A Portrait of Social and Emotional Learning Within Sequoia National Park

Paul T. Stuhr
California State University San Marcos

Hugo Lecomte
Southern Oregon University

Sue Sutherland
The Ohio State University

Abstract

Outdoor adventure–based experiences allow students to engage in physical activities and process learning tasks within a novel, open environment that is unlike any classroom. Past outdoor adventure–based research has indicated two primary participant outcomes: intrapersonal and interpersonal relationship skills or IIRS (Moore & Russell, 2002). The body of literature involving the promising outcomes from outdoor adventure–based experiences designed for college students is growing (Bailey & Kang, 2015; Frauman & Waryold, 2009; Lien & Goldenberg, 2012; Rude, Bobilya, & Bell, 2017; Vlamis, Bell, & Gass, 2011; Wolfe & Kay, 2011). One noticeable gap in the adventure-based literature is research on participants' lived experience through a conceptual lens of social and emotional learning (SEL). The purpose of this study was to explore college students' perceptions of their SEL competencies based on a 3-day adventure-based experience to Sequoia National Park. The participants experienced and expressed in a short time frame in the adventure setting the SEL core competencies of *relationship skills* and *social awareness*. The findings are encouraging, suggesting that the adventure-based experience to Sequoia National Park provided the participants an opportunity to develop SEL that involved the themes of *friendship* and *mindfulness*.

KEYWORDS: social and emotional learning; adventure-based learning; psychosocial equilibrium; campus outdoor recreation

Outdoor adventure–based experiences allow students to engage in physical activities and process learning tasks within a novel, open environment that is unlike any classroom. The body of literature involving the promising outcomes from outdoor adventure–based experiences designed for college students continues to grow (Bailey & Kang, 2015; Frauman & Waryold, 2009; Lien & Goldenberg, 2012; Vlamis, Bell, & Gass, 2011; Wolfe & Kay, 2011). One noticeable gap in the adventure-based literature is research on participants' lived experience through a conceptual lens of social and emotional learning (SEL). At the same time, there appears to be a paucity of SEL research involving higher education outdoor adventure settings. Most studies using a SEL framework have been conducted on campus, within the formal K–16 school environment (Conley, 2015; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Durlak, Weissberg, & Pachan, 2010). The higher education literature contains promising and fascinating findings that illustrate various academic and psychological benefits of helping college students strengthen SEL skills (Conley, Durlak, & Dickson, 2013; Gerdes & Mallinckrodt, 1994; Mattanah et al., 2010; Pritchard & Wilson, 2003; Seal, Naumann, Scott, & Royce-Davies, 2010). With concerns such as retention, graduation rates, and heightened pressure for students to succeed within universities, it behooves educators and administrators to look further into using various types of programming (e.g., adventure-based experiences) as potential tools toward strengthening SEL skills. Given the importance of social and emotional competencies for students on college campuses (Conley, 2015), the purpose of this study was to explore undergraduates' perceptions of their SEL based on a 3-day adventure-based experience to Sequoia National Park. The researchers used qualitative case study protocol (Merriam & Tisdell, 2015) to capture the essence of SEL in college students involved in the adventure-based experience.

Social and Emotional Learning (SEL)

The Collaborative for Academic, Social, and Emotional Learning (CASEL, n.d.) defines SEL as the process through which individuals develop and apply a wide range of social-emotional knowledge, attitudes, and skills toward managing and recognizing emotions, cultivating positive relationships, demonstrating care and concern for others, making responsible decisions, and handling challenging situations constructively. Since the 1990s, a solid and growing body of empirical-based literature has supported the potential intra- and interpersonal relationship skills (IIRS) that children, adolescents, and college students can receive by participating in SEL programming (Conley, 2015; Durlak et al., 2011; Greenberg et al., 2003). This growing trend of literature supporting the use of SEL as part of the educational experience continues to gain the attention of many researchers (Conley, 2015; Hoffman, 2009). Findings from numerous studies highlight the association between quality SEL programming and improved IIRS (Conley, 2015; Durlak et al., 2011; Zins, Weissberg, Wang, & Walberg, 2004). Furthermore, there also appears to be promising academic value in systematically integrating SEL within educational settings (Bar-On, Handley, & Fund, 2006; Durlak et al., 2011; Gerdes & Mallinckrodt, 1994).

Two key pedagogical elements embedded within SEL programming promote the development for desired social and emotional outcomes (CASEL, 2005). These cornerstones include (1) providing time to experience, process (i.e., reflect on and thoroughly discuss), and apply the SEL skills and (2) creating an environment that is fully inclusive, safe, and caring (Durlak et al., 2011). The goal of infusing these important features within SEL programming is to ensure that participants come away feeling valued, with higher levels of motivation, and exhibiting a desirable social-emotional skill set that they can apply toward future life situations (Greenberg et al., 2003). Participants benefit the most when the SEL instruction can be taught, modeled, practiced, and finally applied to daily life situations (Durlak et al., 2011).

CASEL (n.d.) identifies five SEL competency clusters that set the parameters of the cognitive and affective skills that individuals need to develop in order to apply appropriate social and emotional behaviors successfully. These competencies include self-awareness, self-management,

social awareness, relationship skills, and responsible decision making. The knowledge, skills, and dispositions associated with these CASEL competencies are the desired participant outcomes within SEL programming (CASEL, n.d.). These competencies have been shown to promote a number of desirable traits such as positive social behavior, fewer instances of inappropriate conduct, better emotional self-regulation, and higher cognitive and academic performance (Greenberg et al., 2003). These competencies form the basis of what the adventure-based literature calls IIRS (Brown, 2006; Cosgriff, 2000; Dyson & Sutherland, 2014; Priest & Gass, 2005; Stuhr, Sutherland, Ressler, & Ortiz-Stuhr, 2015; Sutherland & Stuhr, 2014). Focus on SEL within outdoor adventure settings might help promote positive and encouraging environments in which learning can occur.

The SEL competencies used to frame this study were self-awareness and relationship skills. Self-awareness is a person's ability to comprehend emotional states and recognize how one's emotions and thoughts affect personal behavior. A goal with self-awareness is being able to develop personal confidence and optimism in one's life. Relationship skills are established through healthy social relationships with others, including appropriate forms of communication, cooperation, conflict resolution, and helping others. The researchers used the SEL competencies of self-awareness and relationship skills to frame the study because they aligned well with the desired social-emotional outcomes of the planned adventure-based experience to Sequoia. The outdoor adventure–based experience (e.g., camping, hiking, rock climbing, Leave No Trace instruction, and the adventure-based learning curriculum) was planned for the participants to have the opportunity to use and develop IIRS that were connected to self-awareness and relationship skills and to have the opportunity to reflect and discuss these skills during the semistructured debrief sessions that occurred on the trip.

Outdoor Adventure–Based Experience in Higher Education

Noting the difficulty with defining terms such as *adventure education, outdoor education, outdoor orientation programs, outdoor pursuits,* and *wilderness education,* in this paper the researchers use the term *adventure-based experience*, which encompasses the purposeful planning of a physical experience or activity to provide the necessary conditions for participant growth (Brown, 2006; Miles & Priest, 1990). Adventure-based experiences can occur on-site within the K–16 school environment or outdoors in a variety of settings, including visits to outdoor activity centers, outdoor adventure sites, wilderness trips, and summer camps. Adventure-based experiences allow participants to engage in physical activities and provide them with the opportunity to process the experience in an effort to develop an assortment of IIRS (Priest & Gass, 2005; Stuhr et al., 2015; Travlou, 2006).

The body of literature highlighting an assortment of benefits involving IIRS for participants who engage in outdoor adventure–based programming is vast and growing (Bailey & Kang, 2015; Bowen & Neill, 2013; Cason & Gillis, 1994; Hattie, Marsh, Neill, & Richards, 1997; Keniger, Gaston, Irvine, & Fuller, 2013; Ribbe, Cyrus, & Langan, 2016; Rude, Bobilya, & Bell, 2017; Travlou, 2006). To promote smoother acclimation and transition into college life, many college campuses offer outdoor orientation programs (OOPs) for incoming freshmen (Ribbe et al., 2016; Schwartz & Belknap, 2017). The OOPs (also known as adventure or wilderness orientation) involve outdoor adventure–based experiences (e.g., camping, hiking, rope courses, rock climbing) within a wilderness setting and at least one overnight stay (Bell, Holmes, & Williams, 2010). OOPs allow small groups of participants (typically 15 or fewer) the opportunity to learn about and improve on an assortment of physical, psychological, and emotional traits (including IIRS). Research involving outdoor adventure–based programming with college students has shown promising results involving an assortment of IIRS benefits (Austin et al., 2010; Libby & Carruthers, 2013; Lien & Goldenberg, 2012; Ribbe et al., 2016; Rude et al., 2017; Schwartz & Belknap, 2017; Vlamis et al., 2011; Wolfe & Kay, 2011). With regard to intrapersonal relationship

skills, OOPs have been shown to help promote personal autonomy (Vlamis et al., 2011), intrinsic motivation (Libby & Carruthers, 2013), and emotional intelligence (Schwartz & Belknap, 2017). In regard to interpersonal relationship skills, OOPs have been shown to enhance social adaptation and support (Ribbe et al., 2016) and to increase positive relationships with peers (Wolfe & Kay, 2011). In one such study involving first-year college students, Bailey and Kang (2015) pointed out that adventure-based orientation programs can raise GPA, help with retention, and overall, provide this population with a higher sense of purpose. In reviewing the literature, Rude et al. (2017) highlighted the effectiveness of OOPs, identifying six overarching outcomes from participation. Notably, Rude et al. pointed out that OOPs have been shown to improve retention, GPA, relationship development, adjustment to college, spirituality, and social support and social skill development. Based upon recent literature, the importance and vitality of college outdoor adventure–based programming continues to be a prominent topic for discussion and research investigation.

Social-Emotional and Adventure-Based Learning

Adventure-based learning (ABL) is a type of SEL curriculum that includes the deliberate use of sequenced physical activities (i.e., team-building games, initiatives, and trust activities) with structured reflection sessions (i.e., debrief) for the development of a variety of IIRS (Cosgriff, 2000). This type of curriculum model has been shown to create space for enhanced participant promotion of IIRS within school settings (Stuhr & Sutherland, 2013; Stuhr et al., 2015; Sutherland & Stuhr, 2014). Several key features make an ABL curriculum unique including the interdependence of the sequenced activities linked to purposeful IIRS, the high emphasis on experiential learning through the implementation of the structured debrief sessions, and the ability to help participants see how transfer of the IIRS is possible in their personal lives (Cosgriff, 2000).

The growing body of evidence that an ABL curriculum can produce desired outcomes associated with IIRS (i.e., SEL) within school environments provided rationale for using ABL to explore SEL in adventure settings (Stuhr & Sutherland, 2013; Stuhr et al., 2015; Sutherland & Legge, 2016; Sutherland & Stuhr, 2014). In one such study, Stuhr et al. (2015) reported that middle school students who participated in a 15-day ABL unit of instruction were able to connect with, value, develop, and transfer preselected IIRS. The IIRS that emerged from this study included improved communication, leadership, and respect (Stuhr et al., 2015). In a similar vein, Sutherland and Stuhr (2014) explored the reactions of 13 preservice physical education teachers who implemented a 10-day ABL curriculum within an urban middle school. The preservice teachers acknowledged that the middle school students became more cohesive and demonstrated improvement in regard to their IIRS (Sutherland & Stuhr, 2014).

SEL is grounded in the ideology that learning is constructed and nurtured in supportive environments in which the instructional tasks or experiences are *challenging, engaging,* and *meaningful* to the participants (CASEL, n.d.). Several key features of ABL capture the essence of care and support for the learner within an environment that parallels the SEL pedagogical element of being inclusive and safe (Stuhr, Sutherland, Ressler, & Ortiz-Stuhr, 2016). For example, ABL is anchored in the belief that experiential activities should provide participants with the freedom to choose their level of engagement (i.e., challenge by choice) and should encourage them to push their personal limits (i.e., risk taking) in an environment that positions care as a quintessential component of the teaching–learning paradigm (Noddings, 1992; Stuhr et al., 2016). With regard to engagement, ABL curriculum provides participants with unique yet relevant experiences from which to learn an assortment of life lessons. When an experience or task becomes relevant, the potential for learner motivation and depth in engagement is greater (Cordova & Lepper, 1996).

Method

Attempting to extend on outdoor and adventure-based research, the researchers explored participants' SEL from an adventure-based experience in the geographically remote location of Sequoia National Park, in this qualitative case study. Because of the potential benefits from engaging in adventure-based programming, it should come as no surprise that many colleges and universities provide students with the opportunity to participate in adventure programming, in an effort to promote SEL (Rude et al., 2017; Vlamis et al., 2011; Wolfe & Kay, 2011). In conjunction with a university campus recreation program, this study was designed to explore SEL in undergraduate (incoming freshmen) students who attended a 3-day outdoor adventure trip. Specifically, the study answers the following questions: What types of SEL would emerge from the adventure trip? How would a predetermined/designed adventure curriculum impact participant SEL expressed during a 3-day adventure trip? The aim of this investigation was to determine to what degree the relatively short duration of the trip would affect the participants' SEL and whether the trip was deemed beneficial by the university students, thus ultimately providing further evidence of the viability of such trips.

Exploratory case study research determined the *particularistic* (i.e., a situation, event, or phenomenon), *descriptive* (i.e., composing rich and thick description of the phenomenon), and *heuristic* (illuminating the reader's understanding of the phenomenon) elements under investigation (Merriam & Tisdell, 2015). The phenomenon under question within this study was the exploration of SEL in undergraduate students involved in adventure programming (i.e., adventure/outdoor pursuits and ABL) within a national park (i.e., Sequoia). Exploring the SEL phenomenon through case study methods allowed the researchers to collect data in a variety of ways. The multiple means of data collection created greater variation across the phenomenon being studied and thus provided better opportunity for the researchers to capture a more compelling interpretation of the undergraduates' SEL (Merriam & Tisdell, 2015).

Context

A department of campus recreation at a mid-sized Southwest university (~14,000 students enrolled) volunteered to collaborate on this study with the researchers. This department offers wellness opportunities for students and staff, with a wide range of activities from fitness classes, sport intramurals, and off-campus outdoor adventure programs. The outdoor adventure programming ranges from single-day trips such as kayaking and archery, to 8-day trips in various adventure settings.

 The adventure trip occurred prior to the beginning of the Fall academic school year. The trip occurred over 3 days in Sequoia National Park (12 students, three staff). Two faculty and one staff member worked together in planning and implementing the trip and research study. Sequoia National Park is located in southern California, in the southern Sierra, and is famous for its giant sequoia trees. Over 80% of Sequoia and Kings Canyon is considered backcountry/wilderness, only accessible by foot or horseback, making this location ideal for the adventure-based outdoor pursuits (camping, hiking, and the implementation of Leave No Trace principles) and ABL curriculum.

Twelve incoming college freshmen (eight male, four female) participated in the Sequoia National Park adventure trip. Consistent with university institutional review board procedures, consent to participate in the research was obtained at a pretrip meeting held by the adventure coordinator. At the pretrip meeting, the primary researcher provided the participants with an overview of the research study prior to asking for their consent to participate. The participants (who self-identified as Asian American, White, Hispanic, and Pacific Islander) ranged in age from 18 to 24 and were incoming freshmen enrolled at the university. None of the participants knew each other or had met before the trip. The prior camping experience and ability level of the

participants varied from some who had never gone camping before ($n = 7$), to some who had gone a few times ($n = 3$), to those who had extensive camping experience and high knowledge regarding tasks (e.g., setting up camp, cooking, hiking) associated with camping ($n = 2$).

Adventure Programming

The undergraduate students had the opportunity to participate in a variety of experiences and learning tasks. They completed two categories of experiences and learning tasks: basic camping skills and experiences (e.g., cooking, setting up and breaking down and using outdoor gear and equipment, hiking, rock climbing, swimming) and the ABL curriculum (e.g., experiential team-building activities with structured debrief sessions).

The ABL curriculum included the experiential team-building activities and the reflective debrief sessions. The 15 ABL activities used on the trip aligned with and provided the participants an opportunity to work on building community, cooperation, emotional and physical trust, and problem-solving skills. Some of the activities included All Aboard (problem solving); Balloon Trolley (physical trust); High Risk, Low Risk (emotional trust); Human Machine (cooperation); and Martian/Politician/Tiger/Salmon (community). The ABL activities came from *Journey Toward the Caring Classroom* (Frank, 2013) and *Adventure Curriculum for Physical Education: Middle School* (Panicucci, Faulkingham-Hunt, Kohut, Rheingold, & Stratton, 2002). The researchers chose these sources because they have been used as part of an ABL higher education curriculum (Sutherland, Stuhr, & Ayvazo, 2016; Sutherland, Stuhr, & Ressler, 2012) and found to help promote IIRS for college students (Stuhr & Sutherland, 2013).

The debrief sessions were semistructured and included the cornerstone topics of promoting self-confidence and enhancing forms of communicating with others. The researchers chose these topics for two reasons. First, the topics aligned with two of the CASEL core competencies (i.e., self-awareness and relationship skills) and would help in the exploration of the participants' SEL. Second, the topics aligned with the adventure-based outdoor pursuits (i.e., camping, hiking, rock climbing, Leave No Trace instruction) that were planned for the trip. The outdoor adventure–based experience provided the participants with an opportunity to use and develop self-confidence and communication skills, which then could be reflected on and discussed during the debrief. The researchers used the Sunday Afternoon Drive debrief model to conduct the ABL debrief sessions (Stuhr & Sutherland, 2013; Sutherland et al., 2012). Evidence suggests that this model can be used to promote IIRS (Stuhr & Sutherland, 2013; Stuhr et al., 2015).

Role of the Researchers

The first and second authors in this study took on the role of active-participant researchers (i.e., insider perspective to the outdoor adventure–based experience). A close partnership between the researcher and participant is important in establishing and sustaining a social relationship (Marshall & Rossman, 2016). The researchers traveled, camped, and participated side by side in all of the activities that the participants experienced. As a result, they established good rapport with the participants, as evident with the openness of communication, informal conversations, and lines of discourse that at times were personal in nature. The researchers viewed their role in this study from an interpretive paradigm whereby reality is socially constructed and understanding the participants' subjective point of view is paramount.

Combined, all of the authors had approximately 30 years of experience with outdoor adventure pursuits, including dozens of expeditions to remote wilderness locations. The authors had taught ABL in higher education and conducted several prior research studies involving ABL. They have also presented dozens of ABL presentations and workshops at local, state, and national levels and have been involved in working with youth with adventure curriculum for over a decade.

Data Collection

In alignment with qualitative case study protocol (Merriam & Tisdell, 2015), the researchers collected data using three primary sources: written journals (prompted and free write), interviews (one-on-one, small group, semistructured, and open-ended), and photo voice journals. The written journaling and interviews occurred throughout the 3-day trip at various times in the adventure setting. The researchers collected photo voice journals from the participants several weeks after the trip ended. In reporting the data, they used the following provenances: written journal entry (JE), individual interview (II), group interview (GI), and photo voice journal (PVJ). Each piece of data includes an identifying participant provenance. For example, (II, P3) represents data that came from an individual interview with Participant 3.

Written journals. Each participant received (and completed) a 20-page pamphlet that contained journal prompts and blank pages. The participants had three 30- to 45-min blocks of time each day to find a quiet place and write in the journal. The participants answered six to 12 journal prompts listed in the pamphlet per day. Some of the prompts to guide the writing included questions such as the following: How has your overall experience thus far been personally meaningful? How has the trip impacted the social dynamics of the group thus far? What did you personally take away (of value) from our ABL activities and debrief today? What would you consider has provided you with a positive emotional experience thus far on the trip? Describe this event in detail? In addition to the prompted journaling, the participants performed *free writes*, which allowed them to write about any topic or idea that was not covered within the journal prompts.

Interviews. The researchers conducted 14 individual (12 undergraduates and two staff members) and eight small group (*n* = 3/small group) interviews throughout the trip. The interviews occurred at various times throughout the 3-day trip and were audio-recorded with permission. The interviews occurred during breaks and in between activities that were planned within the trip itinerary. The interview questions focused on various aspects of the participants' SEL during the adventure experience. Sample interview questions included the following: Describe your experience thus far on the trip. Has this trip, in anyway, provided meaning for you? If so, in what way? If not, why? How has being together with this group of individuals impacted you personally? How has this trip impacted you (or the group) from an interpersonal relationship standpoint?

Photo voice journals. The photo voice journal is an innovative approach that provides participants a way to provide perspective and make meaning of personal experience. The purpose of the photo voice journal was for the participants to capture visual representations of experiences that they found to be individually unique and impactful during the adventure trip and then to connect those experiences to how it had informed their SEL. In addition to taking photographs, each participant elaborated on the photos using prompts. The participants took five to eight pictures related to their experience on the adventure trip. For each picture, they wrote a response using the following three prompts: a brief description of the picture, a more detailed explanation of how the picture relates to what you have personally experienced on the trip, and how your picture and experience on this trip connects or is applicable to your life. Participants were given time on the trip to work on the photo voice journal responses. However, the participants did not submit the fully completed journal, including the photos, to the researchers until 3 weeks after the trip had ended.

Trustworthiness

The trustworthiness of this study was established through prolonged engagement, member checking, and peer debriefing (Guba & Lincoln, 1989). The researchers employed four data collection methods (written journals, individual and small group interviews, and photo voice journals) with the aim of establishing triangulation. They used data from photo voice and written journals to establish the confirmability of the individual and small group interviews. The

researchers purposefully moved beyond the observer role in the investigation by participating in every aspect of the adventure trip, in an effort to establish rapport with the participants and to gain an insider's perspective in relation to the engaged SEL experiences that occurred.

The photo voice journals offered the researchers a unique opportunity to collect data posttrip. The researchers asked the participants to finish and submit their photo voice journal 3 weeks after the trip commenced and used this data set as part of the member checks. This gave the participants a longer time to think about the prompts and reflect on the SEL themes that they had experienced while on the adventure trip. Three of the participants took part in posttrip interviews, in addition to completing the photo voice journals. During the posttrip interviews, the researchers provided and had the participants read concise summaries of the two developing themes from the data corpus (via written transcripts), to determine the accuracy of the preliminary interpretations. The member-checking interviews provided the researchers with additional insight pertaining to the developing themes that had emerged from the data corpus.

The researchers conducted three peer debriefs with three colleagues (all university faculty). They provided each peer debrief colleague with the developing themes and corresponding data prior to meeting face-to-face with each of them. During the peer debrief meeting, each colleague was asked his or her interpretation of the preliminary findings. The peer debriefs provided an outside perspective and helped the researchers to determine alignment between the transcribed data and the interpretation of the preliminary themes. The peer debrief colleagues offered clear and concise feedback regarding the strengths and weaknesses of the data analysis. The peer debriefs also provided the researchers an opportunity to become more aware of any biases regarding the interpretations that were being made based upon the data collected.

Data Analysis

Open and axial coding guided data analysis (Corbin & Strauss, 2008). First, the researchers read and reread the data transcripts and labeled pieces of data with the aim to construct assertions and ultimately create themes and subthemes (i.e., open or first level of coding). They used a codebook to organize the various labels and to take note of the preassertions and modifications of the developing themes and subthemes. Once the initial themes started to emerge, they reread the transcripts again. The researchers used the codebook and the emerging themes as a guide to confirm, reject, or modify the codebook and themes (i.e., axial or second level coding). They used axial coding to explore whether any datum was missed and to confirm that all key aspects of the data corpus had been identified through the coding process.

Findings

Two themes emerged from the data corpus as representation of the SEL that participants experienced during the adventure-based experience: *friendship (social connection and social support)* and *mindfulness (reflective awareness and serenity)*. The SEL that occurred on the trip was a meaningful core experience represented by the interpersonal relationship theme of friendship and the intrapersonal relationship theme of mindfulness. Each theme aligned with one of the two CASEL (n.d.) core competencies that framed this study. The theme of friendship aligned with the definition of the CASEL core competency of relationship skills. The theme of mindfulness paralleled the definition of the core competency of social awareness. Figure 1 illustrates how these themes formed the amalgamation of SEL in participants during the adventure-based experience. The researchers used the selected CASEL core competencies as a lens through which to interpret the data corpus. Through this lens, they discovered two emerging themes and four subthemes.
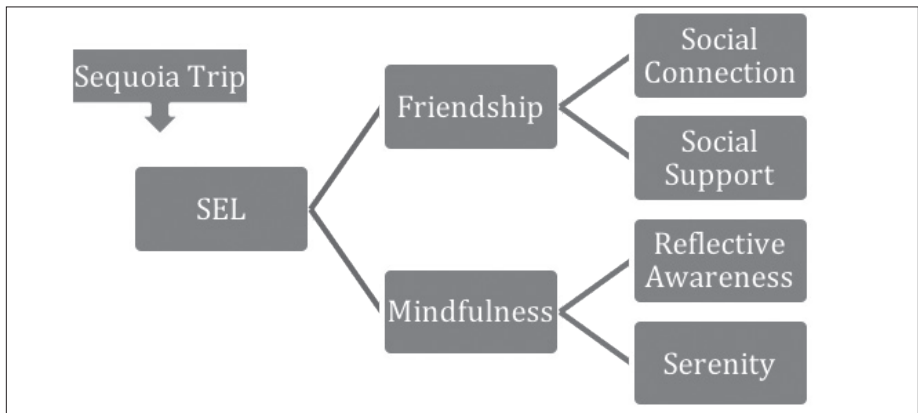
Figure 1. Social and emotional learning from the Sequoia National Park trip.

Friendship

The theme of friendship emerged and was connected to CASEL's relationship skills competency. CASEL (n.d.) defines relationship skills as a person's ability to create healthy social relationships, which includes exhibiting behaviors such as clear communication, active listening, cooperation, negotiating conflict, and seeking the help of others. Attributes such as social engagement, relationship building, and teamwork are desirable interpersonal relationship skills that the adventure-based trip helped to nurture. The adventure-based experience accelerated rapport among the participants and they developed interpersonal relationships with each other in a short time. The theme of friendship emerged as a construct involving participant social connection and social support for one another.

Social connection. The participants had no prior relationship with one another before this study. Yet throughout the trip, they acknowledged becoming closer with and connecting to the other individuals—becoming more socially integrated with one another. Social connection occurred at an accelerated pace for the participants. The remote geographical location of Sequoia was one variable that was perceived to help facilitate the social connection established among the participants:

> There is less stimulation up here. Less technology . . . Less busy, which promotes social connections. It's simple up here . . . When we arrive in nature we actually communicate more. We have less distractions, which gives us the ability to get to know each other, to talk to each other, to laugh, to connect. (II, P5)

When a group finds success accomplishing a task, the group members in essence start to develop commonality. When individuals find commonality, the opportunity for a "we rather than me" (GI, 2) phenomenon can surface in relation to group tasks and activities. The participants noted that achieving success within the adventure activities helped promote the social connections that were made on the trip: "The social interaction and bonding has been amazing because everyone has been pushed outside their comfort zones and discovered that they can actually accomplish some amazing tasks" (II, P8).

The hike to one of the lakes within Sequoia was one of the pivotal bonding experiences for the group (see Figure 2), and every participant mentioned that it had an effect on the group's ability to come closer, unite, and connect:

The lake however had to be the most positive emotional experience for us. After hiking for so long [12-miles] and being so tired when we arrived to the lake it suddenly all became worth the hard work, we got to sit together, have lunch, and then everyone decided to jump in the lake! For me it was a first so I was nervous but excited. I fell in and pulled Sarah with me, and next thing you knew we were all in the water just laughing. (PJ, P8)

Figure 2. Photo journal picture depicting social connection at the lake.

While on the adventure trip in Sequoia, the participants formed social connections through the experiences that were created. The trip provided the conditions for them to "go outside [one's] comfort zone" (GI, P10) and interact with the other participants:

I am a quiet person so trips like this make me go outside my comfort zone and realize how important it is to socialize with others. I normally don't talk to new people. This trip makes me realize that I need to be more willing to talk with others. (II, P3)

The social interactions led participants to a perception of increased self-confidence regarding their social relationship skills. One of the participants indicated, "I feel as though I am becoming more confident in my ability to relate with others because we share the common interest of enjoying this amazing place" (II, P3). The trip and the setting provided a foundation for which discourse became easy and natural. Self-confidence in being able to build rapport and socially connect became apparent with the participants: "This trip has given me more confidence because I am nervous going into college but being here, with these kids and sharing these experiences, it gives me confidence" (II, P5).

Some of the participants acknowledged how the trip affected their self-confidence to return home and have an easier time speaking with, listening to, and understanding others during conversation:

The whole experience has made me realize how important it is to open up with others. I can come back home stronger mentally, stronger spiritually, and this I believe will help me to interact with people with more intent on listening and understanding them. (II, P6)

This particular participant felt that the adventure-based experience provided greater social self-confidence and believed this would be beneficial in future social encounters. This participant acknowledged the value that the trip had provided in regard to developing stronger social skills.

The common message that was discovered within the social connection subtheme was that the participants acknowledged a type of accelerated social integration from the remote, yet remarkably beautiful Sequoia National Park. The participants believed they were able to strengthen their IIRS by being able to develop rapport with others (interpersonal relationship skill) and increase their own social self-confidence (intrapersonal relationship skill). The adventure setting created space and opportunity for social connection to emerge in a short time (i.e., 3 days).

Social support. Cooperation and seeking the help of others are relationship skills that the participants recognized had occurred during the adventure-based experience. The subtheme of social support emerged as part of the friendship theme and was established as a means of reciprocal care among the participants: "That we all became close friends and that we were able to look after one another is pretty amazing considering that I didn't know anyone before coming here" (GI, P4). The participants recognized the importance of having someone they could lean on and that could support them when the hike was getting difficult. The participants acknowledged that this support allowed them to complete the hike, a task they might not have accomplished without that support: "With friends and support it was easier to make it through. If I was walking alone I probably would have turned back, said ok I'm tired I am going back, but the support made it a lot easier. Everyone being on the hike pushed me to keep going and it was well worth it" (II, P1).

Caring for one another materialized as trust was established. The development of trust allowed the participants to recognize that they could be honest and open with one another, look after each other, and provide assistance when necessary:

[The trip] helped me to let down my guard around others so that they get to know me, and this trip speeds that process up because we are around each other 24/7. I was able to build trust in a short period of time. . . . It is one of the most amazing things to come up here with people you are meeting for the first time, yet be able to share a common experience with them. (GI, P6)

One memorable event arose when trust in one another became evident to the participants. A bear entering camp one night was an event repeatedly mentioned by the participants as having a strong effect on the development of their social support. One participant acknowledged the trust that had been established and how the bear incident brought to the surface the support and care for each other:

The whole bear situation actually made us all closer. I only knew [her] for 48 hours but when that bear came . . . we were cuddled up in our tent scared for our lives! We all took care of each other. . . . [A few members of the group] stayed out till the sun came up around our tent making sure the bear didn't come back, which allowed all us to finally get some rest. This for me proves that I can trust them and I know that in time of despair they will be there. It is an amazing thing to feel so close to a group of people so quick and know they have your back. (PJ, P2)

The opportunity for participants to work closely and care for one another while on the trip was evident. They acknowledged that the established social support among group members was in part because of the collaborative participation in the adventure-based activities:

> I felt I came out of my shell more during the [ABL] activities, learned more about myself, and the others, which is a good thing! I don't normally work well with others so being up here was good for me. I was able to meet new people, gain trust in them, and ask them for help. (JE, P3)

One participant wrote about the establishment of rapport as one reason why he believed they were able to support and help one another so well:

> The trip has bought us closer . . . raised my confidence in my social abilities. I see how we are all getting along and working together so well. This makes it easier to ask for help because you know you can count on them. (PJ, P5)

In his photo journal, this participant indicated,

> This picture [Figure 3] is a small group of us hiking to Emerald Lake. We had to help each other by giving moral support in order to reach the lake. [The hike] gave me a chance to get to know others, to socialize. (PJ, P5)

Figure 3. Photo journal picture depicting social support through building rapport.

Another individual indicated that the setting of Sequoia was a primary reason why the group was able to support one another so well:

> This setting invites people to be amazed, which allows for social growth. When you let yourself become amazed by nature it invites people to talk, to share, to create new thoughts and ideas about yourself. This has an impact on wanting to work together and help everyone in camp. (JE, P8)

This individual wrote about the transformation that occurred by simply being present in the natural environment of Sequoia National Park. The participant indicated how the setting itself was the catalyst in which social growth and support flourished.

Within the social support subtheme, a perceived sense of reciprocal care emerged from the data. The adventure-based experience provided the participants an opportunity to work closely with one another. They felt that they could seek out help if needed, because of the formation of the reciprocal care. The participants believed that they were able to strengthen their IIRS by being able to develop cooperation (interpersonal relationship skill), open up, and be honest with the others in the group (intrapersonal relationship skill).

Mindfulness

The theme of mindfulness that emerged from the data corpus was connected with CASEL's self-awareness competency. CASEL (n.d.) defines self-awareness as one's ability to comprehend emotional states and recognize how one's emotions and thoughts affect personal behavior. The participants were able to escape suburbia and all of the technological distractions from their home life. The adventure environment helped them be in the moment and pay closer attention to their own thoughts and interactions with others. The adventure trip promoted mindfulness for the participants in ways that created reflective awareness and serenity.

Reflective awareness. Thinking about and becoming deeply engrossed in thought became apparent for the participants (see Figure 4). Reflective awareness was a common subtheme that emerged from the data corpus and was represented by the perception of "knowing thyself and others" (PJ, P7) on a substantial level, because of the lived experience of being in Sequoia. The participants recognized intra- and interpersonal benefits from being able to "think deeper and clearer about life" (II, P11). From an intrapersonal standpoint, being in Sequoia transformed the way that the participants thought about themselves; they expressed a visceral feeling stemming from being in the setting: "The setting is amazement and it triggers positive emotions, which in turn heightens the experience. When you are amazed you open yourself up to something pure, raw, something that creates an impact for that person" (PJ, P8).

Figure 4. Photo journal picture depicting self-awareness.

In addition to the strengthened intrapersonal skills, the participants indicated stronger interpersonal benefits from being aware of their reflective tendencies: "I believe being here makes me more open to being connected to others" (GI, P5). One individual made the connection between being in nature and being more open with others: "Being in nature helps me to understand myself and be more conscious of interaction with others" (PJ, P4).

Being away from the day-to-day challenges and stress was noted as one reason for the reflective awareness: "This really helps me realize that there is a lot more to life than stress and the day-to-day responsibilities we all have" (II, P1). The participants were away from electronic devices, the Internet, and other time-consuming, attention-grabbing facets of their lives. This freedom allowed for heightened meta-cognition regarding life: "When I camp in a remote environment I find it easier to reflect on my life . . . Being reflective is much more challenging for me back home in my everyday pace of life" (II, P6). Other participants had similar reflective experiences: "Moments like this make me realize the meaning of life. You sit here and realize there is much more to life than just work" (II, P7). There was a clear perceived connection between the adventure setting and the opportunity to reflect:

> Sequoia has created a will for the group to open up and talk and share stories about themselves, about life . . . about how this trip has impacted them . . . benefited them. I think the setting is a catalyst for reflection. (JE, P7)

This particular participant saw a connection between being in an adventure setting and being more open to talk and socialize with others. She indicated in her journal that the trip provided a means through which she felt comfortable sharing personal stories and details regarding her life.

Reflective awareness was a common subtheme that was "impactful" for all of the group members. Being in Sequoia National Park, away from technological distractions, provided the participants with the opportunity to be more mindful and in the moment with their thoughts (i.e., time and motivation to reflect). Some of the participants acknowledged a heightened sense of self-discovery and a need to ponder profound metaphysical questions such as the meaning of their life. A deeper sense of connection to others also emerged from the data; the participants recognized that through fewer distractions they could actively listen and try to understand others in the group.

Serenity. *Peaceful, calm,* and *slowing down* were some of the words that the participants used to express the serenity experienced within Sequoia. The participants recognized serenity as a phenomenon that arose from the adventure backdrop: "To come to a place like this and appreciate nature, take it all in, the way it looks, the peace and quiet that surrounds us . . . it puts you in a different mindset. [Sequoia] just makes you mellow out" (II, P1).

Sequoia provided the conditions for which the participants could de-stress from their current lives: "[Sequoia] . . . helps me to understand life and what is truly important and helpful in making me less concerned about minor problems back home" (JE, P6). One of the participants believed that the adventure setting truly brought a sense of calmness and stillness to his life: "This setting is magical! It really is. Being up here melts away all my worries and concern. It's like a prescription for the day-in and day-out stressors of life back home, and it works" (GI, P6)!

Being at peace with oneself or experiencing a feeling of peace also surfaced within the serenity subtheme: "It's like seeing one of the seven wonders of the world. It's so great to be right here. It's nice that it's so pristine. It makes me feel at peace . . . It makes me realize what peace is" (PJ, P3). One participant indicated that the setting permeated the self and provided peace in terms of where she currently was in life in regard to her goals: "This type of feeling is very beneficial in helping me be at peace with my role in my own life. About where I currently am with my goals in life" (GI, P6). Other individuals recognized peace through being able to slow down: "This landscape makes me want to slow down and take everything in. Looking at the roughness of nature, the granite rocks, trees, it is all so peaceful when you can slow down the pace of life" (JE, P9).

This particular participant alluded to being able to slow down by being on the adventure-based experience. He wrote about how peace became a reality once he was able to slow down and be present with nature and all it had to offer.

The power of Sequoia National Park was portrayed in the participants' representation of the serenity subtheme, through what it means to experience awe and natural beauty. The group was surprised at how an environment can transform their feelings and how much of an effect Sequoia had on being calm, stress-free, and at peace with the present moment. Serenity also emerged when the participants recognized that the trip was helping them to slow down, de-stress, and allow worry and concerns to simply fade away.

Summary of the Findings

Friendship emerged from the data corpus with the participants acknowledging the presence of social connection and support from the adventure-based experience. In part, social connection and support formed because the adventure environment (Sequoia National Park) supported participants in the opportunity to establish collective peer relationships. Beyond the adventure environment, the participants perceived structured and delivered adventure-based activities (i.e., basic camping skills such as cooking, setting up and breaking down and using outdoor gear, hiking, rock climbing, swimming, and the ABL curriculum that included the experiential team-building activities with structured debrief sessions) as a primary reason for the formation of social connection and support among the group.

Mindfulness emerged from the data corpus with the participants acknowledging that the trip created reflective awareness and serenity. The participants discovered reflective awareness as a form of enhanced self-reflection. They perceived the setting and the adventure-based experience as an opportunity to be present in the moment and continue to make self-discoveries about their personal lives. They expressed the phenomenon of serenity through terms such as *being calm, having peace,* and *slowing down* within the adventure setting. The participants acknowledged a perceived benefit in the form of being able to escape the stress and concern from their life back home. They discussed serenity as an experience in awe and natural beauty.

Discussion

The findings from this qualitative case study helped answer the primary research questions driving the study: What types of SEL would emerge from the adventure trip? How would a predetermined/designed adventure curriculum impact participant SEL expressed during a 3-day adventure trip? The findings reveal that the adventure-based experience to Sequoia National Park affected college students' perception of developed friendship (social connection and support) and mindfulness (reflective awareness and serenity). Through the use of a SEL lens, the findings from this study add to the current literature involving outcomes from outdoor adventure–based experiences designed for incoming college students (Austin et al., 2010; Libby & Carruthers, 2013; Lien & Goldenberg, 2012; Ribbe et al., 2016; Rude et al., 2017; Schwartz & Belknap, 2017; Vlamis et al., 2011; Wolfe & Kay, 2011). In addition, the findings extend the outdoor adventure–based literature through the discovered phenomenon of mindfulness that emerged from the trip.

Friendship

Socially connecting with other human beings is a primary psychological need toward optimal physical and mental health (Pressman et al., 2005; Seppala, Rossomando, & Doty, 2013). Yet evidence suggests that social connection has been declining in the United States for some time (Putnam, 2000). Increased use of electronic devices, longer work hours, urban sprawl resulting in longer commutes, and generational change with youth less focused on social capital seem to be factors affecting the slow decline of social connections in America (Putnam, 2000). A need

to help foster social connection with youth and future generations exists, and the Sequoia trip provided such an opportunity.

Learning is presumed to best occur in situations that can "stretch" an individual's current developmental ability level in a way that promotes new growth, discovery, or knowledge (Panicucci, 2007). Stretch zone experiences have been theorized as a catalyst in promoting authentic learning outcomes (Panicucci, 2007). The trip to Sequoia and the adventure activities created direct, active, and engaging situations that created the opportunity for the participants to engage in robust and authentic social connections with one another. The participants on several occasions discussed how the adventure-based experience afforded them the opportunity to push past their comfort zone in relation to their social interactions with the other members on the trip.

The findings regarding the theme of friendship align with the findings in similar studies that have shown the promotion of friendship (social connection and support) through the use of outdoor adventure–based experiences (Austin et al., 2010; Lien & Goldenberg, 2012; Rude et al., 2017; Wolfe & Kay, 2011). Social support emerged as a subtheme of friendship and was represented by the participants recognizing behavioral traits associated with care (i.e., having concern for, helping, and meeting the needs of others). Care is a powerful construct and a cornerstone for healthy social relationships between two or more human beings (Noddings, 1992). The findings indicate that the adventure trip provided the foundation for the cultivation of group care. Through the setting and adventure-based activities, the participants were able to care for and support one another. Care and support are desired action tendencies associated with CASEL's core competency of relationship skills. Peer relations that are established and include the element of cooperation can produce an ethic of care, which can lead to intentionality among individuals within a community (Berman, 1997). Caring peer relationships within adventure-based environments hold the potential to help participants strengthen friendship, by creating a context in which individuals create community (Quay, Dickinson, & Nettleton, 2000). The Sequoia trip provided a context in which cooperation and helping others flourished, thus accelerating the social support that led to an ethic of care among the participants.

Promoting IIRS through SEL programming is an extremely relevant proposition for universities to undertake in helping college students navigate academic, social, and emotional challenges (Conley, 2015). According to Conley (2015), current SEL intervention programs on university campuses primarily focus on helping university students improve social awareness and relationship competencies, which are key social skills in managing the demands of college life. Being outdoors, in nature, and completing team-building activities allowed the participants to focus on themselves and each other and, as such, develop friendship in the form of social connection and support. The adventure-based experience provided the ideal opportunity and setting for the participants to develop and establish relationship skills that accelerated the formation of friendship.

Mindfulness

Focused attention on the present moment, with nonjudgmental behavioral tendencies is one way to describe the act of a "mindful" person. Kabat-Zinn (2003) defines mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (p. 145). Mindfulness is having psychosocial equilibrium whereby an individual is attentive yet calm at the same time.

Through the acronym *ABC*, mindfulness can be described as an amalgam of *attention, balance,* and *compassion*. Attention represents a gentle focus on the present moment, when a person is undistracted by past or future thoughts or events. Balance within the framework of mindfulness is having emotional stability, regulation, or equanimity. Compassion is multifaceted and includes three components: cognitive ("I understand what you're going through"), affective ("I

feel your pain"), and motivational ("I want to help you"). The *ABC*'s of mindfulness are three of the more salient behavioral tendencies associated with being mindful (Stuhr & Thomas, 2017).

In regard to the subtheme of self-awareness, an argument can be made that the mindfulness experienced by the participants furthered their opportunity to explore their own personal meaning and value system; at the same time, mindfulness provided improved interpersonal relationship benefits (e.g., high relatedness, closeness, and acceptance of one another). The participants demonstrated *attention* to their lives in the present moment. Mindfulness and the ability to look within one's own life have been found to be effective in helping individuals become more emotionally and socially intelligent (Barbezat & Bush, 2014).

With regard to the serenity subtheme, the participants indicated a reduction of stress and being more at peace with their thoughts. The establishment of mindfulness has been shown to help individuals lower stress and increase their capacity for self-compassion (Shapiro, Brown, & Biegel, 2007). Lower stress and strengthened self-compassion have been shown to be useful as a preventive measure toward instances of depression (Nolen-Hoeksema, Morrow, & Fredrickson, 1993). The participants acknowledged *balance* in regard to their own equanimity and provided examples of *compassion* for self and others while on the trip.

The mindfulness theme emerged through the participants' perception that the adventure experiences in Sequoia created their self-awareness and serenity. In essence, the trip cultivated the conditions for the *ABC*'s (attention, balance, and compassion) of mindfulness to exist. The participants clearly believed that the trip helped them produce greater "introspection" and "reflective" abilities. The participants also indicated that the trip provided them with the opportunity to "slow down," "be at peace," and "melt away all worries." The emergence of mindfulness as a way for these students to be at peace and worry-free is promising, considering that stress and anxiety are serious problems faced by today's students (Dyrbye, Thomas, & Shanafelt, 2006). The adventure trip fostered and facilitated "mindful" outcomes for participants. Similar 3-day trips hold tremendous opportunity in increasing the number of "mindful" students and in reducing undesirable social and emotional behavior.

Limitations

The findings from this research endeavor are encouraging; however, a few limitations should be addressed. Because of the nature of the methods used, the findings are unique to this group of college students and cannot be generalized or extended to a wider population. Future studies might consider using methods that would allow for a much larger sample population and means to find statistical significance with regard to the two emergent themes (i.e., friendship and mindfulness). Future research could elucidate whether the setting (i.e., remote national park), the adventure-based activities (i.e., basic camping skills, hiking, rock climbing), or the ABL curriculum (i.e., team-building experiences with structured debrief sessions) was more significant or effective in developing participants' perceived friendship and mindfulness.

Another limitation of the study was that data collection was not longitudinal. Future research might develop ways of collecting data from the participants over the academic year to determine the fidelity of the themes (i.e., friendship and mindfulness). For example, did the participants' perceptions of the trip change over time? Did any of these students decide to go on other adventure-based trips because of their positive experience with this 3-day trip? Additional studies might also consider a different adventure-based setting, perhaps another national park setting, in exploring SEL.

There was a lack of data regarding whether the participants disliked or were aversive to anything about the adventure-based experience. Future studies should include data collection techniques that can capture potentially negative feelings that might distract from the participants being able to develop SEL skills. Additionally, future studies within adventure-based settings should explore possible aspects (e.g., techniques, curriculum, activities) that might enhance SEL

further. For example, in what way could mindfulness meditation practices, yoga, or additional ABL activities play a role in strengthening SEL while participants are on adventure trips?

Conclusion

The researchers conducted this qualitative case study to determine college students' perceptions of SEL competencies while participants were involved in a 3-day adventure-based experience to Sequoia National Park. The themes suggest that the Sequoia trip provided the participants an opportunity to further develop SEL skills. The adventure trip fostered a meaningful core experience for the participants. Here, the meaningful core experience was represented as an event or experience that made an impression with the participants—one of relevancy and significance. The core experience for the participants led to perceived friendship (social connection and support) and mindfulness (reflective awareness and serenity).

One goal for outdoor adventure–based programs is to design and implement experiences that allow students to develop SEL competencies that they find relevant and significant to their own lives. This study supports findings from past outdoor adventure–based research (Austin et al., 2010; Lien & Goldenberg, 2012; Rude et al., 2017; Sutherland & Stroot, 2009, 2010; Wolfe & Kay, 2011) regarding the development of the SEL skills of social connection and support (i.e., friendship). This study extends the current literature by capturing how mindfulness also emerged as an outcome. The phenomenon of mindfulness holds tremendous potential in helping individuals with a variety of social and emotional benefits (Zenner, Herrnleben-Kurz, & Walach, 2014; Zoogman, Goldberg, Hoyt, & Miller, 2015). The positive effects of mindfulness in educational settings have been well documented, including a reasonably strong effect on improving student focus (Semple, Lee, Rosa, & Miller, 2010), behavior (Schonert-Reichl et al., 2015), and academic performance (Zenner et al., 2014). However, there is still much to be explored regarding the effect that mindfulness could provide for college students who participate in an outdoor adventure–based experience. For example, can college students learn how to practice mindfulness techniques (to lower stress, anxiety, and other mental health ailments) on an adventure-based trip, in an effort to use those techniques throughout the academic school year? Can mindfulness in an adventure-based setting assist college students by promoting focus, emotional regulation, and other health-enhancing benefits? Could mindfulness help promote a more pleasant outdoor adventure–based experience? Based upon these findings, there appears to be merit in further exploring the phenomenon of mindfulness as a means to enhance the development of SEL within adventure-based settings.

References

Austin, M. L., Martin, B., Yoshino, A., Schanning, K., Ogle, D., & Mittelstaedt, R. (2010). The intersection of community and place in an outdoor orientation program. *Journal of Outdoor Recreation, Education, and Leadership, 2,* 74–92. https://doi.org/10.7768/1948-5123.1033

Bailey, A. W., & Kang, H. (2015). Modeling the impact of wilderness orientation programs on first-year academic success and life purpose. *Journal of Adventure Education and Outdoor Learning, 15,* 209–223. https://doi.org/10.1080/14729679.2014.949809

Barbezat, D. P., & Bush, M. (Eds.). (2014). *Contemplative practices in higher education: Powerful methods to transform teaching and learning.* San Francisco, CA: Jossey-Bass.

Bar-On, R., Handley, R., & Fund, S. (2006). The impact of emotional intelligence on performance. In V. U. Druskat, F. Sala, & G. Mount (Eds.), *Linking emotional intelligence and performance at work* (pp. 3–19). Mahwah, NJ: Erlbaum.

Bell, B. J., Holmes, M., & Williams, B. (2010). A census of outdoor orientation programs at four-year colleges in the United States. *Journal of Experiential Education, 33*(1), 1–18. https://doi.org/10.1177/105382591003300102

Berman, S. (1997). *Children's social consciousness and development of social responsibility.* New York, NY: SUNY.

Bowen, D. J., & Neill, J. T. (2013). A meta-analysis of adventure therapy outcomes and moderators. *The Open Psychology Journal, 6,* 28–53. https://doi.org/10.2174/1874350120130802001

Brown, M. (2006). Adventure education and physical education. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 685–702). Thousand Oaks, CA: Sage. https://doi.org/10.4135/9781848608009.n38

Cason, D., & Gillis, L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education, 17*(1), 40–47. https://doi.org/10.1177/105382 599401700109

Collaborative for Academic, Social, and Emotional Learning. (n.d.). What is social and emotional learning? Retrieved July 22, 2016, from http://www.casel.org/social-and-emotional-learning/

Collaborative for Academic, Social, and Emotional Learning. (2005). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs – Illinois edition.* Chicago, IL: Author.

Conley, C. S. (2015). SEL in higher education. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning* (pp. 197–212). New York, NY: Guilford Press.

Conley, C. S., Durlak, J. A., & Dickson, D. A. (2013). An evaluative review of outcome research on universal mental health promotion and prevention programs for higher education students. *Journal of American College Health, 61,* 286–301. https://doi.org/10.1080/07448481.2013.802237

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousands Oaks, CA: Sage. https://doi.org/10.4135/9781452230153

Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology, 88,* 715–730. https://doi.org/10.1037/0022-0663.88.4.715

Cosgriff, M. (2000). Walking our talk: Adventure based learning and physical education. *Journal of Physical Education New Zealand, 33*(2), 89–98.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82,* 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45,* 294–309. https://doi.org/10.1007/s10464-010-9300-6

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Academic Medicine, 81,* 354–373. https://doi.org/10.1097/00001888-200604000-00009

Dyson, B., & Sutherland, S. (2014). Adventure education in your physical education program. In J. Lund & D. Tannehill (Eds.), *Standards-based physical education curriculum development* (5th ed., pp. 229–254). Burlington, MA: Jones and Bartlett Learning.

Frank, L. (2013). *Journey toward the caring classroom: Using adventure to create community* (2nd ed.). Oklahoma City, OK: Wood 'N' Barnes.

Frauman, E., & Waryold, D. (2009). Impact of a wilderness orientation program on college students' life effectiveness. *Journal of Outdoor Recreation, Education, and Leadership, 1,* 189–207. https://doi.org/10.7768/1948-5123.1018

Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling and Development, 72,* 281–288. https://doi.org/10.1002/j.1556-6676.1994.tb00935.x

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist, 58,* 466–474. https://doi.org/10.1037/0003-066X.58.6-7.466

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.

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), 43–87. https://doi.org/10.3102/00346543067001043

Hoffman, D. M. (2009). Reflecting on social emotional learning: A critical perspective on trends in the United States. *Review of Educational Research, 79,* 533–556. https://doi.org/10.3102/0034654308325184

Keniger, L. E., Gaston, K. J., Irvine, K. N., & Fuller, R. A. (2013). What are the benefits of interacting with nature? *International Journal of Environmental Research and Public Health, 10,* 913–935. https://doi.org/10.3390/ijerph10030913

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10,* 144–156. https://doi.org/10.1093/clipsy.bpg016

Libby, J., & Carruthers, C. (2013). Outcomes associated with a university outdoor adventures women's canoe trip. *Journal of Outdoor Recreation, Education, and Leadership, 5,* 210–225. https://doi.org/10.7768/1948-5123.1136

Lien, M., & Goldenberg, M. (2012). Outcomes of a college wilderness orientation program. *Journal of Experiential Education, 35*(1), 253–271. https://doi.org/10.1177/105382591203500104

Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Thousands Oaks, CA: Sage.

Mattanah, J. F., Ayers, J. F., Brand, B. L., Brooks, L. J., Quimby, J. L., & McNary, S. W. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. *Journal of College Student Development, 51*(1), 93–108. https://doi.org/10.1353/csd.0.0116

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: Jossey-Bass. https://doi.org/10.4018/978-1-4666-7409-7.ch007

Miles, J. C., & Priest, S. (1990). *Adventure education.* State College, PA: Venture.

Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education.* New York, NY: Teachers College Press.

Nolen-Hoeksema, S., Morrow, J., & Fredrickson, B. L. (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology, 102,* 20–28. https://doi.org/10.1037/0021-843X.102.1.20

Panicucci, J. (2007). Cornerstones of adventure education. In D. Prouty, J. Panicucci, & R. Collinson (Eds.), *Adventure education: Theory and application* (pp. 33–48). Champaign, IL: Human Kinetics.

Panicucci, J., Faulkingham-Hunt, L., Kohut, A., Rheingold, A., & Stratton, N. (2002). *Adventure curriculum for physical education: Middle school.* Beverly, MA: Project Adventure.

Pressman, S. D., Cohen, S., Miller, G., Barkin, A., Rabin, B. S., & Treanor, J. J. (2005). Loneliness, social network size, and immune response to influenza vaccination in college freshmen. *Health Psychology, 24,* 297–306. https://doi.org/10.1037/0278-6133.24.3.297

Priest, S., & Gass, M. A. (2005). *Effective leadership in adventure programming* (2nd ed.). Champaign, IL: Human Kinetics.

Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of College Student Development, 44*(1), 18–28. https://doi.org/10.1353/csd.2003.0008

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community.* New York, NY: Simon and Schuster. https://doi.org/10.1145/358916.361990

Quay, J., Dickinson, S., & Nettleton, B. (2000). Community, caring, and outdoor education. *Australian Journal of Outdoor Education, 5*(1), 4–17.

Ribbe, R., Cyrus, R., & Langan, E. (2016). Exploring the impact of an outdoor orientation program on adaptation to college. *Journal of Experiential Education, 39,* 355–369. https://doi.org/10.1177/1053825916668900

Rude, W. J., Bobilya, A. J., & Bell, B. J. (2017). An investigation of the connection between outdoor orientation and thriving. *Journal of Outdoor Recreation, Education, and Leadership, 9,* 197–216. https://doi.org/10.18666/JOREL-2017-V9-I2-8101

Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. *Developmental Psychology, 51*(1), 52–66. https://doi.org/10.1037/a0038454

Schwartz, F., & Belknap, C. J. (2017). Effects of a college outdoor orientation program on trait emotional intelligence. *Journal of Outdoor Recreation, Education, and Leadership, 9*(1), 69–82. https://doi.org/10.18666/JOREL-2017-V9-I1-7429

Seal, C. R., Naumann, S. E., Scott, A. N., & Royce-Davies, J. (2010). Social emotional development: A new model of student learning in higher education. *Research in Higher Education Journal, 10,* 1–13.

Semple, R. J., Lee, J., Rosa, D., & Miller, L. F. (2010). A randomized trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to enhance social-emotional resiliency in children. *Journal of Child and Family Studies, 19,* 218–229. https://doi.org/10.1007/s10826-009-9301-y

Seppala, E., Rossomando, T., & Doty, J. R. (2013). Social connection and compassion: Important predictors of health and well-being. *Social Research, 80,* 411–430.

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology, 1*(2), 105–115. https://doi.org/10.1037/1931-3918.1.2.105

Stuhr, P. T., & Sutherland, S. (2013). Undergraduate perceptions regarding the debrief process in adventure-based learning: Exploring the credibility of the Sunday Afternoon Drive debrief model. *Journal of Outdoor Recreation, Education, and Leadership, 5,* 18–36. https://doi.org/10.7768/1948-5123.1151

Stuhr, P. T., Sutherland, S., Ressler, J., & Ortiz-Stuhr, E. M. (2015). Students' perception of relationship skills during an adventure-based learning unit within physical education. *Australian Journal of Outdoor Education, 18*(1), 27–38.

Stuhr, P., Sutherland, S., Ressler, J., & Ortiz-Stuhr, E. M. (2016). The ABC's of adventure-based learning. *Strategies, 29*(1), 3–9. https://doi.org/10.1080/08924562.2015.1111787

Stuhr, P. T., & Thomas, M. D. (2017). Conceptualizing mindfulness for health and physical educators. *California Association for Health, Physical Education, Recreation, and Dance e-Journal, 3*(3), 13–21.

Sutherland, S., & Legge, M. (2016). The possibilities of "doing" outdoor and/or adventure education in physical education/teacher education. *Journal of Teaching in Physical Education, 35,* 299–312. https://doi.org/10.1123/jtpe.2016-0161

Sutherland, S., & Stroot, S. A. (2009). Brad's story: Exploration of an inclusive adventure education experience. *Therapeutic Recreation Journal, 43*(3), 27–40.

Sutherland, S., & Stroot, S. A. (2010). The impact of participation in an inclusive adventure education trip on group dynamics. *Journal of Leisure Research, 42*(1), 153–167.

Sutherland, S., & Stuhr, P. T. (2014). Reactions to implementing adventure-based learning in PE. *Sport, Education, and Society, 19,* 489–506. https://doi.org/10.1080/13573322.2012.688807

Sutherland, S., Stuhr, P. T., & Ayvazo, S. (2016). Learning to teach: Pedagogical content knowledge in adventure-based learning. *Physical Education and Sport Pedagogy, 21,* 233–248. https://doi.org/10.1080/17408989.2014.931365

Sutherland, S., Stuhr, P. T., & Ressler, J. (2012). The Sunday Afternoon Drive debrief model. *Journal of the International Society for Comparative Physical Education and Sport, 34*(2), 5–12.

Travlou, P. (2006). *Wild adventure space for young people* (Document 1 WASPY). Retrieved from the OPENspace website: http://www.openspace.eca.ed.ac.uk/wp-content/uploads/2015/10/Wild-Adventure-Space-for-Young-People-Literature-Review-Survey-of-Findings-Document-WASYP-1.pdf

Vlamis, E., Bell, B. J., & Gass, M. (2011). Effects of a college adventure orientation program on student development behaviors. *Journal of Experiential Education, 34,* 127–148. https://doi.org/10.1177/105382591103400203

Wolfe, B. D., & Kay, G. (2011). Perceived impact of an outdoor orientation program for first-year university students. *Journal of Experiential Education, 34*(1), 19–34. https://doi.org/10.1177/105382591103400103

Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools: A systematic review and meta-analysis. *Frontiers in Psychology, 5,* 1–20. https://doi.org/10.3389/fpsyg.2014.00603

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning: What does the research say?* New York, NY: Teachers College Press.

Zoogman, S., Goldberg, S. B., Hoyt, W. T., & Miller, L. (2015). Mindfulness interventions with youth: A meta-analysis. *Mindfulness, 6,* 290–302. https://doi.org/10.1007/s12671-013-0260-4