies

on mutual aid in achieving desired ends and avoiding tragic outcomes. Students from this study reported the importance of people helping each other and the need for reliance on one another as contributing to their feelings of connected-ness. The mutual trust that results from these connections enhances attachment, thus enhancing sense of community (Fine & Holyfield). Findings from this study support Ewert and McAvoy's (2000) conclusion that:

Wilderness experiences work to build groups as long as the trip is not too long, too stressful or too demanding. Cross the line of demands and challenges and a functioning group with effective group dynamics tends to diminish in effectiveness, functioning, and individual morale. (p. 18)

Shared Emotional Connection

Another element of outdoor pursuits trips that leads to enhanced sense of community is *shared emotional connections* (McMillan & Chavis, 1986). In this study, the Harmony sub-scale of the PSCS was used to operationalize this fourth element of community in the questionnaires. As previously noted, Harmony was the least reliable sub-scale with a Cronbach's alpha of 0.59. In the only other study reporting reliability analyses of the sub-scales of the PSCS, Halamova (2001) found the Harmony sub-scale had a Cronbach's alpha of 0.60. This is only nominally better than the current results. A significant increase in this variable was found only from Day 3 to Day 13, while the other three elements (measured as Cohesion, Mission, and Reciprocal Responsibility) significantly increased over all three data points (Day 3 to Day 11 to Day 13).

Several factors may have contributed to these findings. First, the Harmony sub-scale was the only index where each item was worded negatively and reversecoded, increasing the chance of misinterpretation due to the complexity of the thought process involved in rating each statement. Second, a lack of harmony may actually have been the catalyst that *led* to sense of community instead of *re-flecting a lack* of community. Working through differences may have taken longer for trip groups to achieve compared to the other three elements of membership, influence, and need integration and fulfillment; the context of the large camp debriefing may have also provided necessary closure for harmony to occur. Focus group data support these conclusions.

Results from the focus group data support other possible conclusions as well. According to the relevant literature, leisure settings have been identified as a place for people to develop shared meanings through the process of involvement and learning (Yuen et al., 2005). In reference to this present study, meeting people and sharing of group activities was articulated by several students as being a highlight of the trip for them. This sharing of knowledge and experience helps form a basis for establishing tight-knit social connections. These connections help to create stability within the group, establishing collective attachment and cohesion and, as a result, personal satisfaction with an experience and positive emotion (Fine & Holyfield, 1996).

In reference to this present study, students noted that debriefing activities, particularly those on the last night of camp that occurred after the trip was over

and groups were back in the centralized camp setting, also contributed to shared emotional connections. Organized trip group and large group debriefing facilitated by senior staff may have assisted students in identifying and integrating feelings of shared emotional connections and membership into their feelings about their experience. In the late 1960s, there was great debate within the wilderness trip provider community that had on the one side the idea that trip providers should "let the mountains speak for themselves" versus the idea (on the other side of the debate) that deliberate, guided facilitation needed to be an integral component of an outdoor leisure experience for students to grow and learn (Russell & Farnum, 2004). Wilderness trip leaders on the latter side of the debate contend that with guided reflection and debriefing, participants are more likely to leave an outdoor leisure experience with enhanced learning that may be more relevant and transferable (Fabrizio & Neill, 2005). In fact, most outdoor leadership facilitation models, including Walsh and Golins' (1976) Outward Bound Process Model, Kolb's (1984) Experiential Learning Cycle, and Priest and Gass' (2005) Six Generations of Facilitations Skills, emphasize the transformative potential of reflection and debriefing on trip participants' learning and experiences. The results from this particular study seem to resonate with this conclusion.

Back in camp, participants also had formal and informal opportunities to compare their experiences with students from other trips groups, and may have come to realize that they actually got along better with their own group than they originally thought. Social identity theory (Turner & Oakes, 1986) may explain this as it asserts that group membership creates in-group enhancements that favor the in-group at the expense of the out-group and make positive evaluations salient. For instance, Turner and Oakes showed that the mere act of individuals categorizing themselves as group members was sufficient to lead them to display in-group favoritism and higher liking and emotional attachment. Furthermore, they found that group members tried to boost their individual self-esteem by seeking positive ways to differentiate their in-group from out-groups, particularly when the in-group was central to their self-definition and the context of the situation promoted comparison with out-groups on some relevant and meaningful dimension. The post-canoe trip debriefing sessions, both trip group and the group as a whole, allowed for these comparisons to occur under guidance by senior staff. These sentiments of feeling a shared emotional connection are clearly seen in scholarly literature in which the "esprit de corps" is a centerpiece of the writing. As Sharpe (2005) noted in her study of the development of community in integrated wilderness trips, communities that form are less about "instrumental relationships" and more about "shared interests and emotions."

Recommendations

Although outdoor pursuits trips are well-suited to allow a positive sense of community and group cohesion to develop within groups, there are several ways in which trip leaders and program directors can ensure opportunities exist to maximize these perceptions. First, leaders and directors can create opportunities for socializing and for camaraderie to develop. Encouraging people to eat at the same time and in the same place allows for bonding to happen and for community to develop. Conscious program design and manipulation of logistics can allow for shared emotional connections to develop, which in turn enhance sense of community.

Second, the results from this study indicate that building sense of community and group cohesion can be accomplished with a more deliberate focus on pretrip and post-trip activities. Conducting pre-trip group activities that help the trip group "form" and "bond" and conducting frequent and effective debriefing activities can serve to further support community building among group members. This suggests that outdoor leaders should be familiar with a variety of debriefing activities, as well as the facilitation models previously mentioned.

Finally, leaders and directors can ensure that the challenge level is appropriate for the group skill level. This is a difficult task as some group members might be expecting different levels of challenge. However, careful route selection and frontloading and debriefing of activities can assist group members in coping with being under or over challenged. Participants in this study noted that a key "ingredient" in successfully creating community was adding "just the right amount" of challenge to outdoor pursuits trips. This leads to both shared emotional connections as well as to positive integration and fulfillment of needs, which in turn enhances sense of community. The research team has studied the influence of leadership style (and thus how a leader is most likely to facilitate how a group confronts a challenge) on trip group experience related to sense of community. Early results suggest that leaders who adopt a situational leadership style (choosing a leadership style that is situationally appropriate) tend to have groups of students who perceive a higher sense of community (O'Connell, Todd, Breunig, Young, Anderson, & Anderson, 2008). Specific aspects of the influence of leadership style on sense of community continue to be explored and are not yet fully understood.

The limitations to this study should be noted. As previously mentioned, the reliability analysis for the Harmony subscale of the PSCS was below conventionally accepted levels. As such, results related to that subscale should be interpreted with caution. Researchers might consider using a different measure of shared emotional connection than the Harmony sub-scale of the PSCS due to its relatively low reliability.

In addition, the students on these wilderness trips were recreation majors learning outdoor skills and learning to live in community with one another. This non-explicit, but implied, intended program goal likely had some influence on the results, including students' capacity to articulate personal and group growth and changes in perceived sense of community. Also, given their previous university coursework, including some knowledge of the research process, it is likely that students had the "language" to assist the researchers in uncovering and "unpacking" the essence of the concepts being studied. Despite these limitations, sense of community appears to be an important outcome of outdoor pursuits trips. Closer examination of the factors that promote or detract from sense of community are warranted as Sharpe (2005) aptly prompts, "Attention to these unique characteristics can help us make sense of the experiences reported within these communities as well as better understand their role in fostering social solidarity" (p. 278). For example, factors such as the effects of gender and culture could be considered in

future research. Several program design elements such as sequencing of activities, manipulation of level of challenge, debriefing the experience, effects of leadership on sense of community, and sense of place could also be examined.

Conclusion

These results document the intended outcomes of the outdoor pursuits program studied. They also support the program structure and delivery, which has been designed to promote community-building among participants. In fact, many program alumni cite their experiences in these outdoor pursuits trips as a seminal part of their university experience, and maintain lifelong friendships with group members.

Although common sense would suggest that all participants would feel enhanced sense of community as a result of participating in outdoor pursuits trips, the relative lack of published research in this area does not provide sufficient evidence of this. However, the results from this study add to the body of literature on group dynamics in outdoor adventure education settings, and successfully apply the theory of sense of community (McMillan & Chavis, 1986) to the broader recreation and leisure field.

References

- Bandoroff, S., & Scherer, D. (1994). Therapeutic family therapy: an innovative treatment approach for problem youth. *Journal of Child and Family Studies*, *3*(20), 175-191.
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swindler, A., & Tipton, S. M. (1996). Habits of the heart Introduction to the updated edition: The house divided. Los Angeles, CA: University of California Press.
- Berg, B. L. (2004). *Qualitative research methods for the social sciences* (5th ed.). Boston, MA: Pearson Education, Inc.
- Bishop, P. D., Chertok, F., & Jason, L. A. (1997). Measuring sense of community: Beyond local boundaries. *The Journal of Primary Prevention*, 18(2), 193-213.
- Bogdan, R., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theory and methods* (4th ed.). Boston: Allyn and Bacon.
- Borgmann, A. (1992). Crossing the postmodern divide. Chicago: University of Chicago Press.
- Coalter, F. (1998). Leisure studies, leisure policy and social citizenship: The failure of welfare of the limits of welfare? *Leisure Studies, 17*, 21-36.
- Easley, A. T., Passineau, J. F., Driver, B. L. (1990). The use of wilderness for personal growth, therapy, and education. Gen. Tech. RM-193. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.
- Ewert, A., & McAvoy, L. H. (2000). The effects of wilderness settings on organized groups: A stateof-knowledge paper. In S. F. McCool, D. N. Cole, W. T. Borrie & J. O'Loughlin (Eds.), Wilderness science in a time of change conference - Volume 3: Wilderness as a place for scientific inquiry (pp. 13-26). Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

- Fabrizio, S. M., & Neill, J. T. (2005). Cultural adaptation in outdoor programming. Australian Journal of Outdoor Education, 9(2), 44-56.
- Fine, G. A., & Holyfield, L. (1996). Secrecy, trust, and dangerous leisure: Generating group cohesion in voluntary organizations. *Social Psychology Quarterly*, 59(1), 22-38.
- Forsyth, D. (1999). Group dynamics, (3rd ed.). Belmont, CA: Wadsworth.
- Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and applications* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Glass, J., & Benshoff, J. (2002). Facilitating group cohesion among adolescents through challenge course experiences. *Journal of Experiential Education*, *25*(2), 268-277.
- Griffin, B., & Pennscott, W. (1991). The development of cohesiveness and self-esteem in an experientially oriented training group. *TACD Journal*, *19*, 53-58.
- Halamova, J. (2001). Psychological sense of community: Examining McMillan Chavis' and Peck's concepts. *Studia Psychologica*, 43(2), 137-148.
- Haluza-Delay, R. (1999). The semantics of adventure programming. In J. C. Miles & S. Priest (Eds.), *Adventure programming* (pp. 445-454). State College, PA: Venture Publishing.
- Hans, T. A. (2000). A meta-analysis of the effects of adventure programming on locus of control. *Journal of Contemporary Psycotherapy*, 30(1), 33-60.
- Haras, K. (2003). *An exploration of meaningful involvement in ropes course programs.* Unpublished Doctoral Dissertation, Texas A & M University, College Station, TX.
- Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of class experiences that make a lasting difference. *Review of Educational Research*, 67(1), 423-87.
- Henderson, K. (2006). *Dimensions of choice: Qualitative approaches to parks, recreation, tourism, sport, and leisure research* (2nd ed.). State College, PA: Venture Publishing.
- Hill, J. (1996). Psychological sense of community: Suggestions for future research. *Journal of Community Psychology*, 24(4), 431-438.
- Hogg, M., & Abrams, D. (2001). Intergroup relations: Essential readings. London: Taylor & Francis.
- Horwood, B. (2002). The influence of outdoor education on curriculum integration: A case study. *Pathways: The Ontario Journal of Outdoor Education, 14*(2), 6-12.
- Jason, L. A., & Kobayashi, R. (1995). Community building: Our next frontier. *The Journal of Primary Prevention, 15*(3), 195-208).
- Johnson, R., & McLean, D. (1994). Leisure and the development of ethical character: Changing views of the North American ideal. *Journal of Applied Recreation Research*, *19*, 117-130.
- Kleiber, D. (1999). *Lives in context: A dialectical interpretation—Leisure and experience and human development.* New York, NY: Basic Books.
- Kolb, D. A. (1984) *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Lieberman, G. A., & Hoody, L. L. (1998). *Closing the achievement gap: Using the environment as an integrating context for learning*. San Diego, CA: State Education and Environment Roundtable.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage
- Lounsbury, J., & DeNeui, D. (1995). Psychological sense of community on campus. *College Student Journal*, 29, 270-277.
- Lyons, K. D. (2003). Exploring meanings of community among summer camp staff. *World Leisure*, *4*, 55-61.
- McAvoy, L., Lais, G., Anderson, L. & Schleien, S. (1995). Wilderness and persons with disabilities: A review of research and policy directions. *Trends*, *32*(1), 33-37, 48.

- McMillan, D., & Chavis, D. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6-23.
- Mitchell, T. R., Dowling, P. J., Kabanoff, B. V., & Larson, J. R. (1988). *People in organizations: An introduction to organizational behavior in Australia*. Sydney: McGraw-Hill.
- Mitten, D. (1999). Leadership for community building. In J. Miles & S. Priest (Eds.), Adventure *Programming*. State College, PA: Venture Publishing.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115, 210-227.
- Nash, R. F. (2001). Wilderness and the American mind (4th ed.). New Haven, CT: Yale.
- Nunnally, J. (1978). Psychometric theory. New York: McGraw Hill.
- O'Connell, T. S. (2002). Multidimensional self-concept and outdoor adventure education with adolescents. In M. D. Bialeschki, K. Henderson, A. B. Young, & R. G. Andrejewski (Eds.), *Research in Outdoor Education, Vol. 6.* Cortland, NY: Coalition for Education in the Outdoors.
- O'Connell, T. S., Todd, S., Breunig, M., Young, A., Anderson, L., & Anderson, D. (2008). The effect of leadership style on sense of community and group cohesion in outdoor pursuits trip groups. In J. Hinton, J. Sibthorp, A. B. Young, & M. A. Anderson (eds.), *Research in Outdoor Education, Vol. 9*. Cortland: The Coalition for Education in the Outdoors, SUNY Cortland, pp. 43-59.
- Priest, S., & Gass, M. (2005). *Effective leadership in adventure programming*. Champaign, IL: Human Kinetics.
- Propst, D. B., & Koesler, R. A. (1998). Bandura goes outdoors: Role of self-efficacy in the outdoor leadership development process. *Leisure Sciences*, 20, 319-344.
- Russell, C. L., & Burton, J. (2000). A report on Ontario secondary school integrated environmental studies programs. *Canadian Journal of Environmental Education, 5*, 287-304.
- Russell, K. C., & Farnum, J. (2004). A concurrent model of the wilderness therapy process. *Journal* of Adventure Education and Outdoor Learning, 4(1), 39-55.
- Russell, K. C., & Hendee, J. C. (1999). Wilderness therapy as an intervention and treatment for adolescents with behavioral problems. In A.E. Watson and G. Aplet (Eds). *Personal, societal, and ecological values of wilderness: Sixth world wilderness congress proceedings on research, management and allocation,* Vol. II, Proc. RMRS-P-000. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Sarason, S. B. (1974). The psychological sense of community: Prospects for a community psychology. San Francisco: Jossey-Bass.
- Schwandt, T. A. (2001). Dictionary of qualitative inquiry (2nd ed.). London: Sage.
- Shaffer, C. R., & Anundsen, K. (1993). *Creating communities anywhere: Finding support and connection in a fragmented world.* New York: G. P. Putnam's Sons.
- Sharpe, E. K. (2005). Delivering communitas: Wilderness adventure and the making of community. *Journal of Leisure Research*, 37(3), 255-280.
- Taylor, S., & Bogdan, R. (1998). Introduction to qualitative research methods: The search for meanings (3rd ed.). Hoboken, NJ: John Wiley & Sons. USDA Forest Service. (1982). ROS users guide. Washington, DC: Author.
- Turner, J., & Oakes, P. (1986). The significance of social identity concept for social psychology with reference to individualism, interactionism, and social influence. *British Journal of Social Psychology, 25*, 237-252.
- Walsh, V., & Gollins, G. (1976). *An exploration of the Outward Bound process*. Denver, CO: Outward Bound Publications.

- Wilson, G. L. (2002). *Groups in context: Leadership and participation in small groups* (6th ed.). Boston: McGraw-Hill.
- Wilson, S. J., & Lipsey, M. W. (2000). Wilderness challenge program for delinquent youth: A meta analysis of outcome evaluations. *Evaluation and Program Planning*, 23(1), 1-12.
- Yuen, F. C., Pedlar, A, & Mannell, R. C. (2005). Building community and social capital through children's leisure in the context of an international camp. *Journal of Leisure Research*, 37(4), 494-518.