

# **Student Readiness: Examining the Impact of a University Outdoor Orientation Program**

**Eddie Hill**

**Timothy Posey**

Old Dominion University

**Edwin Gómez**

East Carolina University

**Stephen L. Shapiro**

University of South Carolina

## **Abstract**

This study examined the impact of a university outdoor orientation program on participants' transition to higher education. Researchers focused on participants' experiences during the program, utilizing a mixed-methods approach to measure resilience and well-being. Pre- and post-test instruments consisted of two preestablished scales and a series of open-ended questions, which were administered during a 4-day university outdoor orientation program. Findings indicated significant improvement of resilience and well-being in participants through outdoor orientation program involvement. Additionally, direct content analysis identified major themes related to resilience, well-being, and readiness for college.

**KEYWORDS:** outdoor orientation programs; flourishing; resilience; well-being; student readiness; transition to higher education; adjustment to higher education

The transition to college has been documented as a challenging period of adjustment for young adults (Bell, 2006; Feldt, Graham, & Dew, 2011; Gómez, Urzúa, & Glass, 2014; Lu, 1994). During the transition to college, young adults encounter new challenges and are forced to make critical life adjustments. These adjustments often cause tremendous stress and may lead to more serious psychological distress (Lu, 1994). Several researchers have indicated that students' social and academic integration into the university fabric is essential to student retention and success (Austin, Martin, Mittelstaedt, Schanning, & Ogle, 2009; Bell, 2006; Bell, Gass, Nafziger, & Starbuck, 2014; Kuh, Kinzie, Schuh, & Whitt, 2010; Robinson, Burns, & Gaw, 1996; Tinto, 2006; Wolfe & Kay, 2011). However, merely achieving social and academic integration into the university setting does not translate into positive adjustment and long-term success at the university (Tinto, 2006). Previous research has found that "campus recreation facilities and programs have an influence on a student's decision to remain at the university" (Kampf & Teske, 2013, p. 87). Additionally, Gómez et al. (2014) found that the most significant predictors of social adjustment to college are on-campus socialization and the establishment of social networks, both of which can be facilitated by outdoor orientation programs (Gass, Garvey, & Sugerman, 2003). In a nationwide NIRSA survey of 33,500 students, Forrester (2014) reported campus recreation amenities as both a recruitment and retention strategy, noting that 67% of students reported campus recreation facilities influenced their decision to attend a specific college (p. 14), and 74% of students reported campus recreation facilities influenced their decision to continue attending their chosen university (p. 16).

Because of the demand from colleges and universities for student retention and academic achievement, orientation programs have become routine for students entering into higher education. Additionally, outdoor orientation programs have become a popular alternative to traditional orientation as a means of first exposing students to college. Bell, Holmes, and Williams (2010) found 164 colleges and universities with outdoor orientation programs. Bailey and Kang (2015) found that participation by first-year/first-semester students in wilderness orientation programs played a positive role in the retention of participants—a traditional primary role of first-year programs (Barefoot, 2000). However, the rate of students that start higher education and drop out before obtaining a degree has stayed consistent, at around 50% for more than 20 years (Tinto, 2010). Although great strides have been made to increase student retention, colleges and universities have been unable to improve graduation rates.

Tinto (2006) suggested that it is advantageous for institutions to have a better understanding of the practices that promote student development. Likewise, Reason (2009) recommended future research investigate specific variables that might predict long-term success. Several researchers have acknowledged resilience and well-being as important aspects of positive young adult development (Arnett, 2000; Evans, Forney, Guido, Patton, & Renn, 2009; Lu, 1994). Young adults who have a greater sense of well-being and resilience have a more realistic life perception and are better able to control major life events (Taylor & Brown, 1994). Prior studies have suggested that outdoor orientation programs increase participants' resilience, well-being, and institutional attachment (Neill & Dias, 2001; Posey et al., 2015; Shellman & Hill, 2013).

The small amount of empirical research on the impacts of orientation programs pertaining to students' resilience and well-being represents a void in higher education literature. Orientation programs are often cited in research as having a significant impact on participants' transition and adjustment to college (Posey et al., 2015; Shellman & Hill, 2013). However, many variables such as well-being, resilience, and institutional attachment have less evidence of impact. Increasing the literature related to such variables will improve our understanding of student transition. Additionally, understanding how these variables impact student success may provide valuable information for improving student success in higher education and beyond. Therefore, the purpose of this study was to determine if an outdoor orientation program impacts participants' resilience, well-being, and sense of attachment to the institution, as measures of successful university student transition.

## Literature Review

### Traditional Orientation Programs

To best understand orientation programs, it is essential that we examine the trends that have become prevalent. Specific trends over the last decade have included (a) parent involvement, (b) academic advising, and (c) program type (e.g., freshmen seminars, outdoor orientation). These trends are a result of changing demographics and a greater understanding of variables that aid in successful transition (Strumpf & Sharer, 1993). Much of the research focuses on retention and long-term success as an outcome of the environment and process of how students integrate socially and academically (Barefoot, 2000; Kuh et al., 2010; Porter & Swing, 2006; Tinto, 2006; Wolfe & Kay, 2011). According to Barefoot (2000), orientation programs have numerous positive outcomes on students and institutions. Goodman and Pascarella (2006) suggested that orientation programs are a fundamental component to student success in higher education, and Robinson et al. (1996) reported that “orientation programs are designed to help students make a successful transition to the college environment and to initiate the process of higher learning” (p. 58). However, several researchers have acknowledged that most orientation programs are not designed to facilitate successful transition and adjustment, but to provide essential information and initiate the transition process (Kuh et al., 2010; Porter & Swing, 2006; Strumpf & Sharer, 1993). Orientation programs need to be proactive and focus on meeting the needs of students, not merely help them to adapt to changes in an academic setting. These include nonacademic needs, such as creating a sense of place (Austin et al., 2009), socialization (Mirken & Middleton, 2014), support and trust (Bell et al., 2014), or creating stronger connections between students and faculty (Scott, Boyd, & Colquhoun, 2013).

### Outdoor Orientation Programs

According to Bell et al. (2014), outdoor orientation programs significantly impact student development, as well as social and academic success. Several studies have suggested that outdoor orientation programs create meaningful social relationships and encourage student development (Austin et al., 2009; Bell, 2006; Bell et al., 2014; Galloway, 2000; Wolfe & Kay, 2011). In a longitudinal study, Gass et al. (2003) found that the impacts of outdoor orientation programs lasted through college and postcollege years. Multiple researchers have attributed these findings to the methods used in outdoor orientation programs (Austin et al., 2009; Bell et al., 2014; Galloway, 2000; Gass et al., 2003; Wolfe & Kay, 2011).

Austin et al. (2009) found that a common model used in outdoor orientation programs is the Outward Bound model. According to McKenzie (2003), the Outward Bound model incorporates seven factors related to outdoor orientation programs: (a) learner, (b) physical environment, (c) social environment, (d) problem-solving tasks, (e) adaptation, (f) competency, and (g) recognition of meaning and experience. The Outward Bound model is a process that uses experience to produce outcomes. Hattie, Marsh, Neill, and Richards (1997) suggested that future studies explore theoretical frameworks that could lead to positive outcomes (e.g., experiential learning theory).

### Resilience

Resilience has been studied at great length and in various capacities (Benson, Scales, & Syvertsen, 2011; Werner & Smith, 1992); however, the meaning of what it is to be resilient is widely disputed. Resilience in its most basic form is the ability to “bounce back” or positively adapt following an adverse or challenging circumstance (Brown, Shellman, Hill, & Gómez, 2012; Luthar, Cicchetti, & Becker, 2000; Smith et al., 2008; Williams et al., 2011). It is a character trait inherent in some individuals and absent in others. The study of resilience has produced “risk”

and “protective” factors, that is, elements that threaten or protect the individual in adverse circumstances. According to Luthar et al. (2000), risk factors are indicators of situations that could adversely impact development. Similarly, protective factors are indicators of situations that aid development and can be categorized into three constructs: stabilizing, enhancing, and reactive. However, the concept of resilience, as solely a character trait, has been critiqued as misleading. Resilience has been more accurately explained as a dynamic process (Luthar et al., 2000; Masten, 2001). How an individual interacts with the stressful environment is crucial to the development of resilience as a dynamic process (Keyes, 2003; Masten, 2001; Ryff, Diener, Love, Essex, & Singer, 1998).

Interest in resilience has increased because of outdoor orientation programs (Neill & Dias, 2001; Posey et al., 2015; Shellman & Hill, 2013). Participants of outdoor orientation programs are commonly placed in situations in which they are challenged physically, mentally, and emotionally (Austin et al., 2009; Bell et al., 2014; Galloway, 2000; Gass et al., 2003; Wolfe & Kay, 2011). These situations and environments are structured to aid in the development of resilience. Ryff et al. (1998) suggested that resilience is not only an important factor in positive development, but also an essential factor in well-being. However, little research exists on outdoor orientation programs and resilience (Shellman & Hill, 2017).

## Well-Being

Well-being has been viewed in various forms; the predominant perspectives are hedonic and eudemonic approaches. The hedonic approach defines well-being as simply overall happiness, and the eudemonic approach views well-being as a function of self-awareness (Andrews & Withey, 2012; Ryan & Deci, 2001). According to Keyes (2003), “Individuals are mentally healthy when they like all parts of themselves, have warm and trusting relationships, see themselves developing into better people, have a direction in life, are able to shape their world to satisfy their needs, and have a degree of self-determination” (p. 262). Well-being is not only a direct reflection of mental health, but can also be separated into three constructs generating a holistic approach: emotional well-being, psychological well-being, and social well-being.

Viewing well-being in a holistic approach creates the notion that well-being can be developed (Ryan & Deci, 2001; Ryff et al., 1998). According to Ryff et al. (1998), well-being is the process of striving to reach one’s full potential and accepting oneself. Well-being has been associated as an essential component to students’ overall ability to adjust successfully to a higher education setting (Feldt et al., 2011). However, not much research has determined the impact on outdoor orientation programs and student well-being (Shellman & Hill, 2017).

## Conclusion

Orientation programs, specifically outdoor orientation programs, aid in student transition to higher education; however, a deficit in student readiness and success still exists. Likewise, exploring variables such as well-being and resiliency might offer insights into how students can be more prepared for success in higher education. With the recent surge of well-being and resiliency among college students, more research is needed to determine effective programming that addresses this need. Additionally, outdoor orientation program could fall under high-impact practices, a currently identified necessity on thriving college campuses. Thus, the researchers addressed the following research questions:

- Is there an increase in participants perceived level of resilience as a result of participation in the First Ascent Program?
- Is there an increase in participants perceived level of well-being as a result of participation in the First Ascent Program?

## Method

### First Ascent Program Overview

The setting for this research study was the First Ascent program, a university-specific outdoor orientation program designed to ease the stress associated with the transition to college by helping students to develop connections, feel welcome in the university community, understand more about university life, and develop confidence in themselves and their abilities. The goal of the First Ascent Program is to engage every student as completely as possible through programmed activities and ensure that they feel like they are part of the university community. The First Ascent Program is designed to encourage participants to open up and experience the trip in a unique and powerful way. This goal is accomplished through the use of trained leadership teams comprising peer trip leaders and faculty mentors. Leadership teams facilitate specific and consistent programming objectives that guide the group toward a shared set of outcomes. Two or three trip leaders and one faculty mentor accompany six to eight new students on their experience.

The trip leader's role on a First Ascent is especially critical and difficult. The trip leader ensures the safety of all participants on the trip while working to engage the participants, facilitate a welcoming community that fosters development and growth, and teach them the skills necessary to succeed on the trip. Additionally, the trip leader introduces students to the university, addressing their concerns regarding their first year in college and encouraging them to build strong connections with other participants that will help them feel more at home during their first year at the university.

The mentor serves as a positive role model to the students on the trip, helps answer questions the students may have about the university, and provides a unique perspective that the trip leaders may not be able to provide. The mentor augments the trip leaders while on the trip, keeping in mind that his or her role is not one of direct leadership. The mentor is encouraged to lead by example and provide support to the trip leaders. The mentor is also encouraged to participate in or assist in facilitating discussions and activities.

First Ascent trips are 4-day programs that take place during July and August. Students have the option to participate in one of three program types: a backpacking trip in Shenandoah National Park (SNP) in Virginia, a canoe trip on the Shenandoah River through SNP, or a surf trip to Ocracoke Island off Cape Hatteras National Seashore (CHNS) in North Carolina. SNP is a 200,000-acre national park with over 500 miles of trails, including a 100-mile stretch of the Appalachian Trail, and lies along the Blue Ridge Mountains. Its geography provides visitors with the opportunity to hike through beautiful wilderness terrain, explore waterfalls, and climb impressive rock faces. CHNS runs 70 miles along North Carolina's Outer Banks from Whalebone Junction to Ocracoke Island. The shifting shoals around CHNS are littered with the bones of some 2,000 wrecked ships—the reason the area is called the “Graveyard of the Atlantic.” CHNS is a water-sports paradise, with small villages separated by miles of undeveloped, unspoiled beaches, which are protected against commercial growth. CHNS is one of the East Coast's top recreation destinations, with plenty of surfing, sailing, fishing, and scuba diving.

### Population and Sample Size

The population for this study was participants in the First Ascent Program during the summer of 2015. To ensure confidentiality, each participant was given a pseudonym. All participants were incoming freshman at a mid-Atlantic university.

## Research Design

Data for this study were collected during the months of July and August 2015. This study used an experimental, comparative design to study the levels of resilience and well-being in participants of the First Ascent Program. The questionnaires (pre- and posttest) were administered upon students' arrival for the trip and at the conclusion during the van ride home.

### First Ascent Program Design

First Ascent was developed with the concept of integrating students socially and academically. This is accomplished through two constructs: (a) guidance of leadership teams consisting of student trip leaders and faculty mentors and (b) the use of programmed days and activities. These constructs allow not only students and staff to engage with each other, but also students to develop connections and relationships with other students.

The roles for the student trip leader and faculty advisor are distinguished; defining the roles ensures that the objectives for the trip are accomplished. The trip leader ensures the safety of participants on the trip while engaging the participants as a friend and fellow student, facilitating a welcoming community that fosters development and growth. Additionally, the trip leader introduces students to the university from a student perspective, addresses their concerns regarding their first year in college, and encourages them to build strong connections with other participants, to make them feel more "at home" during their first year at the university. The trip leaders develop a friend-type relationship with participants, but it is important they maintain a sense of professionalism, inherent in the trip leaders' role as peer mentors. The trip leaders are the primary representatives of the university on the trip and model the values of the university. Finally, it is important that trip leaders have an innate understanding of the program and its intended outcomes.

The faculty mentor serves as a positive role model for the students on the trip, helps answer questions the students may have about the university, and provides a unique perspective different from that of the trip leaders. The mentor is encouraged not only to engage student in a professional manner, but also to develop a relationship with participants that allows them to feel comfortable. Additionally, mentors participate in or assist in facilitating discussions and activities; this allows for students to view faculty in a new way. Finally, faculty mentors above all provide a unique point of view on the transition from high school to college and discuss strategies for success.

The roles of the trip leader and faculty mentor supplement the programmed days of the trip. Trips begin with students obtaining their gear; this represents that all participants are starting on a level plane. Trip leaders facilitate an activity that helps participants confront their greatest anxieties about the trip and highlights what they are most excited for on the trip. Once at their destination, trip leaders, mentors, and participants work together to establish a base camp, and after everything is set up, students are encouraged to take in the landscape in their free time. After dinner, trip leaders facilitate a discussion on what it means to be a student at the university. After the discussion, trip leaders facilitate the "crystal ball," which informs participants of what to expect for the next day and how to best prepare. During the daily activity, the faculty mentors are encouraged to participate with the group while the trip leaders assist participants if they need help during the activity. The team-building activity is centered on asking for help from others and the importance of working with people. After the activity, the group works together to make dinner and get ready for the evening. Following dinner, the faculty mentor facilitates another group discussion on questions the participants might have about college and the transition to higher education. The third day follows a similar format, but with different activities and discussions. On the last day, participants make a final breakfast together and break camp. After the camp is clean, the group is given some time to reflect on their time before they go back home.

Once back at the gear shop, the trip leaders facilitate one last discussion and answer any final questions before the conclusion of the trip.

## Measurement

The questionnaire used comprised two quantitative, preestablished scales: the Mental Health Continuum-Short Form (MHC-SF) and the Brief Resilience Scale (BRS). A series of seven open-ended questions and participant demographics were also included.

Keyes' (2009) MHC-SF assessed participants' well-being. The MHC-SF contains 14 items measuring (a) psychological well-being, (b) emotional well-being, and (c) social well-being. The MHC-SF has been validated as a reliable measure in previous studies (Lamer, Westerhof, Bohlmeijer, Klooster, & Keyes, 2011; Shellman & Hill, 2013). Each item is measured on a Likert-type scale from 0 (*never*) to 5 (*everyday*). An example question is, "In the past four days, how often did you feel confident to think or express your own ideas or opinions?"

Smith et al.'s (2008) BRS was used to measure resilience. The BRS has been validated as a reliable measure for assessing resilience (Smith et al., 2008). The BRS contains six items measuring the ability to bounce back, and each item is measured on a Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). An example question is, "I tend to bounce back after hard times."

A series of seven open-ended questions measured participants' motivation; participants' overall impression of the university, other students, faculty, and the trip; and participants' sense of readiness for the transition to college. These six questions were based on the Outward Bound model (McKenzie, 2003). See Table 1.

**Table 1**

### *Open-Ended Questions*

1. Describe how the **physical environment** of the trip (being outdoors, your experience outdoors) impacted your experience on the First Ascent trip.
2. Describe your **social interactions** (interactions with other student participants) and how they impacted your experience on the First Ascent trip.
3. Describe how the **instructors** impacted your experience on the First Ascent trip (interactions with the faculty member; interactions with trip leaders).
4. Describe how the **course activities** (setting up camp, group-building activities, surfing/rock climbing) impacted your experience on the First Ascent trip.
5. How has **reflecting** on your experiences (keeping journals, debriefing at the end of the day, letter to yourself) impacted what you learned on the First Ascent trip?
6. What is your **biggest "takeaway"** (what impacted you the most) from the First Ascent trip? In answering this question, consider what you learned about yourself, the people on the trip with you, and about [the university], and what to expect when you start college.

## Data Analysis

**Quantitative.** The researchers analyzed quantitative data using the Wilcoxon signed-rank test and qualitative data using direct content analysis in Microsoft Excel. Additionally, they reported effect size using Rosenthal's (1991, p. 19) formula, whereby  $n_1$  and  $n_2$  represent pre- and posttest groups, and interpreted the Wilcoxon test using Cohen's (1992) suggestions for small ( $r = 0.1$ ), medium ( $r = 0.3$ ), and large ( $r = 0.5$ ) effects.

**Qualitative.** For the purposes of this study, the researchers used a traditional qualitative approach with directed content analysis to study the final written reflection completed by the

undergraduate students. Krippendorff (2012) defined content analysis as “a research technique for making replicable and valid inferences from texts to the contexts of their use” (p. 24). Directed content analysis allowed the researchers either to validate or to extend the conceptual framework (Hsieh & Shannon, 2005). Using the existing research on outdoor orientation programs, the researchers identified initial coding categories by identifying key concepts or variables. Next, using the theory as guide, they made operational definitions for each category. After that, they analyzed all highlighted passages using the predetermined codes. Any text that was highlighted and not categorized with the initial coding scheme was given a new code (Hsieh & Shannon, 2005).

## Results

Data were collected on four trips, which had between five and seven students per trip. Pretest, posttest, and qualitative items were completed by 25 participants. Although the sample was small, 100% participation was captured. The sample was 54% female, had a mean age of 18, and was predominantly White (64%). The majority of the sample was single (92%).

### Quantitative

The researchers used Wilcoxon signed-rank tests to analyze differences from pre- and posttest on well-being and resilience. The results indicated statistical significance between participants' well-being ( $z = -2.975, p = 0.003$ ) pre- and posttest, which resulted in a medium effect size ( $r = 0.42$ ). The mean of the ranks for well-being at pretest was 13.88, whereas the mean of the ranks in favor of security was 12.25. Additionally, results indicated a statistical significance between participants' resilience ( $z = -2.402, p = 0.016$ ) pre- and posttest, which resulted in a medium effect size ( $r = 0.34$ ). The mean of the ranks for resilience at pretest was 13.88, whereas the mean of the ranks in favor of security was 12.25.

### Qualitative

Using direct content analysis, the researchers separated themes into categories and subcategories and then grouped these together as they related to areas of interest such as well-being, resilience, and institutional attachment. They identified several themes from the respondents of the First Ascent Program. From the themes, they established seven main categories that reflected the experiences of the participants: motivation, activities, instructors, participants, environment, reflection, and impact. Table 2 shows generalizations regarding categories. Participants reported that the main reason for participating in the program was to build new relationships with people who had similar interests and attended the same university. The participants indicated that the activities, participants, environment, and reflection had the greatest impact on well-being and resilience. Additionally, participants indicated that overall student readiness was a result of the overall impact of the trip.

**Table 2**  
*Categories and Subcategories by Occurrence*

| Category   | Subcategories                            | Occurrence |
|------------|--|------------|
| Motivation | 1.1 Building new relationships           | 23         |
|            | 1.2 Previous interest in outdoors        | 16         |
|            | 1.3 Seeking new and enjoyable activities | 15         |
|            | 1.4 Gain knowledge of the university     | 4          |
|            | 1.5 Externally driven                    | 3          |



Table 2 (cont.)

| Category                | Subcategories  | Occurrence |
|-------------------------|--|------------|
| Activities              | 2.1 Activities encouraged social growth/teamwork, well-being         | 34         |
|                         | 2.2 Activities encouraged personal growth/challenging, resilience    | 17         |
|                         | 2.3 Activities did not challenge                                     | 3          |
| Instructors             | 3.1 Instructors modeled positive relationship/environment            | 26         |
|                         | 3.2 Instructors provided advice/knowledge about college/college life | 15         |
|                         | 3.3 Instructors supported autonomy                                   | 8          |
|                         | 3.4 Instructors taught outdoor skills                                | 5          |
|                         | 3.5 Instructors did not support autonomy                             | 1          |
| Participants            | 4.1 Group fostered well-being through fun/social interactions        | 24         |
|                         | 4.2 Group fostered resilience through support/encouragement          | 8          |
|                         | 4.3 Group hindered flourishing                                       | 1          |
| Environment             | 5.1 Appreciation of outdoors/nature                                  | 16         |
|                         | 5.2 Facilitated personal growth (resiliency)                         | 10         |
|                         | 5.3 Facilitated social growth (well-being)                           | 3          |
|                         | 5.4 Outdoor created experience                                       | 3          |
|                         | 5.6 Adverse response to outdoors                                     | 2          |
| Reflection              | 6.1 Reflection put things into place                                 | 9          |
|                         | 6.2 Reflection appreciation  | 8          |
|                         | 6.3 Reflection relationship  | 5          |
|                         | 6.4 Reflection shows growth  | 4          |
|                         | 6.5 Reflection eases fear of transition                              | 4          |
|                         | 6.6 Reflection learned from the past                                 | 3          |
|                         | 6.7 Reflection created memories                                      | 2          |
|                         | 6.8 Reflection was unnecessary                                       | 1          |
| Impact of Participation | 7.1 Student readiness  | 25         |
|                         | 7.2 Creation of new a relationships/creation of community            | 23         |
|                         | 7.3 Perceived sense of enhanced flourishing                          | 16         |
|                         | 7.4 Sense of attachment to institution                               | 8          |

## Motivation

Each participant expressed a unique reason why he or she chose to participate in the First Ascent Program. From these motivations, five distinct rationales existed as to why participants participated in the program. For example, Nichole expressed that building new relationships was the reason she wanted to go on the First Ascent program: "I chose to participate in the First Ascent Trip in order to make new friends and connections." Jake desired to gain more knowl-

edge about the university and campus life from the students who were currently attending: "I wanted to go to learn a little more about the campus and [the university] itself from current students." Karen explained the previous joy she has received when being outdoors: "I love hiking and nature, I had never backpacked or real rock climbed [*sic*]." Roger had the desire to try camping and meeting new people: "I thought it would be fun to go camping and to be able to meet my fellow classmates." Tim did not want to go on the trip to begin with, but after attending the First Ascent Program, he was he happy he did: "I didn't really exactly -- choose to participate in this program. I was forced into it. My parents thought that this trip would help ease my stress about attending college; now that I think about it, it did."

## Activities

Taylor enjoyed the small group games: "I loved the group building activities." Erin did not like some aspects of the trip, but felt it helped her become stronger as a whole: "I was put into some uncomfortable situations like tumbling in the waves and uncomfortable bike ride, but I felt like a stronger individual." Jamie felt that the adventure aspect of the trip helped her do things she normally would not be able to do: "The rock climbing was amazing! I was really able to push myself and do things that at first I thought I wouldn't be able to do." Thomas felt that the activities were useless: "The group building activities seemed childish and I thought that a mere casual conversation could just as easily provide the output that was being looked for."

## Instructors

Ashley was excited that she was treated with respect: "They made the trip fun and treated us as equals rather than [acting like] dictators." Blair felt that she was treated as a child: "Wished they would treat me like I am 18." Jordan felt that the staff really helped her in all aspects of the adventure trip: "They made me feel confident in what or how I was doing things, like cooking or belaying."

Samantha appreciated the advisor coming along to give pointers on college life: "I really enjoyed having the prof. on the trip because he gave me a lot of really good pointers based on a teaching stance rather than always hearing from the current students." William appreciated all of the help the staff were able to provide, from pointers about college life to aspects of the trip: "All the staff members, trip leaders, OAP people etc. were all awesome people; they really helped me by helping me with things like how to work my camp stove, pack my bag properly, pitch tents, etc."

## Participants

Jane felt that the other participants made the trip fun: "Although being at Shenandoah National Park was absolutely life changing, it was really the group that made it as special as it was." Jamie felt the other participants supported her through different challenges: "At one point the hiking became a challenge, but I felt really comfortable with the help of the people around me." However, Michael indicated that the other participants had a negative impact on his experience: "My group mates did not want to talk or be friendly with me."

## Environment

Jordan appreciated the outdoor experience: "It was absolutely amazing and mind blowing. The environment was a 'breath of fresh air.' Aside from the bugs, it was perfect." Roger came to the conclusion the outdoors was not meant for him: "Despite having tons of fun, I have learned that I'm not really an outdoors kind of person, but I still faced my fears." Hector learned the importance of teamwork: "It made me realize how important being a team is." William felt the outdoors made the experience special: "The experience of sleeping under the stars for more than

two days was pretty awesome.” Mitchel felt that although the outdoors is nice, it is not really for him: “The environment was fine at first when we arrived, but the first night of sleeping was beyond the means of comfortable.”

## Reflection

Jordan appreciated the reflection periods: “Reflection taught me to appreciate the little things in life and to step back and relax and see what happens sometimes.” Royce discovered more about himself from reflection on his experiences: “Reflecting on our experiences has helped me because it shows me how much I have grown and sometimes I’ve learned something from looking back.” Gabby also indicated self-discovery from reflection: “It has shown me that I am not afraid to try new things.” Sarah appreciated the reflection because “it helped [her] to square everything away.” Grady felt that the reflection was unnecessary for him, but realized others could benefit from it: “All together [*sic*] it is a good experience to get the participants to think on an intimate level and make deeper connections to the trip.” Rachael mentioned, “It brings people closer as a group, creating memories that can’t be explained and only understood with the people around.” Mason stated, “Reflecting on our experiences at the end of the day, etc., helped the memories I had made stay fresh in my mind.” David is no longer fearful of the transition from one aspect of life to another: “The letter allowed for a hopeful future.”

## Impact of Participation

Sibly expressed that because she made friends on the trip, she is not as worried about attending college: “Transferring into college is tense and sometimes scary, but this weekend eased a lot of my frustrations thanks to the way the troop leaders lead us by treating us like adults.” Bailey appreciated all the things she has learned from the First Ascent trip: “Risks are good. Being out of your comfort zone forces you to learn and try new things, which can lead to great experiences.” Jordan is no longer afraid of the outdoors: “I feel more comfortable outdoors, for example, bugs don’t seem to scare me as much as they use to, I have more confidence on moist rocks and using the bathroom outside. I still don’t really enjoy the cold unless I’m prepared.”

Evan feels like she will have new friends when she begins classes: “I socialized a lot with Vickie who I shared a tent with and I feel like we’re best friends.” Charlie feels like he made the correct decision is choosing this university: “I am confident that I made the right choice in attending [this university].”

## Discussion

College student well-being and resiliency is becoming an important topic. Many students struggle with the transition from high school to college, which places this life stage on the responsibility of universities nationwide. This study supports previous research that indicates an increase of resilience and well-being as a result of participation in outdoor orientation programs (Neill & Dias, 2001; Posey et al., 2015; Shellman & Hill, 2013, 2017). In this study, the researchers found medium/moderate effect sizes in both cases. This could mean that the intervention is having a moderate effect on the outcome of both resiliency and well-being; we need to consider what programmatic changes could have a more significant impact at posttest.

Many studies have explored recreation and resiliency, but only a few have looked at the evidence of outdoor orientation programs and resiliency (Shellman & Hill, 2017). These findings indicate significant gains pre- to posttest on the measure of resiliency. Although this is a small sample, it begins to provide evidence-based practices for college outdoor orientation programs focused on building resilient young adults. Qualitative results also suggest outdoor programs can help students develop meaningful relationships and gain skills to cope with adverse (e.g., resiliency) or challenging circumstances that many face throughout college. These findings sup-

port other studies in which overcoming challenges helped increase student retention (Bailey & Kang, 2015).

Additionally, this study could complement Keyes' (2009) findings that resilience and well-being contribute to students flourishing, which exemplifies mental health. Finally, the results indicate that focusing on the practices and specific variables that promote student development is beneficial and likely to support long-term student success (Reason, 2009; Tinto, 2006). The American College Health Association (2015) identified that over one third of surveyed students reported feeling "so depressed it was difficult to function." It is also possible that current college students may need different supports and resources than previous generations (Shellman & Hill, 2017). Results from the students in this study also suggest outdoor programs can help students develop meaningful relationships and foster well-being through fun/social interactions. This supports the current needs identified in the literature (Mutz & Müller, 2016).

## Limitations and Future Research Direction

The small sample size was a limitation for the study. Also, the lack of racial diversity of participants in the program is not representative of the university population. Having a larger sample and more racially diverse sample size would be advantageous for future studies examining the impact of diverse types of orientation programs across the campus. Future studies should look at the findings longitudinally or halfway through the semester and similarly compare results with other forms of orientation programs, especially as related to adjusting to college. Using a comparison group of students participating in a traditional orientation could further substantiate the use of an outdoor orientation program. Understanding how resilience, well-being, and student readiness impact students long term is of interest to administrators and might help predict retention among other factors of interest to institutions.

## Conclusion

Students gave a wide range of motivations to participate in the First Ascent Program, but it was evident from the qualitative and quantitative analyses that well-being and resilience increased because of participation in the First Ascent Program. Additionally, participants stated that because of the program, they feel comfortable with their decision to attend this university (e.g., impacts of participation theme). These findings are important not only to program facilitators but also college and university administrators because they contribute to student development and likely success postgraduation. Finally, student readiness being the theme mentioned most frequently could be a significant contribution to academia and beyond. Student readiness could be argued to be a developmental asset that helps students flourish, better prepares students to handle adversity, and creates better citizens for society.

These outcomes are meaningful to universities and society. More colleges and universities are exploring high-impact practices to address student needs such as well-being (Shellman & Hill, 2017). Additionally, college campuses are expected to address student flourishing and resilience as they pertain to student success. This situates outdoor orientation programs in a productive state because they can alleviate some of these societal needs.

## References

- American College Health Association. (2015, Spring). *American College Health Association National College Health Assessment II: Reference Group Executive Summary*. Hanover, MD: Author.
- Andrews, F. M., & Withey, S. B. (2012). *Social indicators of well-being: Americans' perceptions of life quality*. Berlin, Germany: Springer.

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*, 469–480. <https://doi.org/10.1037//0003-066X.55.5.469>
- Austin, M. L., Martin, B., Mittelstaedt, R., Schanning, K., & Ogle, D. (2009). Outdoor orientation program effects: Sense of place and social benefits. *Journal of Experiential Education*, *31*, 435–439. <https://doi.org/10.1177/105382590803100315>
- Bailey, A. W., & Kang, H.-K. (2015). Modeling the impact of wilderness orientation programs on first-year academic success and life purpose. *Journal of Adventure Education and Outdoor Learning*, *15*, 209–223. <https://doi.org/10.1080/14729679.2014.949809>
- Barefoot, B. O. (2000) The first-year experience: Are we making it any better? *About Campus*, *4*(6), 12–18.
- Bell, B. J. (2006). Wilderness orientation: Exploring the relationship between college preorientation programs and social support. *Journal of Experiential Education*, *29*, 145–167. <https://doi.org/10.1177/105382590602900206>
- Bell, B. J., Gass, M. A., Nafziger, C. S., & Starbuck, J. D. (2014). The state of knowledge of outdoor orientation programs current practices, research, and theory. *Journal of Experiential Education*, *37*, 31–45. <https://doi.org/10.1177/105382591351889>
- Bell, B. J., Holmes, M., & Williams, B. (2010). A census of outdoor orientation programs at four-year colleges in the United States. *Journal of Experiential Education*, *33*, 1–18. <https://doi.org/10.1177/105382591003300102>
- Benson, P. L., Scales, P. C., & Syvertsen, A. K. (2011). Chapter 8: The contribution of the developmental assets framework to positive youth development theory and practice. *Advances in Child Development and Behavior*, *41*, 197–230. <https://doi.org/10.1016/B978-0-12-386492-5.00008-7>
- Brown, L., Shellman, A., Hill, E., & Gómez, E. (2012). Positive youth development: A resiliency-based afterschool program case study. *Journal of Youth Development*, *7*(4), 50–62. <https://doi.org/10.5195/JYD.2012.117>
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, *1*(3), 98–101. <https://doi.org/10.1111/1467-8721.ep10768783>
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. Hoboken, NJ: John Wiley & Sons.
- Feldt, R. C., Graham, M., & Dew, D. (2011). Measuring adjustment to college: Construct validity of the Student Adaptation to College Questionnaire. *Measurement and Evaluation in Counseling and Development*, *44*, 92–104. <https://doi.org/10.1177/0748175611400291>
- Forrester, S. A. (2014). *The benefits of campus recreation*. Retrieved from NIRSA website: [http://nirsa.net/nirsa/wp-content/uploads/Forrester\\_2014-Report.pdf](http://nirsa.net/nirsa/wp-content/uploads/Forrester_2014-Report.pdf)
- Galloway, S. P. (2000). Assessment in wilderness orientation programs: Efforts to improve college student retention. *Journal of Experiential Education*, *23*, 75–84. <https://doi.org/10.1177/105382590002300205>
- Gass, M. A., Garvey, D. E., & Sugerman, D. A. (2003). The long-term effects of a first-year student wilderness orientation program. *Journal of Experiential Education*, *26*, 34–40. <https://doi.org/10.1177/105382590302600106>
- Gómez, E., Urzúa, A., & Glass, C. R. (2014). International student adjustment to college: Social networks, acculturation, and leisure. *Journal of Park and Recreation Administration*, *32*(1), 7–25.
- Goodman, K., & Pascarella, E. T. (2006). First-year seminars increase persistence and retention. *Peer Review*, *8*(3), 26–28.
- Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, *67*(1), 43–87. <https://doi.org/10.3102/00346543067001043>

- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*, 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Kampf, S., & Teske, E. J. (2013). Collegiate recreation participation and retention. *Recreational Sports Journal, 37*(2), 85–96. <https://doi.org/10.1123/rsj.37.2.85>
- Keyes, C. L. M. (2003). Promoting a life worth living: Human development from the vantage points of mental illness and mental health. In R. M. Lerner, F. Jacobs, & D. Wertlieb (Series Eds.), *Handbook of Applied Development Science: Vol. 1. Applying developmental science for youth and families* (pp. 257–268). Thousand Oaks, CA: Sage.
- Keyes, C. L. M. (2009). Toward a science of mental health. In S. J. Lopez & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (pp. 89–95). New York, NY: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195187243.013.0009>
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology* (3rd ed.). Thousand Oaks, CA: Sage.
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter*. Hoboken, NJ: John Wiley & Sons.
- Lamer, S., Westerhof, G., Bohlmeijer, E., Klooster, P., & Keyes, C., (2011). Evaluating the psychometric properties of the Mental Health Continuum-Short Form (MHC-SF). *Journal of Clinical Psychology, 67*(1), 99–110. <https://doi.org/10.1002/jclp.20741>
- Lu, L. (1994). University transition: Major and minor life stressors, personality characteristics, and mental health. *Psychological Medicine, 24*(1), 81–87. <https://doi.org/10.1017/S0033291700026854>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*, 543–562. <https://doi.org/10.1111/1467-8624.00164>
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227–238. <https://doi.org/10.1037//0003-066X.56.3.227>
- McKenzie, M. (2003). Beyond “the Outward Bound process:” Rethinking student learning. *Journal of Experiential Education, 26*, 8–23. <https://doi.org/10.1177/105382590302600104>
- Mirken, B. J., & Middleton, M. J. (2014). The social climate and peer interaction on outdoor courses. *Journal of Experiential Education, 37*, 232–247. <https://doi.org/10.1177/1053825913498370>
- Mutz, M., & Müller, J. (2016). Mental health benefits of outdoor adventures: Results from two pilot studies. *Journal of Adolescence, 49*, 105–114. <https://doi.org/10.1016/j.adolescence.2016.03.009>
- Neill, J. T., & Dias, K. L. (2001). Adventure education and resilience: The double-edged sword. *Journal of Adventure Education and Outdoor Learning, 1*(2), 35–42. <https://doi.org/10.1080/14729670185200061>
- Porter, S. R., & Swing, R. L. (2006). Understanding how first-year seminars affect persistence. *Research in Higher Education, 47*(1), 89–109. <https://doi.org/10.1007/s11162-005-8153-6>
- Posey, T., Hill, E., Gómez, E., McFall, M., Humenik, S., & Clifford, D. (2015). Student adjustment to college: Examining the impact of an outdoor orientation program. *Illuminare: A Student Journal in Recreation, Parks, and Tourism Studies, 13*(1), 53–62.
- Reason, R. D. (2009). Student variables that predict retention: Recent research and new developments. *NASPA Journal, 46*, 482–501. <https://doi.org/10.2202/1949-6605.5022>
- Robinson, D. A., Burns, C. F., & Gaw, K. F. (1996). Orientation programs: A foundation for student learning and success. *New Directions for Student Services, 75*, 55–68. <https://doi.org/10.1002/ss.37119967507>
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: Sage. <https://doi.org/10.4135/9781412984997>

- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryff, C. D., Diener, E., & Singer, B. (1998). Resilience in adulthood and later life: Defining features and dynamic process. In J. Lomranz (Ed.), *Handbook of aging and mental health* (pp. 69–96). Boston, MA: Springer. [https://doi.org/10.1007/978-1-4899-0098-2\\_4](https://doi.org/10.1007/978-1-4899-0098-2_4)
- Scott, G., Boyd, M., & Colquhoun, D. (2013). Changing spaces, changing relationships: The positive impact of learning out of doors. *Australian Journal of Outdoor Education*, 17(1), 47–53.
- Shellman, A., & Hill, E. (2013, November). *Flourishing through resilience: Examining the impact of a college outdoor education program*. Presentation at the Association of Outdoor Recreation and Education Research Symposium, College Park, MD.
- Shellman, A., & Hill, E. (2017). Flourishing through resilience: Examining the impact of a college outdoor education program. *Journal of Park and Recreation Administration*, 35(4), 59–68. <https://doi.org/10.18666/JPra-2017-V35-I4-7779>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194–200. <https://doi.org/10.1080/10705500802222972>
- Strumpf, G., & Sharer, G. (1993). Trends and issues in orientation programs. In M. L. Upcraft, R. H. Mullendore, B. O. Barefoot, & D. S. Fidler (Eds.), *Designing successful transitions: A guide for orienting students to college* (pp. 27–34). Columbia: University of South Carolina.
- Taylor, S. E., & Brown, J. D. (1994). Positive illusions and well-being revisited: Separating fact from fiction. *Psychological Bulletin*, 116(1), 21–27. <https://doi.org/10.1037/0033-2909.116.1.21>
- Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory, and Practice*, 8(1), 1–19. <https://doi.org/10.2190/4YNU-4TMB-22DJ-AN4W>
- Tinto, V. (2010). From theory to action: Exploring the institutional conditions for student retention. In J. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 51–89). Dordrecht, Netherlands: Springer. [https://doi.org/10.1007/978-90-481-8598-6\\_2](https://doi.org/10.1007/978-90-481-8598-6_2)
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High-risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.
- Williams, T., Hill, E., Gómez, E., Milliken, T., Goff, J., & Gregory, N. (2013). The resiliency and attitudes skills profile: An assessment of factor structure. *Illuminare: A Student Journal in Recreation, Parks, and Tourism Studies*, 11(1), 16–30.
- Wolfe, B. D., & Kay, G. (2011). Perceived impact of an outdoor orientation program for first-year university students. *Journal of Experiential Education*, 34(1), 19–34. <https://doi.org/10.1177/105382591103400103>