

Social Emotional Skills in Adventure Education: A Qualitative Study on the Connection of  
Adventure Education Participation and Social Emotional Skills in High School Students

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# SOCIAL EMOTIONAL SKILLS IN ADVENTURE EDUCATION

## Abstract

The purpose of this study was to examine possible connections between participation in an Adventure Education (AE) course and social-emotional skills (SEL) in a group of high school students during their junior and senior years. Six participants agreed to a one-on-one, open-ended, interview to determine their experiences from taking a 5-6 week AE course. Those experiences were then explored for relativity to SEL. A phenomenological approach gained an understanding of the participant's experience throughout the course. Findings indicated, through participation in the course, participants experienced impacts on self-confidence and self-awareness, and shared experiences of changes in empathy and connectivity to their group community. It was further determined those impacts from the experience aligned, to a varying extent, with the five core competencies of SEL. Further research is required to determine if AE programs are a viable way to provide SEL programming to adolescents.

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List of Abbreviations

Adventure Education (AE)

Collaboration for Academic, Social and Emotional Learning (CASEL)

Physical Education (PE)

Social-Emotional Learning (SEL)

## Definitions

There are a number of key terms to be familiar with when discussing Adventure Education (AE). The topic of AE refers to programming based around trust and team building activities, and is the general focus of this study. Typical progression involves trust-building activities in the beginning, which lead into low element problem solving activities. The last stage, high ropes elements, consists of participants completing challenges, which require rock climbing and belaying skills (D'Amato & Krasny, 2011).

An Element, or Challenge, refers to a specific challenge activity, which a group must solve. There are low elements, which may include obstacles, and may also include the need for peer spotting, but do not take place more than a few feet off the ground, therefore tether and belay systems are not needed to complete the challenge. There are also high elements, which can take place a couple stories off the ground and require the use of harnesses and rope systems by the participants, as well as belaying skills. Belaying is the technique used by the partner on the ground as a safety precaution to prevent a fall from the high ropes participant. Belaying involves giving and taking up slack in the rope, as the climber needs it. All elements used in this study were low elements. (D'Amato & Krasny, 2011)

When discussing impacts of participation, several terms are used. Delayed Gratification is the concept that if one is patient, resists the temptation of an immediate reward, and goes about a process in the right way, then one will obtain a much greater reward and feeling of accomplishment (Conti, n.d.). Community's description is one's relationship with others and the environment. A sense of community means a person experiences a feeling of fellowship with those around them, in part, because of common interests and goals. Empathy is one's ability to understand and share the feelings of others ("Empathy," 2018). Empathy describes one's



capacity to understand and share the feelings of others (“Empathy,” 2018). Assertive communication refers to a style of communication where the individual’s perspective is clear and heard by the group without dominating others or the conversation. Other communication styles include passive, aggressive, and passive-aggressive communication. (“Assertive Communication,” n.d.).

Debrief or Reflection Circle are terms used for the closure of an AE lesson where participants reflect on the process of what they had just gone through, whether they were successful or not, and why. The Reflection Circle is commonly the time for discussion of previous concepts identified, such as delayed gratification and empathy. Discussion norms are typically set up during the beginning of an AE course in order to facilitate personal growth through group reflection. (Seaman & Rheingold, 2013)

## CHAPTER ONE

### Introduction

During the junior and senior years of high school, teenagers have many challenges to navigate. The teenage years are a period of significant change and development, including physical, emotional, and mental changes (Caissey, 1994). During adolescence, teens navigate relationships with peers, family, and others to understand where they fit in adult society (Caissey, 1994). Adolescence is a life stage with “unique developmental needs...including the search for purpose and identity, the importance of peer relations, their attitudes towards themselves and others, and their meta-cognitive abilities” (Pennsylvania State University, 2017, p. 2).

These developmental needs translate to a time when individuals form values, and, often, strive for success to secure a desired future. Without adequate life skills, students may have increased anxiety, poor communication skills, low self-esteem, vulnerability to drug use or other risky behaviors, and poor academic performance, indicating that development of such life skills are essential for an adolescents to develop into a highly functioning adult (Pennsylvania State University, 2017). The challenges of adolescence appear vast, and it is a critical time to develop the skills to manage emotions, relationships and life challenges (Caissey, 1994).

High schools have requirements ensuring graduates learn basic skills in math, science, language arts, and the list goes on. Many schools lack graduation requirements for life skills that help students understand and handle life’s challenges, and that help them become productive members of society. In 1994, a group of researchers, educators, national leaders and other stakeholders gathered to discuss a ‘missing piece’ in education: streamlined programming which sets youth up to be adults who were confident, self-aware, made sound decisions, managed

emotions, developed strong relationships with others, and who became contributing members of society (Pennsylvania State University, 2017). This gathering of stakeholders led to the coining of the term ‘social and emotional learning’ and the formation of the Collaborative for Academic, Social and Emotional Learning (CASEL). Throughout the following 20 years, CASEL, and other researchers, child advocates and education-related foundations, encouraged the implementation of new SEL programs and conducted research to gather evidence on programming for social and emotional development.

Much evidence has emerged over the years to support the concept of providing SEL programs that cover many important topics, in place of the many separate initiatives previously aimed towards guiding positive youth development in one area at a time. Separate initiatives focused on individual areas such as “drug prevention, violence prevention, sex education, civic education, and moral education, to name a few” (CASEL, 2018, p. 1). CASEL held a forum in 2009 to encourage additional SEL programs through a national initiative (CASEL, 2018). The evidence on SEL programming over the past 30 years reveals that SEL programs benefit students by fostering a positive self-concept, developing skills for building and maintaining relationships, and improving academic performance (CASEL, 2018).

Programs using AE teach physical education skills and help to develop character among participants. Research on AE focused on similar impacts including self-esteem, relationship building skills, and reduced fear and anxiety (Neill, 2002). There is consistent evidence participation in an AE program can increase participants’ social interaction skills, and the way they handle adversity in their personal and academic lives (Cason & Gillis, 1993; Deringer, 2011; Oldmixon, 2007; Taylor, Oberle, Durlak, & Weissberg, 2017; Whittington, 2011). The many challenges for participants in AE allow them the opportunity to practice social interaction,

as well as provide the chance to face adversity and make decisions that affect themselves, and others, in a controlled manner (Sibthorp & Jostad, 2014).

Despite the overlap in experiential outcomes of SEL programs, and those of AE programs, there appears to be little research explicitly focused on AE *as* SEL programming in schools. To better understand if, and to what extent, school-based AE is a viable form of SEL programming, studying of a group of high school students enrolled in an AE class may provide useful information about the overall essence of the experience.

### **Purpose & Significance**

The following is a qualitative study focusing on how a group of high school students, from Belmont, Massachusetts, experience participation in a school-based AE course. The AE course was 5-6 weeks long and met four occasions weekly. Existing evidence on the experience during participation in AE exists, primarily, through quantitative studies, and studies reviewing the experiences of participants on a one-time excursion, such as a 10-day voyage or a voluntary program provided outside of school, rather than a school-based AE unit in a physical education class. The current research on AE is lacking in qualitative studies centered on understanding the experience of students in school-based AE programs.

Since it is well established that teenagers are in a life stage with plentiful new experiences, which include adversity, and CASEL is advocating for increased SEL initiatives in schools, there has been a need identified for SEL programming reaching adolescents and developing the unique skills many academically-focused classes do not (Caissey, 1994; CASEL, 2018). It is important to understand the experiences of adolescents who participate in an AE class. The information gathered from interviews in this study will further strengthen the literature on the student experience of AE in a school-based AE course. In addition, this research will

identify implications for additional research needed to determine whether AE programs are SEL programming in schools.

### **Statement of the Research**

Though there is evidence that participation in AE can have intrapersonal and interpersonal impacts through the experience (Oldmixon, 2007; Whittington, Mack, Budbill, & McKenney, 2011), these conclusions primarily involved quantitative studies. In addition, often the skills assessed in studies on AE focused on skills that fell into one of the five core competencies of SEL (CASEL, 2018), yet there are only a few studies explicitly linking AE with the SEL competencies (Rahman, 2009; Stuhr, Sutherland, Ressler, & Ortiz-Stuhr, 2015).

It is important to further examine the experiences of students in a school-based AE program to understand if AE can contribute to a high school student's SEL, and if so, how? Understanding the experience of participation in an AE course, based in a high school setting, while also trying to gain an appreciation of the extent of SEL provided in the course, required gathering data on the social and emotional impact of participation in a school-based high school AE course.

### **Research Questions**

1. What does a group of high school juniors and seniors experience through participating in a 6-week, school-based AE course, in terms of SEL?
2. How does the participant's experiences relate to the core competencies of SEL?

One-on-one, guided interviews, with a predetermined question guide, took place to explore personal experiences, as it relates to key concepts in social and emotional development, through participation in a high school AE course. The course consisted of four 50-minute classes per week, for 5-6 weeks. The variability in the length of the course depended on the group's

completion time of each challenge. The AE course of study took place inside a standard gymnasium or open outdoor space.

Elements were portable and adaptable to different settings, as it is common in PE, to have to alter one's classroom due to weather or lack of gym space. The sequencing of the sections of the AE course, divided into four units, ensured skills learned in the first unit were important for success in the second unit, and so forth. The units were team building, communication, trust, and group problem solving.

Participants were provided as much time as necessary to complete a challenge. Each class meeting began and ended with a circle debrief, or reflection, on the challenge and the skills which could potentially lead to success. The challenge elements included a variety of team building skills intended to induce struggle, from which learning and growth, presumably, could ensue. The AE course incorporated low rope elements into the instruction of social, emotional, spiritual, and physical skills.

The research participants were students enrolled in the AE course at the participating high school. The public high school of study, considered high achieving academically, was located in an affluent suburban town outside of Boston, Massachusetts. Participants agreed to participate in a post course interview, with parental consent. Each participant interviewed within 3 weeks after completing the AE course. Specific interview questions strove to elicit information that would best facilitate answers to the research questions. All participants received the same questions from the guide. Follow up questions, used to gain specific information from a response, varied between participants.

### **Researcher-as-Instrument**

The researcher-as-instrument concept is the idea that the researcher himself, or herself, is the instrument for collecting data, as opposed to a more standardized research tool without the direct involvement of an individual human being (Pezalla, Pettigrew & Miller-Day, 2012). Each researcher has their own personal characteristics, which contribute to a unique interview style; therefore, different researchers will have different conversations with participants, eliciting different types of responses: “Because the researcher is the instrument in semi structured or unstructured qualitative interviews, unique researcher attributes have the potential to influence the collection of empirical materials” (Pezalla et al., 2012, p. 166).

Having the researcher as an instrument in this study potentially influenced the results in a range of ways, both positively and negatively. Extensive background in the field of study assisted in the observation of the phenomenon of the experience, which aided in the identification of concepts during interviews. Conversely, an obvious enthusiasm for the course, and the student-teacher relationship between the interviewer and interviewee, created a self-selection bias among participants who may have sought out approval from their teacher.

The researcher had past experiences with AE, both during his teenage years and as an adult. Spending eight years in the Boy Scouts of America, he reached the rank of Eagle Scout. During that time, he participated in many wilderness adventure experiences such as backpacking, camping, aquatics, low and high rope challenges, and more. He spent most of his time within the organization acting in leadership positions.

While attending Springfield College for a Bachelor’s degree in Physical Education, he spent a full semester in an AE program, culminating in teaching AE lessons to local middle

school students from a behavioral challenge school. The course included team building activities, low element challenges, high ropes challenges, and rock climbing.

During his position at the time of research, a PE teacher, in the building where the participating students attended high school, he led a group of peers who developed an outdoor education course, which consisted of AE and wilderness sporting such as camping, archery, and snowshoeing. Another role was instructor of the AE course, and instructor of the study's participants.

As part of the process to identify the phenomenon of the experience, observation took place of the group, and individual behaviors, during each of the challenge activities, and throughout the entire unit. Being part of the experience, as a witness, provided more context to participants' interview answers, which allowed for a more accurate interpretation of the results (Pezalla et al., 2012).

Through facilitation of the course, a rapport with the students in the class was established. Rapport establishment happened, primarily, through discussion and reflection circles at the beginning, end, or during difficult moments of the challenge. Establishing a rapport with the participants in the study prior to the interview allowed for a more comfortable environment for participants to speak openly about their experiences. (Pezalla et al., 2012)

It was evident, through participation in the course, that the researcher/course instructor had an enthusiasm for the course material, as well as a contributing hand in designing the course. As many individuals seek approval when in a relationship such as student-teacher, students with negative experiences may have chosen not to participate in an interview. In order to avoid disappointing their teacher, or to receive approval, students with positive experiences may have been more likely to volunteer.



Despite an extensive background in the field of study, the researcher had little experience conducting one-on-one interviews for research, including, in this case, creating the interview guide and conducting the interview. After a self-assessment of the researcher's interview style, the interview happened in an affirming style, rather than a neutral style. As a response to the interviewees' potential to be nervous or uncomfortable being interviewed by their teacher, the researcher used affirmations and natural excitement when a positive response was given. The researcher was quick to affirm, and repeatedly remind participants, that negative responses were acceptable, perhaps leading to more reserved responses.

### **Limitations of the Research**

**Student-teacher Relationship.** The relationship of student-teacher overlapping with researcher-participant presented a potential bias in both recruitment and responses to interview questions. The willingness of potential participants to interview may have been increased or decreased by the relationship. For example, a student may have been more comfortable being interviewed by a familiar teacher rather than a stranger, or there may have been a level of hesitation to be interviewed by a person who served as an authority figure. This overlap may have affected the way they chose to answer interview questions.

An additional limitation occurs when the students, as in this study, were minors. Studying minors requires special permission from the research board, principal of the school, and parents or guardians of the minor. These challenges not only make it more difficult to study minors, but also in recruitment and evidence collection. For example, students in the class of study are required, for a grade, to journal a reflection on how they felt about themselves during the AE course. These reflections could not be evidence in the study because there was no parental consent.

**Variability in AE Curriculum.** Although basic principles exist in AE, there was no unified AE curriculum. Students who participated in a different AE course at the school may have had varied experiences. They may have been participating in daily lessons planned by different instructors, or may have been part of a different class with the same instructor who adjusted course structure and learning experiences on a class by class basis, as is common in AE.

As a designer of the course, the researcher established certain learning objectives and created lesson plans to reach those desired outcomes. Most of the challenges were standard AE low rope elements, but class reflection questions varied, based on observation and past personal experiences. These factors created the issue of potentially leading potential participants toward a biased outcome. Similarly, the interview questions were subject to the same bias, perhaps leading participants to more responses that are positive.

**Selection Bias.** The AE course of study was part of an elective requirement for PE credit. Students were required to take two elective classes out of their choice of six different PE classes. The AE course took place in one of the six elective choices, titled Outdoor Pursuits. Students who had no interest in an AE course, or the wilderness sporting units which followed, may have elected to take other courses, creating a bias in the study group. As the AE course was not a graduation requirement, the sample of students who participated in the course, most likely, had an above average interest in AE before the course began.

Self-selection bias is an issue that results when participants elect, or not, to be involved in research. The voluntary nature of the research lends itself to having individuals who have a higher interest in discussing a particular study topic be more likely to participate in the research. Bias results by disproportionately having participants be people who are more interested in AE

curriculum, more interested in discussing AE or, like the teacher/investigator and want to please them. This is often true of research where participation is voluntary. (Collier & Mahoney, 1996)

The authority role of the teacher versus the student and the adult versus the adolescent creates a potential bias. In such a setting, a self-selection bias occurs as interviewees may have participated, and provided responses, in order to please or appease.

## CHAPTER TWO

### Review of the Literature

There is a large volume of research on SEL, which stems from several national initiatives to implement programming. Research aims to understand what type of programming creates youth who become responsible, capable, communicative, contributing members of society. A majority of the research on school-based SEL programs focused on SEL interventions involving elementary or middle school aged children (Durlak, 2011). Evidence indicates, SEL programming with various structures, instructors, and settings, has a positive impact on youth (Payton et al., 2008).

The bulk of the literature on AE includes research on specialized groups, primarily in expedition-based, or singular experience-based AE programs, and are primarily quantitative in nature. Several meta-analyses on impacts of AE noted that studies on AE have had fair or poor design quality, and, as a result, results may be misleading (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2008; Cason & Gillis, 1993). This paper seeks to examine if there is a connection between SEL and AE in order to understand a need for future research considering school-based AE courses as evidence-based SEL programming. Only two studies in the last 20 years explicitly review this connection, indicating a significant gap in the literature (Rahman, 2009; Stuhr et al., 2015).

#### **Social-Emotional Learning (SEL) Defined**

According to CASEL, Social-Emotional Learning (SEL) is, the process through which children and adults acquire the knowledge, attitudes, and skills to recognize and manage their emotions, set and achieve positive goals, demonstrate caring and concern for others, establish and maintain positive relationships, make

responsible decisions, and handle interpersonal situations effectively. (CASEL, 2018, p.

1)

Encouraging teachers to help students acquire social and emotional skills is an initiative for many school administrations (Payton et al., 2000). Social-emotional growth is imperative for one's own health (mental, emotional and spiritual), and for acting as a productive member of one's environment (Durlak, 2011).

CASEL further asserted the knowledge, attitude and skills mentioned above allow children, especially, to be able to handle emotions, develop and maintain healthy relationships, manage conflict, make sound decisions, and develop characteristics and skills that allow them to positively contribute to society, and interact with their environment (CASEL, 2018). Significant research through CASEL, and their funding and research partners, allowed for the creation of five "inter-related core social and emotional competencies that SEL programs should address: 1) self-awareness... 2) self-management... 3) relationship skills... 4) social awareness...5) responsible decision making" (Payton et al., 2008, p. 4).

According to CASEL (Payton et al., 2008), the first core competency, self-awareness, describes the ability to understand one's personal values, emotions and identity, and to have a sense of self-confidence. The second core competency, self-management, refers to an ability to manage stress, handle emotions, react appropriately in challenging situations and set adequate goals for oneself (Payton et al., 2008). Social awareness, the third core competency, is about understanding others' perspectives, appreciating similarities and differences between individuals or groups, and the ability to recognize and utilize available resources as best as possible (Payton et al., 2008). The fourth core competency, relationship skills, includes the ability to find, create and maintain positive relationships, and appropriately handle conflict with others (Payton et al.,

2008). Lastly, the fifth core competency, responsible decision making, refers to making decisions grounded in ethical considerations, social norms, respect and safety, and the ability to contribute to one's community (Payton et al., 2008).

With growing evidence that SEL skills are important to acquire, and need to be explicitly taught (Payton et al., 2008), there comes an increased need for various ways to teach these skills. A challenge emerges on how to best develop the growth of these skills, rather than simply explaining the skills and their meaning. SEL programs must not only identify what the necessary SEL skills are, but also, allow participants a chance to practice those skills and reflect on their mindset and behavior regarding those skills.

### **Evidence of the Benefits of SEL**

There are many different types of studies on SEL programs - ranging from small programs with specialized populations (e.g. children with behavioral issues, at risk urban youth), to large universal school-based programs, after school programs, and programs outside of schools. Three major meta-analyses conducted in the last 10 years aimed to indicate the impact of SEL programs.

The first universal review meta-analysis (Durlak et al., 2008) aimed to determine the impact of SEL strategies on students aged 5 to 13. The paper reviewed 180 different investigations in school settings, involving 277, 977 students (without known social, emotional or behavioral problems) (Durlak et al., 2008). The meta-analysis found immediately after the intervention, (e.g. series of classroom-based lessons targeted at specific SEL competencies), students showed,

increased social-emotional skills in test situations (e.g., self-control, decision-making, communication, and problem-solving skills); more positive attitudes toward self and

others (e.g., self-concept, self-esteem, prosocial attitudes toward aggression, and liking and feeling connected to school); more positive social behaviors (e.g., daily behaviors related to getting along with and cooperating with others); fewer conduct problems (e.g., aggression, disruptiveness); lower levels of emotional distress (i.e., anxiety, depressive symptoms); and significantly better academic performance (i.e., school grades and achievement test scores), (Payton et al., 2008, p. 7)

compared to students in control groups.

Limitations of this meta-analysis were that it reviewed universal SEL programs, as well as programs for specialized groups. Examples of specialized groups include at-risk youth; individuals recovering from substance use disorders, individuals diagnosed with AIDS, youth with previously identified behavioral issues, youth with known social or personality disorders (Durlak et al., 2008). Though the benefits experienced by specialized groups contribute to the growing evidence of the benefits of SEL programs, it is important to understand the impact of SEL programs on individuals who do not fall into these specialized groups.

In 2011, Durlak et al. conducted another meta-analysis, doing just that. The researchers reviewed 213 SEL programs in schools, involving 270,034 students in kindergarten through high school, and aged 5 to 18. This meta-analysis aimed to review universal interventions only, meaning they were not targeting any specialized populations. Findings revealed that students who participated in SEL programs had significantly improved outcomes as compared to the controls.

Said outcomes measured included “social and emotional skills, attitudes toward self and others, positive social behaviors, conduct problems, emotional distress and academic performance,” (Durlak et al, 2011, p. 410). Students who participated in AE programs showed

significantly better outcomes in all measures, as compared to controls. In addition, approximately 15% of the studies reviewed assessed the aforementioned outcomes at least six months after the program. Participant follow up occurred, on average, 92 weeks (nearly two years) post-intervention, and all outcomes remained significantly higher for participants in SEL programs vs. controls (Durlak et al., 2011). This study indicates that SEL programs benefit universal populations, and these benefits maintained at least six months after participation in SEL programs.

Just as Durlak et al. (2011) presented follow up outcomes after participation in SEL programs, a more recent meta-analysis focused solely on follow-up outcomes of SEL programs (Taylor et al., 2017). Taylor et al. investigated 82 school-based universal SEL interventions, including 97,406 students from kindergarten through high school, both within, and outside, of the United States. The researchers focused on follow-up outcomes of school-based SEL programs, ranging from 6 months to 18 years after the program. Follow up outcomes include emotional skills, attitudes, and well-being. The indicators used to determine well-being included positive social behavior, academic performance, conduct problems, emotional distress and drug use.

Results from Taylor et al. (2017) indicated, students who participated in SEL programs showed significantly better social-emotional skills and positive attitudes (Taylor et al., 2017). In addition, the results showed that, at follow-up, participants in SEL programs demonstrated more prosocial behavior, had better academic performance, fewer conduct issues, less emotional distress, and reported less drug use than those who did not participate. Only a few studies in this meta-analysis looked at impacts of SEL programs on graduation rates and safe sexual behaviors, but notably, participants of SEL programs were more likely to graduate from high school and to



report using safe sexual behaviors, compared to students in the control groups (Taylor et al., 2017). This meta-analysis discussed results found on the impact of SEL programs six months to 18 years post-intervention, indicating that SEL programs can not only promote positive behavior, but they can also contribute to preventing negative or risky behaviors (Taylor et al., 2017).

The growing body of literature, and vast number of SEL programs across the country, indicate that SEL programs play an integral role in shaping students' attitudes and experiences throughout their school aged years, potentially maintained for, up to, 18 years post participation. Due to the incredible need of programs for adolescents, which foster SEL, it is important to understand all types of programs that may be able to contribute to SEL in schools.

### **Adventure Education (AE) Defined**

Similar to SEL programs, AE programs have been touted as an alternative method of reaching adolescents to foster prosocial behavior and develop positive social characteristics. AE also provides the opportunity for individuals to interact with others and the environment, in a way, allowing them to be positively contributing members of their community (Durlak et al., 2008).

AE programs bring their participants through a series of challenges, with the goal of individual, and group, growth in a number of areas consistent with social-emotional growth. Challenges are sequenced in such a way to facilitate this growth. Participants typically start out by working in small groups to solve a mental problem or challenge (Bailey, 1999). As the program progresses, the challenges become more difficult, more physical, and must be completed by larger groups. These challenges are often referred to as low rope challenges as the next phase of AE moves to high rope challenges where participants are in a harness, attached to a rope, on belay and are given challenges to complete thirty feet up in the air. After each challenge,

and along the way, the facilitator of the program provides questions for reflection of the identified social-emotional skills.

As Bailey (1999, p. 39) described, “Adventure education...uses kinesthetic learning through physical experience. It involves structured learning experiences that create the opportunity for increased human performance and capacity. There is conscious reflection on the experience and application that carries it beyond the present moment.” AE uses a specific sequence and flow of activities to foster physical and social development of students through placing focus on the “process” of student participation and cooperation, while working towards a common challenge or task, rather than emphasizing the outcome of the challenge (Cosgriff, 2000). In AE, students work towards a common goal and then practice reflecting on experiences.

Dyson & Sutherland (2015, p. 230) described, “through an atmosphere of self-expression, communication, cooperation, trust, problem solving, and challenge, students are encouraged to think independently while working with others.” The experience had by students, while participating in AE activities, as well as guided personal reflection after activities, is how students develop relationship skills, communication, managing conflict, problem solving, cooperation, and trust (Dyson & Sutherland, 2015).

A well-known program that uses AE in a PE curriculum is Project Adventure. Rohnke (1986) noted,

The intent of Project Adventure is to increase the student’s sense of personal confidence, increase mutual support within the group, develop an increased level of agility and physical coordination, and develop an increased appreciation in one’s physical self while interacting with others. (p. 68)

The learning process for AE stems from the philosophy that a physical challenge, completed by a group, allows students to “challenge themselves, cooperate on tasks, take real or perceived physical or emotional risks, trust in themselves and others, and solve problems with others’ help and guidance” (Dyson & Sutherland, 2015, p. 232).

### **Impacts of Adventure Education Programs**

There is a significant amount of current research on participation in AE programs, including studies within large and small groups, different age, race and gender demographics, and in a variety of environments. Strong evidence is emerging to support the positive characteristics gained through participation in AE in all sized and demographic groups. Similar to SEL programs, many researchers and experts in the field assert that participation in AE, not only teaches physical skills, but also cognitive and social skills (Cooley, Burns & Cumming, 2016; Greffrath, 2013; Mutz & Miller, 2016).

Cain (2005) argued that AE could provide all three tenets of effective group education, as opposed to classroom education, which can only provide the first two tenets: “1) provide a clearly identified and worthy task, 2) provide the opportunity for growth and advancement of new skills, and 3) the opportunity to create and maintain relationships with other members of the group” (Cain, 2005, p. 5). The third tenet of effective group education focuses on the social skill of creating and maintaining relationships, which is a core focus of SEL programs (CASEL, 2018).

Adventure education has consistently shown to improve group dynamics and comfort of the individual in a group setting (Cooley et al., 2016; Greffrath, 2013). In the traditional model of PE curriculum, students learn the concepts of endurance, strength, and flexibility through sport and physical fitness classes, while they learn the concepts of teamwork, relationship building,

communication, and other social skills in a classroom-based health class. Proponents of AE claim that the program can combine the two areas to teach the full student (Gehris, Kress & Swalm, 2011).

Several major reviews explored the benefits of AE programs. Of note, Hattie, Marsh, Neill & Richards (1997) reviewed 96 studies of AE programs with varying lengths of participation. Included in these studies were programs such as Outward Bound, and other excursion-based programs, as well as school or camp-based programs. This meta-analysis found that the overall effect size for AE on specific outcomes such as leadership skills, self-concept, academics, personality factors, interpersonal relationships, and adventurousness showed to be small to moderate, sustained or increased after participation (Hattie et al., 1997).

The outcomes reviewed here fall into four of the five SEL core competencies; self-awareness, social awareness, relationship skills and responsible decision-making (CASEL, 2018). This was an impactful finding, as many other programs, aiming to reduce risky behavior or improve academics and prosocial behavior, had similar effect sizes, but decreased over time (Hattie et al., 1997).

In a review of the impact of AE, focused solely on adolescents, making the results most relevant for this study, Cason and Gillis (1993) conducted a meta-analysis, including quantitative studies on effects of AE programming on adolescents, which all used control groups. The 43 studies included in this meta-analysis were studies on groups' aged 11 through college freshman. Specialized groups were included in this meta-analysis, as were programs such as college orientation excursions and Outward Bound programs. It is unclear what percentage of studies from this meta-analysis were school-based programs vs. excursion-based programs.

The study reviewed effect sizes in the following outcome measures: self-concept, behavioral assessment by others, attitudes, locus of control, clinical scales, academic grades, and school attendance (Cason & Gillis, 1993). In all areas of outcomes, effect sizes showed small to moderate differences between the control groups and experimental groups, suggesting that AE participation improved outcomes for adolescents in several SEL competency areas.

To provide a clearer picture of the outcomes measured in individual studies on the impact of AE, several studies on groups of college students or adolescents were reviewed. Most studies, pertaining to impacts of AE on adolescents or college-aged individuals, are on special populations in AE programs that are not school-based. These studies remain important to the overall body of literature on the impacts of AE, as the outcomes typically fell within the five core competencies of SEL: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2018). Common outcomes within studies reviewed include AE impacts on self-esteem, self-efficacy, confidence, relationship building, and communication skills (Cross et al., 2002; Deringer, 2011; Oldmixon, 2007; Scarf, Hayhurst, Riordan, Boyes, Ruffman, & Hunter, 2016; Whittington & Budbill, 2013).

One of the most commonly studied groups in the AE literature is college-aged individuals. Oldmixon (2007) studied benefits of outdoor AE on college campuses. The author discusses that both students and the campuses benefitted from these programs. In this study, students went into the wilderness on outdoor adventure trips, facilitated by their college or university. Results indicated, compared to a control group who did not attend these trips, students who participated reported lower stress levels, reduced fear, reduced anxiety, and an increased ability to become more productive and happier students (Oldmixon, 2007).

Similarly, a study at Texas State University explored how AE influences personal characteristics such as comfort, safety, and freedom (Deringer, 2011). The university ran an adventure program, and studied the participants' experiences. Data collection occurred by doing in-depth interviews with students that had attended at least one five day trip. The purpose of this qualitative study was to understand the experience of the students as it relates to handling the college lifestyle. The researcher aimed to understand if, and how, participation in the programs influenced students' lives outside of the AE program. The interview results showed that students consistently discussed themes of clearer self-definition, feelings of freedom, and feelings of authenticity during and immediately post-intervention (Deringer, 2011).

Another commonly studied age was adolescence, and similarly, studies often focused on the experiences of specialized groups of adolescents in AE programs that were not school-based. For example, Cross (2002) studied perceptions of alienation and personal control in a group of at-risk adolescents who completed a series of rock climbing trips. Results indicated, compared to controls, those who participated in the AE program felt less alienated and had a stronger sense of personal control after participation (Cross, 2002).

Whittington et al. (2013) also studied adolescent girls, with a focus on changes in confidence and sense of self for those who participated in an AE program called 'Dirt Divas.' This program included a weekly mountain biking and empowerment program for adolescent females. Qualitative interviews aimed to understand the experiences of participants. Analysis of interviews revealed themes such as increased confidence in physical abilities, feelings of physical strength, higher self-esteem, increased behaviors showing perseverance and courage, increased resiliency, increased connection with others, and a greater sense of self (Whittington et al., 2013).

In an earlier study, Whittington et al. (2011) analyzed experiences of 361 girls, aged 10-17 years, from diverse backgrounds in socio-economic status and race/ethnicity, who experienced excursion AE programming, including backpacking, water adventure, mountain biking, and rock climbing. The results of the qualitative interviews conducted revealed three themes: increase in girls' feelings of comfort and safety, increased connections with one another, and freedom of stereotypes after participation in AE programming (Whittington et al., 2011).

Louw, Meyer, Strydom, Kotze, & Ellis (2012) focused on a specialized adolescent population, black teenagers, to determine if participation in an AE program provided any short-term or long-term benefits. Forty boys and forty girls aged 12-17 divided into a control group or an experimental group. The experimental group participated in a five-day AE program and all participants took "The Life Effectiveness Questionnaire" immediately before, immediately after, and six months after the program. According to researchers, this questionnaire "reflects the psychological and behavioral aspects of human functioning which determine the proficiency of a person in society" (Louw et al., 2012, pg. 55). The results indicated a beneficial change in "The Life Effectiveness Questionnaire" scores in the experimental group compared to the control group suggesting that participation in AE improved one's ability to function in their environment (Louw et al., 2012).

Scarf et al. (2016) reviewed adolescents who participated in a 10-day trip as part of an AE program. Participants had their resilience measured by a questionnaire on the first and last day of their trip. Testing occurred, on perceived social support and sense of belonging, on their last day. Results of the questionnaires, administered on the first and last day of the trip, revealed that adolescents who participated in the AE program had increased resiliency from the first day,

to the last day of the trip, results maintained when controlling for perceived social support (Scarfe et al., 2016).

Unlike many of the previous studies, Beightol, Jeverson, Carter, Gray, & Gass (2012) reviewed the impact of a school-based AE program, as opposed to an excursion-based AE program. The investigators included a younger population, 5th grade Latino students, and focused primarily on the concept of resilience. In this study, a school-based program with 13 sessions (10 of them were two-hour sessions in classroom or playground, and three of them as all-day excursions), was reviewed. Participants completed surveys and did qualitative interviews. Primarily qualitative data, from interviews and focus groups, provided significant results in this paper. This data indicated that participants of this AE program had increased self-esteem, self-efficacy, empathy, goals and aspirations, and problem-solving skills.

Just as few studies in the literature review focused on impacts of high school-based AE units or courses, even fewer explicitly connected AE programming with SEL competencies (Rahman, 2009; Stuhr et al., 2015). This may be a potential avenue for providing SEL programs in high schools, not yet been fully explored for this purpose. Rahman (2009) made a similar explicit connection when the investigator conducted a quantitative study on an eight-week school-based AE program at a secondary school in Singapore, with the goal of specifically measuring changes in skills within the five core SEL competencies using a pre-test, post-test survey design (Rahman, 2009).

Results indicated students in one 'track' in Singapore schools labeled 'Express Stream' had a moderate to large effect on skills, behaviors and attitudes as compared to a negligible effect on another 'track' of students labeled the 'Normal Stream.' The difference between 'Normal' and 'Express Stream' students in Singapore is the amount of time and preparation they



receive to take the ‘O’ exam, which if passed, signifies readiness for university (Rahman, 2009). Investigators noted this difference was perplexing. Qualitative data from all students indicated that participants in the eight-week AE program had increased classroom engagement in all classes (Rahman, 2009).

Stuhr et al. (2015) aimed to understand the impact of AE on SEL, and in particular, the 4th core competency: relationship skills. Investigators completed a qualitative case study on an AE program in a middle school to determine student perceptions of relationship skills before and after the program. The researcher conducted interviews with participants and found that participants in a school-based AE program expressed an increased “ability to connect with, understand, value, develop and transfer inter- and intra-personal relationship skills” (Stuhr et al., 2015, p. 27).

These results indicated that middle school students not only increased their own perceived relationship skills, but also increased their understanding of inter- and intra-personal relationship skills, as well as their value (Stuhr et al., 2015). These individual studies identified major themes, which have emerged as potential benefits of AE. Most of these studies focused on a concentrated few concepts of SEL rather than potential benefits within all five core competencies of SEL.

### **Summary of the Evidence**

There is strong evidence for the need of sound SEL programs to enhance the role of schools in students’ lives, beyond merely providing an academic education. SEL programs allow students to develop a greater sense of self, increase self-esteem and self-efficacy, understand and appreciate differences between individuals and groups, function within social norms, create and maintain relationships, and set personal and academic goals (CASEL, 2018).

Similarly, there has been consistent evidence, based on the outcomes of a number of studies on AE programs, that participation in AE provides positive benefits on aspects of social and emotional development. There is a great deal of evidence to support the emotional and social skill improvement, ranging from self-concept and self-definition, authenticity, attitudes and behaviors, to decreased feelings of stress, fear and anxiety, as well as increased feelings of freedom, productivity, leadership skills, motivation, trust and communication (Cason & Gillis, 1993; Cross et al., 2002; Deringer, 2011; Hattie et al., 1997; Oldmixon, 2007; Scarf et al., 2016; Whittington, 2013). The evidence shows, regardless of different age groups, risk levels, group sizes, and program settings, AE continues to provide some level of benefit to its participants. Despite the frequent overlap in goals and desired outcomes for SEL and AE programs, very little research explicitly connects AE programs with SEL.

In particular, AE programs are not being used to deliver SEL programming in schools. This study seeks to address the gap in literature by conducting focused, and open-ended qualitative interviews with students in a high school AE course to better understand their experiences through AE, in relation to each of the five core SEL competencies. This knowledge can further the research by creating a foundation for additional research that seeks to review AE programs for meeting criteria of an SEL program. If research indicates AE has the potential of fulfilling SEL criteria, there is a need for AE inclusion in high school PE curriculum across the country.

## CHAPTER THREE

### Research Methods

#### Phenomenological Research

The objective of the study was to gain a deeper understanding of the experience of the selected students from the school-based AE program of study. In addition, the study aimed to determine how these experiences relate to the core competencies of SEL. To meet this objective, the research attempts to identify the essence of the participants' experience during the AE course. Through collection of evidence, the goal is to discover the commonality in the experiential components to understand what the experience provides. The method selected to find this evidence is phenomenology.

Phenomenology addresses a research problem that requires an understanding of human experiences common to a group of people (Padilla-Diaz, 2015). According to investigators, groups should consist of 3 to 15 participants in a phenomenology study (Creswell, 2013; Moustakas, 1994; Padilla-Diaz, 2015). Participants should be able to articulate experiences to a researcher, and steps taken to ensure interview conduction best accommodates the most accurate account of an experience. Participants should be able to relay descriptions of personal experiences based on their memory of the experience. To achieve this, conduction of the study takes place in a timely manner for events to be fresh in the participants' minds (Padilla-Diaz, 2015).

“The role of the phenomenological investigator, or researcher, is to ‘construct’ the studied object according to its own manifestations, structures, and components.” (Padilla-Diaz, 2015, p. 104). If the experiences of the participants are too diverse then it is challenging to identify underlying themes in the responses and the experience is more difficult to interpret. A

researcher should take measures to ensure as similar an experience as possible, to draw commonalities, by limiting the variety. Therefore, sampling used to collect data intentionally comes from a cohort of individuals who had as similar an experience as possible. This use of purposive sampling allows for a selection of participants who have a common experience (Padilla-Diaz, 2015).

A phenomenological study should be more open and less structured, the research methods should be designed in a way that facilitates the description of the experience (Kvale & Brinkmann, 2009; Marshall & Rossman, 2010). Interview questions in a phenomenological study get the interviewee to openly talk about the experience and describe it in detail. The use of questions with “yes” or “no” responses limits the amount of data which can be collected. Furthermore, interviews benefit from being unstructured in a phenomenology study. Asking scripted, open-ended questions, along with unscripted follow up questions to elicit more information, provides data that is more substantial. Participants also benefit from being given as much time as they need to contemplate and respond.

During the data analysis phase in a phenomenological study, investigators consider two facets of the responses, or data. The investigator looks at the content of the answers, as well as how the participants express their answer, gaining a ‘textual’ and ‘structural’ analysis of the data (Padilla-Diaz, 2015). What the responses are, and how they are articulated, are both important for complete data collection to identify the ‘true phenomena’ of the experience. For example, an enthusiastic, confident response when describing an experience could mean stronger data than an unsure answer. Therefore, researcher observation is a necessary tool in phenomenological data analysis (Kvale & Brinkmann, 2009).

**Purposive Sample**

The sample for this investigation included juniors and seniors in high school, enrolled in the AE course studied, as a portion of the school's Outdoor Pursuits class, with the same instructor. The rationale for selecting a high school aged population, from the same course, with the same instructor, was to ensure the sample included only adolescent subjects who shared a similar experience. Participants were six individuals (one male and five females); five subjects were juniors and one senior at Belmont High School in Belmont, Massachusetts.

The goal for participation was 10 participants total. The rationale for this number of participants is that 10 participants allows enough data to be collected to identify themes and contradictions within the content of the interviews, while remaining reasonable in terms of time spent conducting interviews for each participating subject (approximately 15-20 minutes each interview) (Creswell, 2013).

It was determined, after three participants interviewed, to recruit additional participants during the next running of the course, with the same instructor, to obtain more evidence. No additional volunteers came forward, after follow up, post the first offering of the course, and data had not reached a saturation point. An additional three subjects were interviewed, and another determination was made additional recruitment would not necessarily strengthen results and was not needed. Data was reaching a saturation point as participant six was providing little new evidence. More volunteers would not be available until the next school year, and there was little value in delaying the collection process, given the strength of evidence received from the six participants.

**Setting**

The setting for the study interviews was the 'Modular Common Area' located at Belmont High School. This setting allowed interviews to occur in an area where others could not easily overhear interview responses. Doors in this area had windows and did not lock. The aim was, for this location to be comfortable for students and ensure the privacy of interview responses.

**Methods**

The findings derived from interviewing six participants from the participating school's AE course. A goal of recruitment was consistency in the experience across participants. In order to provide this, the experience received by the participants was from a set curriculum with a defined scope and sequence. The same instructor for each participant provided the experience.

In addition to the role of the instructor of the course, which requires very little instruction time during the actual challenges, the role of research observer took place and notes taken. Observation on the experience of the entire class, as well as the small groups and individuals, took place during each challenge. Observations focused specifically on group interaction, such as communication and group problem solving. Observations made regarding whom the leaders and followers were, the ways the students communicated and interacted with each other, how they dealt with frustration, and if there were any notable personal changes in the aforementioned areas. Students who were vocally sharing their ideas and directing other individuals, noted as leaders, while students who were standing off to the side, or disengaged from the process, noted as being passive, or followers.

During each interview, the interviewer made notations on participant responses related to their experience during the AE unit. Non-reactions were identified, and positive reactions highlighted, to aid later review. Recording of interviews took place, with the participants'

knowledge, for the researcher to access an audio recount of the interview. Participants interviewed, using open-ended interview questions, and unscripted follow up questions to a portion of the responses. The scripted questions were a guide, and follow up, probing questions, used as appropriate for each interview to gain further insight and additional information. Participants were encouraged to answer questions as openly and honestly as possible, and assured that an answer of “does not apply” was an appropriate answer.

Upon completion of the interviews, data from each of the recorded interview tapes was reviewed twice and all experiences identified. Experiences were then grouped into sub-themes along with similar responded experiences. On a third review, transcription of interviews ascertained direct quotes of evidence of the experience. Taking into consideration, the content of the responses, the related sub-themes, and the way in which the participants responded, overarching themes of the experience emerged.

Following the gathering of data, notes were peer reviewed with another instructor of the AE course at the same school, for the purpose of triangulation, a practice done to understand if participant accounts were consistent with the observations of others in similar experiences (Redfern & Norman, 1994). Triangulation of data adds an important additional perspective, which potentially leads to a strengthening of evidence by confirmation of results, or weakening of evidence by revealing inconsistencies between data collected and peer observation (Redfern & Norman, 1994).

## **Procedures**

**Recruitment.** Recruitment of participants for this study occurred through emailing all students in AE courses offered during the second and fourth quarters of the school year, totaling 51 students altogether. An explanation of the study and data collection methods were provide to

students. An Informed Consent/Child Assent form came attached to the initial recruitment email. If students chose to participate, they were to sign, and have their parents sign, said form, and returned it to the researcher at the time of their scheduled interview. As planned, when less than ten students volunteered to participate, a follow up email was sent to the same group of students.

Initial recruitment came from the second quarter AE course, consisting of 24 students. After the first recruitment email, three students agreed to participate in the study. No additional students came forward after the follow up email. In order to continue data collection, recruitment continued, with an additional 27 students, from the fourth quarter AE course. Just as with the first offering, three students agreed to participate after the initial email, with no additional students coming forward after a follow up recruitment email.

The first students to email the researcher became first to participate in the study. This ensured participant participation in an interview. To avoid losing potential participants, scheduling of interviews took place as soon as possible, after participant agreement, as opposed to waiting for a selection process. If deemed necessary to collect additional data, recruiting of up to five additional participants allowed for a cap of 15. There was no additional screening of participants as all students in the studied classes were juniors and seniors in high school from the participating school. Participants completed an interview in person with the researcher after their completion of the AE course.

Student interviews were audio-recorded and participants did not say their names on audio-recordings. In all reports, referred to as 'Participant 1,' 'Participant 2,' and so on. For confidentiality of minors, a documented list of identities, linking each subject to their participation number, saved on a password protected flash drive, stayed in a locked drawer in the



researcher's office. Participant identification numbers coincided with the order in which interviews were completed.

**Data Collection.** Collection of data conducted by in person, one-on-one (researcher-participant) interviews.

*Interview questions.* A general interview guide with identical questions, in the same order, aimed to keep the interview format consistent. Reference Appendix A for a list of interview questions asked during individual interviews with participants. The aim was to ask all participants the same questions ensuring consistent information was collected, but also ask additional follow up questions as needed, which varied from participant to participant.

To ensure interview questions comprehensively explored all SEL learning topics, three comprehensive, quantitative questionnaires were reviewed to guide the development of open-ended questions covering concepts from all core competencies of SEL: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Payton et al., 2008). The first source of interview questions is the 'Strengths and Difficulties Questionnaire (SDQ)' (Goodman, Meltzer, & Bailey, 1998). The SDQ was a short behavioral screening questionnaire for young children through adolescence. There were various versions of the SDQ, but in all versions, questions explored 25 attributes, including those related to 'emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviors' (Goodman et al., 1998).

The second questionnaire reviewed to compile interview questions was the 'Well-Being Indicator Tool for Youth (WIT-Y)' (Center for Advanced Studies in Child Welfare, 2015). This WIT-Y tool aids in starting a conversation between a youth member and an adult regarding their overall well-being. The tool was derived by input from interdisciplinary experts on social and

emotional development and youth well-being, as well as from youth and parents (Center for Advanced Studies in Child Welfare, 2015).

The Strong Teens Unit Tests (Merrell, 2007) was the third review source for interview questions. The Strong Teens Curriculum, from the University of Oregon, aims to help adolescents in grades 9-12 develop socially and emotionally. The Strong Teens Unit Tests includes two components: The Symptoms Test, which aims to identify students' 'feelings and thinking patterns related to emotional distress,' (Merrell, 2007), while the Knowledge Test was created to assess students' 'knowledge of social and emotional concepts and coping strategies' (Merrell, 2007).

Although the Strong Teens Unit Tests were designed to assess the Strong Teens curriculum in 'increasing student's knowledge of social-emotional concepts and coping strategies and decreasing symptoms of emotional distress' (Merrell, 2007), these questions were not used to assess knowledge of SEL concepts. Instead, these questions aided in developing open-ended questions, which would provide the participants the opportunity to share experiences related to emotional awareness and self-management.

*Interviews.* Six total participants agreed to an interview, and all interviews took place after completion of the AE unit. Three participants volunteered from the first offering of the course, and an additional three volunteers came forward, after the second running of the course. Interview times were by appointment with the participant, and recorded interviews lasted between 10:32 and 16:41 in duration. Interview times varied due to speed of participant response and amount of information provided by the participant.

Each of the participants answered open-ended questions, from the interview script in the same order, making all attempts to ensure complete and clear responses, through use of scripted

questions, followed up with probing questions. The interviewer requested that participants explain certain feelings, or provide examples, to understand the essence of certain experiences (Kvale & Brinkmann, 2009). Participants were audio recorded using an Ipad recording application, set up between the researcher and the participant. Each participant received an explanation that their audio record was for further analysis of the data. All participants acknowledged and were aware their voices were for the record.

*Evidence Collection.* Hand-written notes, taken on notepaper, were used for later analysis. Notes taken on all responses related to the experience, making a written comment of the response next to the question, which elicited the response, aided in audio review (Sutton & Austin, 2015). Audio interviews were recorded and transcribed through the application ‘Voice Recorder’, and reviewed multiple times to identify all feedback on the experience of participating in an AE course. The interview recordings were stored within the application on a password protected Ipad and labeled, participant one, participant two, and so on. Recordings and written transcriptions were available for review unlimited times, through access of the recording application.

Upon the first audio review, during identification of each piece of evidence of the experience, a code marked new evidence, noted on a new document, identifying which participant expressed the evidence and when they stated it during the interview. For example, the notation ‘P1 (1:30)’, identified the evidence was expressed by participant #1, one minute and thirty seconds into the interview. The coding system aided in a second and third review of the recordings, and added a written record of the response, which provided additional data. It was determined to take notes specifically on evidence during the first recording, to gain improved understanding of the participant’s experience (Sutton & Austin, 2015).

In an attempt to further understanding and meaning of participant responses, conduction of a second audio review occurred. Sutton & Austin (2015) determined that research is most representative of ‘the truth’ if the researcher reviews data with the specific intention of understanding each participants’ unique experience. In the initial review of findings from this study, research focused primarily on identifying overarching themes as presented in interview responses. A second review allowed for a deeper understanding of each individual participant’s responses, as well as identifying additional themes. The audio was required to analyze the participants tone and enthusiasm of answers. Intentionally, the written transcript was not utilized during this portion of the review (Sutton & Austin, 2015).

An average of the reviews, not merely one review, aided in identifying themes, each time taking into consideration the content of the responses, the tone of the response, the question that elicited the response, and the researchers own past observations (Sutton & Austin, 2015). Experiential themes emerged based on participants’ answers to interview questions, as well as their ability to elaborate on their answers, and provide examples.

A third review aided in extracting direct quotes of evidence. In order to identify the direct quote of evidence in the interview, the document of notes from the first two reviews assisted in the transcription of the evidence, which corresponded to the associated note. For example, the notation ‘P1 (1:30)’ was then followed by the direct quote from the transcription.

**Data Analysis.** Using observation of the experience as it happened, and the information provided by participants who agreed to be interviewed, including what was said and the manner it was expressed, themes of the experience were identified from the collection of evidence. There was no limit on the number of themes. The goal was to use the first categorization of themes as sub-themes, which then would be used to identify overarching themes of the experience.

Upon review of the recorded interviews, all expressed takeaways from the experience were identified with a theme. These themes, in some cases, directly related to the interview question, but others were identified through conversations not directly related to the initial question. Themes, which emerged through conversation, versus direct questioning, provided stronger evidence, as experiential accounts were more genuine in these cases. As new data came from the responses it was placed in an existing theme category or a new theme category was created specifically for the new evidence.

Twelve sub-themes emerged, with different ranges of evidence to support each sub-theme, including sub-themes which incorporated multiple responses from multiple participants, and sub-themes with evidence only provided by one participant. The twelve sub-themes were identified as: 'leadership recognition', 'connections made', 'communication', 'delayed gratification', 'group work', 'self-realizations', 'trust building', 'confidence gained', 'empathy', 'less afraid of a challenge', 'willingness to try new things', and 'reduction in stress'.

From the emerging data, the sub-themes were explored for connection to other sub-themes. Sub-themes, which were closely related, such as 'group work' and 'communication' were organized into groups. All sub-themes were subsequently organized into groups based on their connectivity. Those connections led to identification of overarching themes of the experience, based on the relativity of the sub-themes and strength of evidence for each sub-theme. Four overarching themes emerged after all sub-themes were analyzed for connectivity. Each group of sub-themes were coded with the overarching theme to which it belonged, (G) gained confidence, (E) empathy, (C) community, and (A) self-awareness.

The largest group of related sub-themes included 'gained confidence', 'less afraid of a challenge', 'leadership recognition', 'delayed gratification', and 'willingness to try new things'.

This group's strongest connection was how the other sub-themes connected with the sub-theme of 'gained confidence', which took on the title for the identification of the overarching 'Gained Confidence' theme.

The next two overarching themes were comprised of groups of three sub-themes. The overarching theme 'Community' was based on the connectivity of 'connections made', 'communication', and 'group work'. 'Self-awareness' was the overarching theme which emerged from the groups, 'self-realizations', 'trust building', and 'reduction in stress'.

'Empathy' emerged as an overarching theme without a connection to another sub-theme. There was strong evidence, provided by the participants, for empathy, but not a strong correlation to another sub-theme. Nonetheless, it stood out as its own overarching theme, as much of the data collected indicated empathetic moments for the participants, during their explanations of their responses, especially during general conversation.

## CHAPTER FOUR

### Results

The themes of gained confidence, increased capacity for empathy, increased sense of community, and self-realization emerged as themes attributed to the experience, although the strength of evidence and individual experiences fluctuated. Some found an increase in confidence, specifically in the areas of leadership skills and ability to take on challenges. An increase in empathy was consistently observed, and identified, among the participants who reported changes in the way they viewed others.

Participants identified an increase in sense of community, specifically within the community of their classmates, coupled with realizations about general group work. The experience led to changes in the areas of communication and group project participation, as well. The participants also identified realizations regarding self-awareness. While the realizations they made varied, the theme of an increase in self-awareness was apparent.

#### **Improved Self-Confidence**

The first overarching theme which emerged, supplied evidence of an increase in self-confidence because of the participants' experiences. Participants explicitly talked about their personal sense of increased confidence, and identified additional information related to an increase in confidence. Some participants identified being less afraid to handle a challenge, some recognized leadership abilities and roles, and it was further evident that a rudimentary understanding of the concept of delayed gratification was gained, through participating in the experience.

**Sub-theme: Delayed gratification.** Delayed gratification, the concept that if you are patient, resist the temptation of an immediate reward, and go about a process in the right way,

you will obtain a much greater reward and feeling of accomplishment (Conti, n.d.), was a new concept for students in the class. Few of the students had heard of the concept, and even fewer knew of the potential personal impacts of delayed gratification. Findings were not compelling that the practice of delayed gratification is a result of AE participation, as participants merely identified being more aware of the concept, after completion of the AE course. In addition, most findings came from direct probing questions concerning delayed gratification. When asked about the concept, some participants responded they were aware of it and could identify it.

“I see it in school sometimes, you could just look up the answer, or you could actually spend the time to learn it, that way you don’t have to relearn it later.” (P2)

“I always like to take the shortcut to things, but I think this course showed that if you work hard, and you do it in a way that you’ll be proud of later, then it feels a lot better when you get it done.” (P3)

“With the island (challenge) we did that we spent 5 days on. It seemed really hard, and it was kind of hard, but sticking through it...I was very happy that we managed to do it. We fit 22 people on a small board and it was like, wow we did it.” (P1)

“It did feel good when we finished the pipeline.” (P5)

For one of the participants there was slightly more than an awareness gained. They found something they could put into practice in their personal life. One of the constants observed during the discussion circles was, how the skills used to complete the challenges, often related to real life circumstances:

“It’s definitely impactful, the parts where you struggle and it finally pays off, when you keep working at it and accomplish the task...With every struggle, there’s a breakthrough.” (P4)



“It helps me not become discouraged. When something is difficult, you might just want to forget about it, but eventually the work will pay off.” (P4)

**Sub Theme: Willingness to take on a challenge.** Throughout the entire AE course, participants received a challenge, and were required to complete it, in order to advance to the next challenge. The instructor allowed no maximum time spent on any one activity. Each participant interviewed was presented with several challenges, but all of them were part of a group who got ‘stuck’ on a challenge for more than four class periods of 50 minutes, as was observed. Interviewees identified these specific challenges during the interview process on various occasions.

One group of students struggled the most with an activity dubbed ‘Islands.’ To complete Islands, they were required to move the entire class across small, square platforms, spaced out at more than the average leap, and finally, collect everyone on the last platform. The entire group had to remain off the ground the entire time, and maneuver individuals onto the last platform, using two four-foot planks. The second group of observation struggled with an activity called ‘Pipeline’, where students had a 1-2 foot piece of U-shaped plastic piping, and were required to pass a marble along their pipes, the distance of half the length of a football field, without the marble falling or stopping.

There were numerous times participants were observed to be frustrated or had trouble with a task, making it consistent with the evidence that a number of interviewees referenced their increased willingness to take on a challenge. Findings indicated participants provided evidence in the area of handling a challenge. One participant described impacts when asked about intrinsic change:

“I don’t know if it’s been put into action, but it’s something that I think about a lot. How you just can’t give up when it gets hard...it solidified (that concept) in my brain.” (P2)

Other responses identified individual improvements when asked how they handle dealing with a problem. They identified problems as more of a process, and potential failure was not as large of a concern. Participants stated this directly related to completion of the AE course:

“Thinking it through a little more before I take the first step, and seeing that to handle a problem, there’s no one right way to do it, but if you break it down, you see you can’t do the whole thing in one step.” (P2)

“I approach problems more open minded, and I can mess up and just keep on it.” (P3)

When asked about handling stress and emotions, participants provided evidence they were handling some emotions, such as frustration, better. They identified such activities as pipeline, which brought them to levels of high frustration and stress. Comments indicated, through the experience of the course, participants were more likely to view challenges as a process and less likely to let frustration get in their way:

“I’ve gotten less frustrated. (Because of the pipeline activity).” (P5)

“Yeah, like not trying to overwhelm me...I’ve realized (challenges) are more of a process. I’m more willing to put in effort.” (P1)

“If there’s a problem, I try and figure it out instead of being stuck in one place, like a lot of people did during the activities. (I’m more likely) to not hit a wall.” (P1)

Participants also provided moderate evidence of an increase in patience. When participants responded about sticking with challenges, and explicitly asked about their level of patience, they were able to identify examples of some instances in their outside schoolwork, where their level of patience improved. While there was a definite observed increase in patience

during the student interactions in class, only one participant had a strong response regarding personal increases in patience in other aspects of life:

“A little bit, I think I’ll try to figure out things for longer and spend more time on work on it.” (P1)

“That has definitely gotten better...If I don’t understand something, French for example, usually if I don’t get the grammar I’d say ‘Whatever, I’m just not going to do well on this test.’...But I’m actually studying harder for my upcoming test”. (P5)

“Recently in anatomy it’s been pretty difficult for me, but I’ve kept working at it...and eventually it clicks.” (P5)

**Sub Theme: Increase in confidence.** A general increase in confidence was the sub-theme, which was a central connection to other sub-themes and, therefore, emerged as the overarching theme. Participants did not always share the same type of increases in confidence, but there were consistent responses regarding gaining confidence in one area or another. One of the areas was communication with other people. Direct probing initiated the majority of responses regarding increases in confidence. During observation, it was clear that some students gained confidence in their interactions with the group, but observed to be inconsistent:

“I think I gained a little more confidence. I do talk a little more in class, and I think I feel a little more comfortable...more willing to put myself out there.” (P1)

“I think I’ve become more comfortable in talking. For me I think that it is a big change because I did not talk before. If you had told me I needed to do an interview before, I would have said no.” (P1)

“I’ve never been the type of person to speak up that much in a group situation. In the beginning of the class I wasn’t really able to, but towards the end I was really able to say what I thought would help the team.” (P3)

“I think I’ve become more calm when talking to people...I talk slowly now and I think I don’t stutter as much.” (P1)

“I don’t usually participate a lot in school things, but I did more, shared my ideas (In AE).” (P5)

Findings also indicated, with the aid of in-course observation, a potential willingness to try something new and different, although the results were not consistently strong among participants. As observed, during the course, students' roles changed throughout the duration of the five to six week course, as some students became more comfortable in participation. One example observed occurred during a challenge called ‘Spider web’, where students were required to pass other students through holes in webbed rope, without touching the sides. Some hesitant students changed their mind, for the sake of the group, and trusted others to lift and pass them through the spider web. Some interviewees also highlighted this observed behavior, during interview discussions:

“The last (activity) I did a lot more than in previous things. I’ve gained a little bit (of confidence).” (P5)

“I think that it helped me step up more as a team member because in the beginning I would want to go last...but towards the end I was like, yeah I can do this.” (P3)

“I think I’m more willing to try new things. I’d be more open to join things when I’m going to college.” (P4)

**Sub Theme: Leadership abilities.** There were reports of impact on leadership abilities. This impact was stronger for the participants who, as observed, emerged as leaders during the challenge. Incidences were observed showing students in previous leadership roles adjusting their leadership style, after class reflective discussions. As the challenges were designed to facilitate accepting leadership and follower roles, it remains unclear the extent of leadership improvement among, generally, passive course participants. Some participants highlighted their sense of an increase in confidence in their leadership abilities:

“I think it has helped me realize that I am able to put myself out there, that I am able to become a leader.” (P4)

“Learning how to be a leader...I’ve learned how to listen to other people, and being more of a follower rather than always being a leader. I’ve gained confidence in my leadership abilities and my following abilities.” (P6)

“I have more confidence in my leadership abilities.” (P2)

### **Increased Capacity for Empathy**

A second overarching piece of evidence was an increase in empathy among the participants. Study participants described empathetic awareness, matching observation during the AE course. There were challenges requiring some fine motor skills and balance, and there was a wide range of those abilities among the students in the course. There were also challenges made easier if one is taller or shorter, facilitating all participants’ opportunity to witness the challenges of others.

When participants were specifically asked about their feelings or changes in empathy, the majority of responses were along the lines of ‘not noticed’, with the most positive response from participant 2, “I think it’s something I’ve been thinking about more.” When asked questions

about their perspectives towards others or acceptance of people who are different, participants supplied responses, which indicated a clear change in capacity for empathy.

These responses, which indicated empathy, matched observation of an increase in empathy. For example, one student, of one class, had a fine-motor disability, which made balance difficult, and, after a brave admission from this student during a reflection circle, the students of the class appeared far less frustrated with, and far more willing to help, their classmate. While it appears evident participants may not have been getting a clear understanding of the literal definition of empathy from the experience, there is consistent evidence that there was empathetic improvement for the individual, through participation in the course. Most of the evidence, for increase in the capacity for empathy, did not come from direct probing questions, but more general impact questions, strengthening said evidence.

One indication of an increase in empathy was respondents discussing a change in perspective towards others. Participants identified they were more likely to understand, or at least try to understand, the point of view, or different ideas of a classmate. Participants provided examples on how they took into consideration these empathetic notions, while handling other aspects of their lives.

“I think the unit kind of taught me to look at new perspectives of some things, and if I do have problems, going to other people and seeing their ideas might help. I’m more in tune with what (others) are trying to do...through doing some of these activities I’ve gained more familiarity with the way (my friend works)...(It’s easier to figure out how others) might think, or they might act.” (P1)

“I think I definitely try to understand people a little bit more. Over the winter, on my team, there was a huge divide between my friend and I...and I tried to understand why that was, and accept other people for who they are.” (P6)

Participants reported being more accepting of people who were different from them, as another indication of an increase in empathy. During the course, discussion took place regarding challenge and struggle being an essential part of the experience. Challenge elements allowed students to notice the individual challenges of others, and provide peer assistance when needed. Study participants reflected, having said experiences, led to them being more accepting of those who are different:

“Having to work with people so closely, that I didn’t know before, help me see things in people that I’ve never seen before. I’ve realized that everyone has a different way of going about things...I think it impacted the way I meet new people, and talk to people I already know.” (P2)

“Some people take longer to accomplish the same thing that others do quickly.” (P4)

Study participants were also able to provide some reflective moments in their own lives where they used empathy as a tool to deal with frustration. Some identified an understanding that people will disagree, go about things in a different way, dislike something you have done, etc..., but accepting those circumstances is required, to limit one’s own frustration:

“I usually get more frustrated, but I came to realize (through the course) that we all need to accept people’s challenges. When I’m not specifically challenged, I’m not getting as frustrated with people being challenged with certain things, and I just accept that other people have difficulties with things, and I need to help them out.” (P6)

“So if I get frustrated at someone, I should check in with myself, if I was that person how would I feel? Getting frustrated at someone over a little thing, it wouldn’t feel very good.” (P4)

### **Increased Sense of Community**

A third overarching theme identified was a stronger sense of community. Through the experience, an understanding of the importance of communication with others occurred, which is an important component of relationships (Adigwe & Okoro, 2016). The course appeared to facilitate connections between classmates, as well as produce a change in the way participants viewed relationships, within group settings. There were also reports, the experience contributed to gaining an ability to handle conflict, especially with people who are more difficult.

**Sub Theme: Communication.** Through questioning about their environment and interactions with others, as observed, a realization occurred, considering the way the participants communicated, and areas that needed improvement. Throughout the course, a change occurred in communication style among the groups. In addition, the students of the course discussed how to communicate with others frequently, during class reflection circles. Both classes of study were observed, toward the end of the course, stopping a challenge activity on their own and getting into their own discussion circles, which the instructor was not part of.

There was also evidence, from the interviews; participants had an increased realization of the importance of communication in relationships. Participants were also able to identify their own communication style, as well as areas, which needed improvement. However, inconsistent evidence suggests, it is unclear if change in proper communication skills, or merely a further understanding of proper communication, is a result of the course.



“I’ve realized the importance of communication with people. Make sure they know exactly what you’re trying to say to them, and don’t leave anything out.” (P2)

“When I have an opinion, and I want to say it, I try harder to get people to hear it.” (P3)

“I’d like to be more direct, while not coming off too strong. I’d rather come off in a way that someone would be motivated by it, instead of being turned away by it.” (P2)

**Sub Theme: Conflict.** Each day of the course, there were between 20-27 individuals who were trying to accomplish a goal. The students in the groups were teenagers, and the design of the challenges induced frustration and struggle. Therefore, it was, presumably, inevitable that verbal conflicts, which arose frequently, particularly in the beginning of the course, would occur. Study participants also identified marginal improvements in conflict resolution skills, when asked about general impacts of the course, needing specific probing about conflicts in their own life.

“In life there will be people that are easy to work with and harder to work with, less willing to follow instructions, or become a follower.” (P4)

“I have a teammate who is not a good communicator and can come off very negative...and the two of us bump heads, and I think I’ve been better at saying, let’s not negate what you said, and turn it into a positive, instead of saying, we don’t need that.” (P2)

“I was terrible at dealing with conflict, but I think I’d be a little bit more successful now than I was before, but still not comfortable with it.” (P6)

**Sub Theme: Connections.** One finding, attributed to the course, was the accelerated connection process among the students who participated in the course. Evaluating external connections between students is difficult to do through researcher observation. Evidence came

from study participants who discussed how they felt about their group, or class section, as a whole. Responses made it appear participants were more likely to believe in the possibility of positive connections in any group, of which they may belong, and some participants were able to come to build relationships with, and trust, their group of classmates from the course. There was consistent evidence, from open-ended questions, regarding the accelerated connections and trust among participants, but no evidence of translations into increased trust in other groups, to which the participants belong.

“I think (the course) did build trust. I became more familiar with everyone, and people who I didn’t talk to, I got to understand how to interact with them.” (P1)

“I liked the challenges, and as we have been going through them, I feel like we have gotten a lot better as a group.” (P3)

“I felt like it helped me connect with classmates I didn’t know as well, and that helped me realize the potential of my entire (junior) class to be more of a unit. On my team, it changed the way I thought about it.” (P2)

“Talking to people I didn’t necessarily talk to before and realizing no one really judges you as much as you think they do...I’m more open to being friends with people who do not have the same interests as me.” (P6)

**Sub Theme: Relationships.** An additional sub-theme of community, relationships, emerged; as there was a reported change in the way the study’s participants viewed relationships, especially during group work. It was evident there was an acknowledgement about the difficulty of building and maintaining healthy relationships. As observed during the course, comfort within a large group appeared to be a slow process, and participants were confirming that sentiment, as well as describing their newfound realization of it:

“I guess I always knew that you needed to work at relationships to keep them good, but this class reinforced that.” (P4)

“At the end of the class I was able to talk to, and work with, people (I didn’t know very well) as a team...I think there’s been a change in my willingness to speak up when I’m in a team situation.” (P3)

“It’s changed my perspective on group work, for school especially, I haven’t been a huge fan of group work (with new people), and (the course) has helped me realize you can build relationships in a team, and that will help you work better.” (P3)

### **Increased Self-Awareness**

All participating students identified a moment of self-awareness, which occurred during the course. The type of self-realization was individual to the participant, but there was consistent evidence that some sort of self-awareness was a result of participation in the course. Participants mentioned the trust activities as a facilitator for understanding each individual’s own trust levels. Participants also identified an awareness of their roles in a group, and highlighted areas of strengths and weaknesses. An awareness about the way participants handled emotions was an additional piece of evidence towards self-awareness. Additionally, there were self-realizations for the participants, which were unique to themselves, yet still evidence of self-awareness.

**Sub Theme: Group Work.** Consistent findings, from both open-ended questions and probing questions, identified an indication of intrinsic reflection in regards to one’s role in a group setting. There was strong evidence that one impact of the AE experience was a clearer identification of one’s role in a group. There were individuals who reported being more aware of their leadership roles, and realizing the type of group members, they want to be. Others, who were more observed to be passive in class, e.g. quietly standing off to the side, had come to

realize they need to assert themselves more when they have ideas, as they had been too passive in the past when considering taking on a leadership role.

“The biggest thing was my awareness of my role in a group, and how that solidified and helped me see that, to get better at a skill, I need to get better at (being aware of my role in a group).” (P2)

“I see myself as more of a leader. I have natural skills as a leader, but this course helped me see that the natural skills that you have as a leader, aren’t enough to get you by, it’s just like any other skill, you have to work on it.” (P2)

“I’ve noticed myself as someone who enjoys being more in control of a situation.” (P6)

“Sometimes I have a pretty good idea, but I need to work on expressing that so people can hear it.” (P4)

**Sub Theme: Trust Building.** A number of the challenge activities involved a trust component; in fact, a unit in the AE course was dedicated to trust building activities. There were discussions on how to build trust, and the characteristics of a trustworthy individual. While it seemed, through observation, there was some level of trust building among the group, respondents did not recognize a clear change in their ability to trust other people, but more of an awareness about trust itself. During peer review of the findings, an identification occurred that limited results related to trust, potentially, were related to issues in the course design of the trust unit.

As a result, evidence was unclear whether a participant in AE would be more likely to trust other individuals outside of the class. Evidence did point to an increase in understanding the way trust building works between people. All discussions about trust took place after a direct

question prompt, specifically on trust, therefore not part of any participant's significant takeaways.

"I think (the course) did build trust. I became more familiar with everyone, and people who I didn't talk to, I got to understand how to interact with them." (P1)

"I've realized that I'm a pretty trusting person...It's not so daunting now to try something I've never done before. You saw how high the highest (trust fall height) was and I said I'm never going to do that, and then after doing it you realize it wasn't that bad." (P1)

"It helped me with team building, I trusted everyone more in the end than I did in the beginning. I wasn't able to do the trust fall, but I think the course helped me to trust people in the class more...It depends how you build trust, when you're working with a team, and everyone is doing something together, it helps build trust faster." (P3)

"I was pretty closed (off) during the trust unit...I think it takes longer for me to trust someone...it's not that easy for me over the course of a couple classes...At first I thought I trusted really easy, but this course made me realize, it's kind of the opposite." (P4)

**Sub Theme: Self-realization.** Evidence of general self-realizations emerged on various topics, unique to the individual. One participant remarked that they enjoyed the class and the challenges themselves, "It's been fun, I like the challenges, and the class itself was a stress reliever." (P5). Participants were able to identify realizations in the way they handle emotions outside of the course, as well as an ability to take a step back and reflect on themselves.

"I have to check in with myself and make sure I'm not going overboard...I've tried to be more calm, and not get so worked up at little things." (P4)

"I was 'chiller' than I thought with the AP (Advanced Placement) tests. Right before big things happen, I get really stressed, but that didn't really happen this time." (P5)

“After the trust falls, I think I liked the self-improvement about it. It made me more self-aware, in the past I was more shy and didn’t want to do (trust falls), but I did all of the heights (in this class), and I was pretty proud of myself.” (P1)

### **Peer Review**

In order to strengthen the rigor of the research results, a review of research notes occurred with another instructor of the same AE course at the participating school. Along with researcher observation and participant interviews, utilization of a peer review allows for triangulation of the data (Redfern & Norman, 1994). Discussion of results occurred during peer review, to understand if there were any anomalies in the data, based on the perspective of another observer. A review of the entirety of the evidence took place, highlighting unanticipated results, such as the limited impact on trust building.

After peer review, it was determined the results were consistent with peer expectations. Evidence was not identical to peer observations of other classes, yet inconsistencies occurred due to the individual style of the instructor, as well as the varying dynamics from different groups of students. Importantly, results were reasonable, identifying no major anomalies, therefore increasing the trustworthiness of the data.

## CHAPTER FIVE

### Discussion

This research sought to identify the experience of participation in a specific AE course, in order to understand if there is a connection to SEL through participation of that course. The goal was to understand potential connections between the experience of completing an AE course and SEL impacts, to support further research, which may lead to implementation of AE across PE programs. There is minimal, school-based, qualitative research connecting AE and SEL, in existence, representing a gap in the literature. Results hoped to aid future research determining if an AE course, in PE class, would qualify as SEL programming, to recommend implementation of AE courses in schools. Comparison of evidence took place from findings, to the established competencies of SEL programming, to answer the research questions.

As earlier described in the review of the literature, in order for a program to be considered to be providing SEL, it must address at least one of the five core competencies of SEL: 1) self-awareness; an understanding of one's values, emotions, and identity, 2) self-management; one's ability to handle stress and emotions, 3) relationship skills; one's ability to create and maintain healthy relationships, 4) social awareness; one's ability to understand and utilize the perspective and differences of others, and 5) responsible decision making; one's ability to make choices which respect others and contribute to their community (Payton et al., 2008). To qualify as quality SEL programming, a program should address each of the five competencies (CASEL, 2018).

#### **Gained Self-Confidence**

The first theme identified in the results of this study indicated a marginal increase in self-confidence, after participation in the AE course. Participants were able to cite specific examples

of a variety of ways they gained confidence, although these examples arose because of direct probing, and were not as elaborate as other responses. These reported impacts correlate to the second core competency of SEL: self-management, as well as the third core competency: building and maintaining healthy relationships.

While evidence was not consistently strong for participants gaining self-confidence, in general, there was strong evidence; students were more willing to take on a challenge. Participants provided specific examples, citing being less afraid of failure, along with the emotional and stressful consequences of failure. While participants did identify an understanding of delayed gratification, and the notion that with struggle, comes breakthroughs, which in turn, provides positive intrinsic feelings, it was more of an understanding of the concept, rather than an adaptation of a behavior change.

One area of increased confidence, for some participants, was in leadership abilities. Having an increase in self-confidence can indirectly improve relationship skills, as individuals with self-confidence are more likely to create and maintain healthy relationships, the third core competency of SEL (Stuhr et al, 2015). Further evidence related to the third competency was an identification from participants of improvement in their leadership abilities with their peers. This evidence was not consistent for all participants, but was evident only for the participants who were already comfortable in leadership roles, and, as observed, honed those leadership skills during the course. Participants who appeared passive during the course did not report an increase in leadership abilities, specifically, yet the experience did improve leadership abilities among natural leaders.

An improvement in leadership ability is important for a leader to be able to create, foster, and improve relationships, in order to be more likely to accomplish goals (Lee, 2011). Some



participants identified how they could use what they learned about being a better leader, to help build relationships with their teammates on their athletic teams. For example, one participant identified a difficult relationship with a basketball teammate and used what they learned during the course to control their frustration, in order to facilitate a conversation to understand each other and move forward.

Participants specifically described gaining confidence in the area of assertive communication. They identified they were more likely to speak up in a group setting, and were more comfortable sharing thoughts and ideas. A change in communication style also occurred during the experience, and said change consistently aligned among instructors, during peer review of the findings. On average, individuals tended to move away from passive and aggressive communication, and toward assertive communication. Assertive communication skills help individuals to build and maintain healthy relationships (Stuhr et al., 2015).

### **Displays of Empathy**

A second theme identified from the findings, backed by the strongest evidence, was an increase in empathy. Participants gave individual accounts of, and as observed, displayed a higher level of empathy toward other individuals, which was consistent with peer observation. As noted earlier, participants did not seem to recognize personal improvement in their individual capacities for empathy, as there was consistent negative feedback from participants, citing no increase in empathy from the experience. Direct questioning prompted non-responses, yet general questioning lead to genuine examples of increased capacity for empathy. For this reason, it is the strongest theme of evidence.

When discussing specific aspects of empathy, participants noted gaining an understanding of other people's struggles, accepting other people for who they are, and feeling

less frustrated by the limitations of others. These are the characteristics used to describe an empathetic person (Lee, 2011). While participants were not consistently clear on the definition of empathy, it appeared there was an increase in an individual's capacity for empathy, after the experience.

Empathy is commonly a difficult concept to define and understand, as was observed in class reflection circles. Though difficult to understand, empathy is an essential part of all five core competencies of SEL programming. Empathy directly correlates the most with core competency four, social awareness, yet the characteristics of an empathetic person, enable personal growth in each of the five different components. Merriam-Webster dictionary defines empathy as,

the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experiences of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner *also*: the capacity for this. (“Empathy,” 2018)

Merriam-Webster dictionary (“Empathy,” 2018) also cites people have a capacity for empathy, meaning individuals could have more or less empathy than their peers. This leads one to conclude, an empathetic person can still achieve an increase in their capacity for empathy.

The first two components of SEL programming, self-awareness and self-management, are strengthened by empathy. Individuals who have strong values, a clear identity of who they are, and can recognize, their own stress and emotions, while dealing with them in healthy ways, have empathy. Empathy is an important characteristic of those who are successful with the third component, relationship skills. A person needs to have, at least, a minimal capacity for empathy in order to create and maintain healthy relationships (Lee, 2011).

The fourth component, social awareness, relates most directly with empathy. A working definition of social awareness: ‘one’s ability to understand and utilize the perspectives and differences of others’ is merely another way in which one could define empathy. An individual also requires empathy when making choices that affect their community, in regards to respecting others, as described by the fifth component: responsible decision-making (CASEL, 2018).

### **Stronger Sense of Community**

There was varying evidence under the theme of community. Much of the evidence came from direct questioning regarding participants’ communities, and the strongest evidence concerned the community of classmates from the course, rather than outside communities. The areas of effective communication, conflict resolution, and making peer connections, were the most pronounced areas identified.

Outside communities, described by participants, primarily consisted of different peer groups to which the participants belonged. However, participants identified acquiring skills, which, presumably, could enhance future relationships with other communities. Acquisition of such skills, potentially contributes to an increased understanding of what it takes to create and maintain healthy relationships (SEL core competency 3), a hypothesis, which was shared by some participants regarding their future groups and communities (Adigwe & Okoro, 2016).

Because there were moments to practice group communication and conflict management skills, there was a clearer, and accelerated, process of connection making amongst participants. These connections, for some, led to realizations about relationship building in general, which has the potential to translate from successful interactions with peer groups, to an understanding of successful participation in their larger communities, such as their town, state, country, or the community of the human race.

Participants specifically described gaining an understanding of the importance of relationship building, when they were in a group or team situation. There was an acknowledgement that relationships were difficult and required work to make them successful. The realization made about the way people should communicate with each other, especially when they are handling a conflict, showed evidence that participants learned how to show others more respect. The ability to demonstrate respect makes it easier for them to contribute to their larger communities, and in society as a whole. Although, there was a lack of examples from outside groups making it unclear if the skill translated outside of class.

An increased ability to contribute to one's community through effective communication skills, specifically in the area of conflict resolution, relates to creating and maintaining healthy relationships (Adigwe & Okoro, 2016). A slight increase in sense of community provides moderate SEL evidence for core competency three: one's ability to create and maintain healthy relationships, and competency five: one's ability to make choices that demonstrate respect for others, and contribute to their community.

### **Increased Self-Awareness**

Another goal of the course was to induce reflective thought from the participant, regarding why they struggled and why they succeeded. It is logical, from reflective thought, might come an increase in self-awareness, the fourth theme regarding the experience of participation in AE. The two topics observed to be discussed the most during reflection circles, which occurred at the beginning and end of class sessions, were how to develop and maintain trust, and how be successful in a group setting, making the findings on reflective thought in those areas anticipated.

Self-awareness of one's values, emotions, and identity is the first core competency of SEL programming. A large number of responses started with a phrase similar to, "I've noticed myself as..." demonstrating an increase in understanding of the participants' own identities. There is evidence the experience facilitated an increase in understanding of the study participants' own self-awareness.

There was no specific discussion regarding individual's values brought up during the interviews, yet during the course, and interview interactions, participants were beginning to feel stronger about certain attributes, such as assertive communication, respect for others, and having an effective role in a group. Participants brought up examples of dealing with their emotions in a more effective manner, both during the course, and in outside life, because of dealing with frustration so frequently during the course.

Another objective of the course was to facilitate improved social interaction in a group setting, and to develop trust, through trust building activities. Mixed evidence emerged regarding one's ability to trust, from the experience, indicating that preconceived notions on trust may have played a factor. As noticed, throughout the course and after, interview participants did not change how fast they trusted someone, but merely, some, came to a realization about it. These were unexpected results, uncovering a potential flaw in the design of the trust unit in peer review. The participants reflected on the fact that they did not gain a great deal in willingness to trust, yet there were indications the experience led to an understanding of the participant's own comfort level with trust. Trust is a characteristic, which is highly related to a person's values and emotions (Lewicki, McAllister, & Bies, 1998).

The strongest evidence of self-awareness came from participants' indications of a higher level of understanding how their role in a group, typically manifests. Along with understanding

roles in a group setting, there were additional reports of specific individual changes to fulfill a part in achieving group cohesiveness. An ability to understand one's role in a group provides evidence for gaining an understanding of one's own identity, further relating to competency one. As previously described, the experience of AE appears to correlate with the five core competencies of SEL.

### **Research Conclusions**

Numerous examples and anecdotes, from the participants, provided evidence that their experiences correlated, to a varying extent, with all five core competencies of SEL. Findings indicate a connection between SEL skills and AE program participation, providing evidence that AE programming may qualify as SEL programming for high school students. Findings provided answers to research questions:

- What does a group of high school juniors and seniors, experience through participating in a 6-week school-based AE course, in terms of SEL?
- How does the participant's experiences relate to the core competencies of SEL?

### **Implications for Future Research**

Evidence from this study suggests a correlation between AE and SEL. While there were certain limitations to this study, there is strong evidence for further research on the subject. There is a significant lack of research in the literature concerning AE as SEL, especially during the teenage years, when the SEL skills are vital (Caissey, 1994). Suggestions for further research include additional qualitative studies on school-based AE programs, ideally those which are required participation for individuals in adolescence. A wide variety of related AE experiences, such as excursion trips, overnights, and high rope courses, need a qualitative review to gather enough evidence to find potential common positive SEL themes among different AE courses. A

potential continuation step includes using those common themes as standard tools to quantitatively measure the effectiveness of AE programs, and diagnose improvement methods for facilitating SEL skills to program participants.

Different instructors, of varying courses, who may have different interpretations of group dynamics and where to steer reflective conversations, lead to a variety of different experiences. Such a variety could lead to a wider range of results from study, therefore challenging established conclusions. Would additional studies support similar SEL skills acquired, and if so, how would the strength of evidence for each skill vary? For example, an AE program designed for problem solving and inducing struggle may show strong benefits for an increased capacity for empathy. Yet, an AE program designed to be an overnight wilderness survival program, may show little strength of evidence for empathy, and strong evidence in another skill, such as interaction with their community.

A future recommendation is to use a qualitative approach to study related AE courses, with a methodology such as phenomenology. It became clear during research, in order to understand the true essence of the experience of the participant, researcher observation and in-depth questioning were necessary steps to understanding connections to SEL skills. Results from a questionnaire would have provided different findings.

Because a sample size consisting of minors is more difficult to research, requiring items such as principal approval and parental consent, as in this case, there is a lot more research on adult AE experiences, revealing a need for more research on school-aged children, especially when the potential impacts could have major implications. In addition, the sample consisted of participants from the same school, who lived in the same general area, and had the same instructor and program sequence. How would results vary with participants from different

backgrounds, i.e. socioeconomic, environmental, etc...?

There is a need for an increase in knowledge on the youth AE participant. The skills developed through AE programming are skills, which, potentially, could help young people navigate a difficult point in their lives, as they are transitioning from adolescence to adulthood. In order to advance the literature, there needs to be more research on school-based programs, which have an AE course as part of the required curriculum. The students in this study have the option of more traditional PE classes, but would programs run differently, and results show different evidence if participants did not choose to participate willingly?

### **Closing**

There is strong, consistent evidence documented that AE programming facilitates teamwork amongst a participating group of individuals. The experience is set up to be challenging, yet fun, thought provoking, and self-reflective in nature (Bailey, 1999). There is a need for a higher quantity of research on the experience of participation in AE and other outdoor programming during adolescence, as it relates to SEL.

An increase in conclusive research on SEL during AE programming may provide better evidence of whether to adapt AE as necessary education for children in public schools. Perhaps, in the future, education that builds SEL, and improves the very way young people view themselves and interact with others in their environment, will be viewed to be just as essential as a young person's ability to read, write, and do arithmetic.



## References

- Adigwe P. & Okoro E. (2016). Human Communication and Effective Interpersonal Relationships: An Analysis of Client Counseling and Emotional Stability. *International Journal of Economic & Management Sciences* 5(3):336-339. Doi:10.4172/2162-6359.
- Assertive Communication. (n.d.). Retrieved from  
<[https://healthywa.wa.gov.au/Articles/A\\_E/Assertive-communication](https://healthywa.wa.gov.au/Articles/A_E/Assertive-communication)>
- Bailey, J. (1999). *A world of adventure education*. State College, PA: Venture.
- Beightol, J., Jeverson, J., Carter, S., Gray, S., & Gass, M. (2012). Adventure Education and Resilience Enhancement. *Journal of Experiential Education*, 35(2): 307-325.
- Cain, J. (2005) *In defense of adventure-based education and active learning opportunities: Developing challenge course programs for schools*. Dubuque, IA: Kendall / Hunt Publications.
- Caissey, G. (1994). *Early Adolescence: Understanding the 10 to 15 Year Old*. New York, NY: Insight Books.
- Collaborative for Academic, Social, and Emotional Learning. (2018). What is SEL? Retrieved from <[casel.org/what-is-sel](http://casel.org/what-is-sel)>
- Collier, D., & Mahoney, J. (1996). Insights and Pitfalls: Selection Bias in Qualitative Research. *World Politics*, 49(October): 56-91.
- Cooley S. J., Burns, V. E., & Cumming, J. (2015) The role of outdoor adventure education in facilitating groupwork in higher education. *Higher Education*, 69(4): 567–582.  
<https://doi.org/10.1007/s10734-014-9791-4>.
- Cooley, S. J., Burns, V. E., & Cumming, J. (2016) Using Outdoor Adventure Education to Develop Students' Groupwork Skills: A Quantitative Exploration of Reaction and

- Learning. *Journal of Experiential Education*, 39(4), <https://doi.org/10.1177/1053825916668899>.
- Cosgriff, M. (2000). Walking our talk: Adventure based learning and physical education. *Journal of Physical Education New Zealand*, 33(2), 89-98.
- Creswell, John W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Cross, R. (2002). The effects of an Adventure Education program on perceptions of alienation and personal control among at-risk adolescents. *Journal of Experiential Education*, 25, 247-254.
- D'Amato, L. G., & Krasny, M. E. (2011). Outdoor Adventure Education: Applying Transformative Learning Theory to Understanding Instrumental Learning and Personal Growth in Environmental Education. *Journal Of Environmental Education*, 42(4), 237-254.
- Deringer, A. (2011). College Life Through an Existential Lens: A Role For Adventure Programming. *Association of Outdoor Recreation & Education Conference Proceedings*, 44-48.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2008). Enhancing students' social and emotional learning promotes success in school: A meta-analysis. Unpublished manuscript.
- Durlak, J. A. (2011). The impact of enhancing students' social and emotional learning in high school-based universal interventions. *Child Development*, 82(1), 405-32.
- Dyson, B. (1994). A case study of two alternative elementary physical education programs. Unpublished doctoral dissertation, Ohio State University, Columbus, OH.

- Dyson, B., & Sutherland, S. (2015). Adventure education in your physical education program. In Lund, J. L. (3rd Edition), *Standards-Based Physical Education Curriculum Development* (pp. 229-253). Burlington, MA: Jones & Bartlett Learning
- Empathy [Def. 1] (2018). In *Merriam Webster Online*. Retrieved from <http://www.merriam-webster.com/dictionary>.
- Ewert, A. (1988). The identification and modification of situational fears associated with outdoor recreation. *Journal of Leisure Research*, 20(2),106-117.  
<https://doi.org/10.1080/00222216.1988.11969762>.
- Gehris, J., Kress, J., & Swalm, R. (2011). Effects of Adventure-Physical Education on High School Students' Physical Self-Concept and Physical Fitness. *Pennsylvania Journal of Health, Physical Education, Recreation & Dance*, 81(2), 21-27.
- Goodman, R., Meltzer, H., & Bailey, V. (1998) The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry*, 7, 125-130.
- Goodman A., & Goodman, R. (2009). Strengths and Difficulties Questionnaire as a dimensional measure of child mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*. 48(4), 400-3.
- Greffrath, G. (2013). A comparison between centre-based and expedition-based (wilderness) adventure experiential learning regarding group effectiveness: a mixed methodology. *South African Journal for Research in Sport, Physical Education and recreation*, 35(1), 11-24.
- Hattie, J., Marsh, H. W., Neill, J. T. & Richards, G. E. (1997). Adventure Education and Outward Bound: Out-of-class experiences that have a lasting effect. *Review of*

- Educational Research*, 67, 43-87.
- Hobbs, W., & Ward, W. (2006). Changes in perceptions of fear in a short-term, college outdoor adventure program. *The Journal of Experiential Education*, 28, 274.
- Kvale, S. and Brinkmann, S. (2009), *InterViews: Learning the Craft of Qualitative Research Interviewing*, Sage, Los Angeles, CA.
- Lee, C. J. (2011). Communication Competence, Empathy, and Self-Esteem. *Journal of Humanities Therapy*, 2.
- Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and Distrust: New Relationships and Realities. *Academy of Management Review*, 23(3), 438-458.
- Li, H. W., Chung, O. J., Ho, K. Y., Chiu, S. Y., & Lopez, V. (2013). Effectiveness of an integrated adventure-based training and health education program in promoting regular physical activity among childhood cancer survivors. *Psycho-Oncology*, 22(11), 2601-2610.
- Louw, P., Meyer, C., Strydom, G., Kotze, H., & Ellis, S. (2012). The impact of an adventure based experiential learning programme on the life effectiveness of black high school learners. *African Journal for Physical, Health Education, Recreation & Dance*, 18(1), 55-64.
- Luckner, J. (1998). Effects of participation in an outdoor adventure education course on the self-concept of hearing-impaired individuals. *American Annals of the Deaf*, 134(1), 45-9.
- Lund, J., & Tannehill, D. (2015). *Standards-Based Physical Education Curriculum Development, third edition*. Burlington, MA: Jones & Bartlett Learning.
- Marshall, C. & Rossman, G. B. (2010). *Designing Qualitative Research* (5th ed.). Thousand Oaks, CA: Sage Publications.

- Merrell, K. (2007). *Strong Teens Unit Tests: Strong Teens Curriculum*. University of Oregon.  
Retrieved from <https://strongkids.uoregon.edu/unittests/strongteens.pdf>.
- Moustakas, C. (1994). *Phenomenological research methods*. London, Sage.
- Mutz, M., & Miller, J. (2016). Mental health benefits of outdoor adventures: Results from two Pilot Studies. *Journal of Adolescence*, 49, 105-114.
- Oldmixon, M. (2007). The great outdoors: campus and individual benefits of outdoor adventures programming. *The Bulletin of the Association of College Unions International*, 75(2).
- Padilla-Diaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*, 1(2), 101-110. <https://doi.org/10.18562/IJEE.2015.0009>.
- Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, J. T., & Weissberg, R. P. (2000). Social and emotional learning: a framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health*, 70(5), 179-85, <https://doi.org/10.1111/j.1746-1561.2000.tb06468.x>
- Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students. Findings from Three Scientific Reviews*. Collaborative for Academic, Social, and Emotional Learning. Retrieved from <[www.casel.org/wp-content/uploads/2016/08/PDF-4-the-positive-impact-of-social-and-emotional-learning-for-kindergarten-to-eighth-grade-students-executive-summary.pdf](http://www.casel.org/wp-content/uploads/2016/08/PDF-4-the-positive-impact-of-social-and-emotional-learning-for-kindergarten-to-eighth-grade-students-executive-summary.pdf)>
- Pennsylvania State University (2017). Promoting Social and Emotional Learning in the Middle and High School Years. Retrieved from [http://prevention.psu.edu/uploads/files/penn\\_state\\_middle\\_high\\_brief\\_final.pdf](http://prevention.psu.edu/uploads/files/penn_state_middle_high_brief_final.pdf).

- Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: an exercise in interviewer self-reflexivity. *Qualitative research: QR*, 12(2), 165–185.  
doi:10.1177/1487941111422107
- Rahman, H. A. (2009). The Effect of Outdoor Education on Students' Social Emotional Competencies Development and Engagement in Classroom, Outdoor Education Research and Theory: Critical Reflections, New Directions, the Fourth International Outdoor Education Research Conference, La Trobe University, Beechworth, Victoria, Australia, April 15-18, 2009.
- Redfern, S. J., & Norman, I. J. (1994) Validity through triangulation. *Nurse Researcher*. 2(2), 41-56.
- Rhodes, H. M., & Martin, A. J. (2014). Behavior Change After Adventure Education Courses: Do Work Colleagues Notice? *Journal of Experiential Education*, 37(3), 265-284,  
[https://doi:10.1177/1053825913503115](https://doi.org/10.1177/1053825913503115)
- Rohnke, K. (1986). Project Adventure: A widely used generic product. *Journal of Physical Education, Recreation and Dance*, 57(6), 68-70, <https://doi.org/10.1080/07303084.1986.10606139>.
- Scarf, D., Hayhurst, J. G., Riordan, B. C., Boyes, M., Ruffman, T., & Hunter, J. A. (2016). Increasing resilience in adolescents: the importance of social connectedness in adventure education programmes. *Australian Psychiatry*, 25(2), 154-156,  
<https://doi.org/10.1177/1039856216671668>.
- Scrutton, R. A. (2015). Outdoor adventure education for children in Scotland: quantifying the benefits. *Journal of Adventure Education & Outdoor Learning*, 15(2), 123-137.  
<https://doi.org/10.1080/14729679.2013.867813>

- Seaman, J., & Rheingold, A. (2013). Circle Talks As Situated Experiential Learning: Context, Identity, and Knowledgeability in “Learning From Reflection.” *Journal of Experiential Education*, 36(2), 155–174. <https://doi.org/10.1177/1053825913487887>
- Sibthorp, J., & Jostad, J. (2014). The Social System in Outdoor Adventure Education Programs. *Journal of Experiential Education*, 37(1), 60-74. doi:10.1177/1053825913518897
- Stuhr, P. T., Sutherland, S., Ressler, J., & Ortiz-Stuhr, E. M. (2015) Students’ perceptions of relationship skills during an adventure-based learning unit within physical education. *Australian Journal of Outdoor Education*, 18(1), 27-38, <https://doi.org/10.1007/BF03400977>.
- Sutton, J., & Austin, Z. (2015). Qualitative Research: Data Collection, Analysis, and Management. *Canadian Journal of Hospital Pharmacology*, 68(3):226-231.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017) Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, 88(4),1156-1171, <https://doi.org/10.1111/cdev.12864>
- University of Minnesota Center for Advanced Studies in Child Welfare (2015). The Well-Being Indicator Tool for Youth (WIT-Y). Retrieved from <<https://casew.umn.edu/portfolio-items/well-being-indicator-tool-for-youth-wit-y/>>
- Whittington, A., Mack, E. N., Budbill, N. W., & McKenney, P. (2011). All-girls adventure programs: what are the benefits? *Journal of Adventure Education & Outdoor Learning*, 11(1), 1-14. doi:10.1080/14729679.2010.505817.
- Whittington, A., & Budbill, N. (2013). Breaking the mold: Impacts of adventure education on girls. *Journal of Outdoor Recreation, Education, and Leadership*, 5(1), 37–53,

<https://doi.org/10.7768/1948-5123.1128>.



## Appendix A

## INTERVIEW QUESTIONS

Please describe your thoughts of the adventure education unit. You may talk about whatever you found had an impact on you.

After completion of the adventure education unit:

Have you noticed any changes in your sense of community?

Have you joined a club/group recently? Are you more willing to join a new group now?  
Have you noticed any changes in acceptance of those who are different from you? Have you found you enjoy being with people who are different?

Have you noticed any intrinsic changes?

Do you view yourself differently in any way?

Has your work efficiency improved?

Has your perspective changed about anything (environment/relationships)? How?

Have you noticed any changes in the way you handle your emotions?

Did you gain confidence in leadership abilities?

Have you noticed a change in empathy or willingness to help others?

Have you noticed a change in the way you handle your stressors? Anger? Sadness? Any other emotion?

Have you noticed any changes in the way you deal with problems?

Has your decision making process changed? How?

Do you find yourself sticking with something challenging for longer? (Studying, athletics, arts)

Is there an increase in patience? Do you deal with frustration better?

Have you experienced personal benefits from delayed gratification recently?

Have there been any changes on your perception of trust?

Have there been any changes in your social interactions?

Have conversations with your parents changed?

Has your communication style changed at all? Have you become more assertive?

Have you been in a conflict, which you handled differently?

Have you made any changes in the way you view trust?

Do you have any change in willingness to learn something new/try something?

## Appendix B

The Liberty University Institutional Review Board has approved this document for use from 1/8/2018 to 1/7/2019 Protocol # 3059.010818 PARENT/GUARDIAN CONSENT FORM Social and Emotional Learning through Adventure Education Joseph Reynolds Liberty University Sports Management/School of Education

Your student is invited to be in a research study on the social and emotional skills developed through participation in adventure education classes. He or she was selected as a possible participant because he or she is a junior or senior enrolled in an Outdoor Pursuits class. Please read this form and ask any questions you may have before agreeing to allow him or her to be in the study.

Joseph Reynolds, a master's degree candidate in the Sports Management department in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to determine the social and emotional skills developed through participation in an adventure education class and how students perceive that participation in the class helps improve these skills. **Procedures:** If you agree to allow your student to be in this study, I would ask him or her to do the following things: 1. Complete an in-person, audio-recorded interview after his or her completion of an Outdoor Pursuits class. I expect this will take approximately 60 minutes. Interviews will be scheduled according to each student's free time during and after school.

**Risks:** The risks involved in this study include the risks related to this researcher as a mandatory reporter. If students share information related to child abuse, child neglect or intent to harm self or others, I will be required to report to the school administration.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. I may share the data I collect from your student for use in future research studies or with other researchers; if I share the data that I collect about your student, I will remove any information that could identify him or her, if applicable, before I share the data.

I will conduct the interviews in a location at Belmont High School where others will not easily overhear the conversation. Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted. Interviews will be recorded and transcribed. Recordings will be stored on a passwordlocked computer for three years and then erased. Only the researcher will have access to these recordings.

The Liberty University Institutional Review Board has approved this document for use from 1/8/2018 to 1/7/2019 Protocol # 3059.010818 **Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to allow your student to participate will not affect his or her current or future relations with Liberty University or Belmont Public Schools,

his or her grade, or my opinion of him or her. If you decide to allow your student to participate, he or she is free to not answer any question or withdraw at any time without affecting those relationships.

**How to Withdraw from the Study:** If your student chooses to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should your student choose to withdraw, any data collected will be destroyed immediately and will not be included in this study. **Contacts and Questions:** The researcher conducting this study is Joseph Reynolds, Wellness Teacher at Belmont High School. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at 860-392-9530 or jreynolds@belmont.k12.ma.us. You may also contact the researcher's faculty advisor, Dr. Clark Zealand, at ctzealan@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to allow my student to participate in the study.

(NOTE: DO NOT AGREE TO ALLOW YOUR STUDENT TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

The researcher has my permission to audio-record my child/student as part of his or her participation in this study.

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Signature of Minor      Date

---

Signature of Parent      Date

---

Signature of Investigator

Appendix C

January 8, 2018

Joseph A. Reynolds IRB Approval 3059.010818: Social Emotional Learning through Adventure Education

Dear Joseph A. Reynolds,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP Administrative Chair of Institutional Research The Graduate School

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Appendix D: Belmont Public Schools Permission Letter

*Belmont High School*

*Mr. Daniel E. Richards  
Principal*



221 Concord Avenue  
Belmont, Massachusetts 02478-3047  
(617) 993-5900  
FAX (617) 993-5909

To Whom It May Concern,

I give my permission for Joseph Reynolds to conduct research, for his thesis work through Liberty University, using Belmont High School students as participants. I also give my permission to use the facilities at Belmont High School to conduct his research.

Sincerely,

Mr. Daniel E. Richards  
Belmont High School Principal

