Student Adjustment to College: Examining the Impact of an Outdoor Orientation Program

This pilot study examined the impact of an outdoor orientation program (First Ascent) on participants’ level of transference, resilience, well-being and transition to college. Pre and post-test instruments were administered during a four-day college outdoor orientation program, as well as an open-ended series of questions. The *t*-tests indicate a significant improvement of transference..Non-parametric tests revealed significant differences from the pre- and posttest of the measures on skill transference and resiliency. Additional, individual items from each questionnaire were examined. Qualitative results revealed students’ excitement associated with the decision to attend a university on the mid-Atlantic coast.

Key words: outdoor orientation programs, resiliency, transfer, well-being, and adjustment to college

A student’s first year in college is often described as life-changing and transformative. This first year is also one of the most tumultuous periods of adjustment in adulthood (Baker & Siryk, 1984; Fox, Zakely, Morris & Jundt, 1993). Outdoor orientation programs may alleviate this period of difficult adjustment. Outdoor orientation programs are designed to facilitate students’ transition to college life and aid in their success (Kuh, Kinzie, Schuh, & Whitt, 2010).  This pilot study explores the impact of an outdoor orientation program on student transition to a university setting.

**Review of**

Some of the documented benefits that students experience, as a result of participating in outdoor orientation programs, include a sense of belonging at the institution and increased perceived social support (Bell, 2006). Additional research suggests increased academic success, a positive effect on social skills (Bell, 2006; Gass, Garvey & Sugerman, 2003), and greater adjustment to college life (Brown, 1998). Other measured outcomes have been the development of a more realistic view of social norms on campus in regard to using alcohol and attending parties (Wardwell, 1999), improved self-confidence, and increased appreciation of outdoor activities (Propst & Koesler, 1998).

The first college orientation program was created at the University of Boston in1888 (Gass 1987); however, the utilization of freshman orientation programs did not become popular until the 1970s and 1980s (Boundreau & Kromrey, 1994). During this time, researchers became interested in the effectiveness of such programs. A 1980s study, found greater retention rates for freshmen orientation participants, when compared non-participants (Schwitzer, McGovern, & Robbins, 1991). Furthermore, research has shown that outdoor orientation programs offer significant physiological and mental health benefits. For example, Shellman and Hill (2012 reported significant gains in psychological resilience, social resilience, and emotional well-being. Other benefits include greater cardiovascular fitness and general health (Driver, Brown & Peterson, 1991), reduction of stress and depression (Ewert & Kessler, 1996), and enhancement of the subjective areas of resilience and well-being (Shellman & Hill, 2012; Wagnild & Young, 1993).

Outdoor orientation programs enhance participant experiences and have been described as life-altering and transformative (Sibthorp, Furman, Paisley & Gookin, 2009). Luckner and Nadler (1997) explored the impact of outdoor education as it applies to being successful in other areas of life (i.e., skill transference). Sibthorp et al. (2009) posited that transferred learning from outdoor programs can be organized into four categories: (a) self-systems (b) group-dynamics and development (c) personal values (d) technical skills. Although many orientation programs are structured, some research has supported the benefits of providing participants with a choice of activity (Hill & Sibthorp, 2006; Ramsing & Sibthorp, 2008). Thus, the purpose of this pilot study was to determine the impact of a university outdoor orientation program on participants’ perceived level of transferable skills, resilience, well-being, and adjustment to college.

**Methods**

The First Ascent Program is a specially designed Freshman Orientation Program at a mid-Atlantic university that aims to assist incoming freshman and transfer students in their adjustment to college. Participants have the option to participate in one of two 4-day First Ascent trips: a backpacking trip in Shenandoah National Park (SNP) in Virginia, or a surf trip to Ocracoke Island 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.

The Cape Hatteras National Seashore (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. During their stay, students camped on Ocracoke Island Campground in Ocracoke, NC. The campground is at the southern edge of CHNS.

**Programming**

Assisting incoming freshman and transfer students in their adjustment to college life was accomplished through the facilitation of a unique outdoor adventure experience that encourages students to try new activities outside of their comfort zone, while on an outdoor trip with other students. The transition from high school to college can be a particularly dynamic and challenging time for students. As a result, the First Ascent Program intends to ease the stress associated with such significant change 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. It is the goal of the First Ascent Program is to engage every student as completely as possible and ensure that they feel like they are part of a team and part of the university community. Because students are outside of their comfort zone and have taken a significant risk in signing up for the program, they are more willing to challenge themselves and engage others. The goal of the First Ascent experience, combined with the major life transition they are making from high school to college, is to assist participants in opening up and experiencing the trip in a very unique and powerful way.

This effort was further guided by the use of a specific and consistent set of programming throughout the trip that facilitated the group towards a shared set of outcomes and understandings. The outcomes were accomplished through a series of initiatives that the trip leaders and mentors facilitated to guide the group towards a collaborative understanding. Trips were offered twice and occur during the months of July-August 2014. The program was specifically designed for incoming college freshmen and offered as an alternative to more traditional orientation programs. Although the programming took place in two different settings, the outdoor experiences both offered outdoor recreation and education, direct support from a university faculty mentor on the trip, reflective sessions regarding the first year of college, socialization, and the option to meet new incoming students.

**Trip Leader Role**

The trip leader ensured the safety of all participants on the trip, while also engaging the participants, facilitating a welcoming community that fosters development and growth, and teaching the skills necessary to succeed on a trip. Additionally, the trip leader introduces students to the university, 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. In short, trip leaders serve as mentors.

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. Given the trip leaders’ senior university student status, the goal is for the new students in the outdoor experience to model the behavior and attitudes towards the university after the trip leaders. The trip leaders are the primary representatives of the university on the trip and model the values of the university. Finally, it was important that trip leaders have an innate understanding of the program and its intended outcomes. It was solely their responsibility to execute this part of the program and tailor it as needed to ensure the participants all take away the intended message.

 **The Faculty Mentor Role**

 The faculty (or staff) mentor’s role is to serve as a positive role model for the students on the trip, help answer questions the students may have about the university, and provide a unique perspective different from that of the trip leaders. The faculty mentor augments the trip leaders while on the trip, but keeps in mind that his or her role is not one of direct leadership. The mentor is encouraged to (a) lead by example and provide support to the trip leaders, (b) participate in or assist in facilitating discussions and activities, (c) serve as a positive role model to students, (d) provide a unique point of view on the transition from high school to college, (e) discuss tips and strategies for college success, and (f) help students feel understood.

**Measures**

Participants in First Ascent were given quantitative, pre-established scales (e.g., Wagnild & Young, 1993) [collapsed into one questionnaire] to measure resilience, transfer of skills, adjustment to college (pretest, post-test, and follow-up posttest), and well-being (posttest only). The 48-question pretest, was administered upon students’ arrival at the pre-trip meeting. The posttest contains 79 questions and was administered at the conclusion of the trip. Resilience was measured using Wagnild and Young’s (1993) 25-item Resilience Scale (RS) and scored on a Likert-type scale of 1 (strongly agree) to 7 (strongly disagree). This scale has been used in previous studies to assess resilience in outdoor and adventure education program participants (Ewert & Yoshino, 2008; Neill & Dias, 2001; Shellman, 2009). Keyes’s (2009) Mental Health Continuum-Short Form (MHC-SF) was used to assess participants’ mental health. The MHC-SF contains 14-items measuring three domains of well-being: (a) psychological, (b) emotional, and (c) social well-being. Each item is measured on a Likert-type scale from 0 (never) to 5 (everyday). Student adjustment to college was measured using the 23-item Modified Student Adaptation to College Questionnaire (MSACQ) based on the following five areas of adjustment: (a) academic motivation, (b) personal/emotional adjustment, (c) social adjustment, (d) academic environment, and (e) institutional attachment (Gómez, Urzúa & Glass, 2014). It is scored on a Likert-type scale from 1 (doesn’t apply to me at all) to 9 (applies very close to me). To measure the level of transferable skill, a 17-item survey developed by Sibthorp et al. (2009), and previously tested on National Outdoor Leadership School (NOLS) students, was administered to all program participants. The survey is based on four dimensions: (a) self-systems (b) group dynamics (c) personal values (d) technical skills. It is scored on a Likert-type scale from 1 (least important) to 10 (most important). Only pretest and posttest scores will be reported for this study, as post-posttest scores were not feasible due to attrition.

**Results**

Data were collected on two trips. Eleven participants completed the pretest, posttest, and qualitative items. The sample was 72% female with a mean age of 20. Wilcoxon *T* tests were used to analyze any differences from the pre- and posttest of the measures on skill transference and resiliency. Additionally, effect size (*r*X) will be reported using Rosenthal’s (1991, p.19) *z*-score formula, and interpreted using Cohen’s (1992) suggestions for small (*r* = .1), medium (*r* = .3) and large (*r* = .5) effects.

Due to the small *N*, psychometric properties of the transference and resilience scales were not analyzed, however, previous research supports both metrics to be in acceptable ranges for use (e.g., Shellman, 2009; 2014; Sibthorp et al., 2009). The results indicated a statistically significant increased difference between participants’ skill transference pretest and posttest scores. Skill transference levels were significantly higher at posttest (*Mdn* = 8.94) than on pretest (*Mdn* = 8.24), *T* = 43, *p* = .015, *r*Transference = 52. Thus, we concluded that there is a significant change between transference of skills from pretest to posttest.

Results from the measure of resilience indicated a statistically significant increased difference between participants’ resilience pretest and posttest scores. Resilience levels were significantly higher at post-test (*Mdn* = 6.72) than on pretest (*Mdn* = 6.25), *T* = 57, *p* = .033, *r*Resilience = 46. Thus, we concluded that there is a significant change between resilience from pretest to posttest.

Student Adjustment and Mental Health Continuum (measure of well-being) posttest means were reported. The Student Adjustment to College Questionnaire will be administered a second time the following semester to determine impact. The Mental Health Continuum is only administered as a posttest, but due to the sample size, the percentage of students “flourishing: psychologically, emotionally, and socially” could not be computed. Also, due to the small *N*, scale analyses were not performed; however, individual items from the four outcomes were looked at to identify the highest three item means for each instrument used (see Tables 1-4).

Table 1

Measure of Transfer of Skills

|  |  |  |  |
| --- | --- | --- | --- |
| Top three items |  Pretest *M* |  |  Posttest *M* |
| Ability to take care of myself | 9.09 | Ability to function effectively under difficulty | 9.45 |
| Ability to work as a team member | 8.81 | Ability to identify my strengths and weaknesses | 9.09 |
| Ability to function effectively under difficulty | 8.81 | Ability to make informed and thoughtful decisions | 9.09 |

Table 2

Measure of Resilience

|  |  |  |  |
| --- | --- | --- | --- |
| Top three items |  Pretest *M* |  |  Posttest *M* |
| I am able to depend on myself more than anyone | 6.00 | I have enough energy to do what I have to do | 6.90 |
| I am determined | 6.00 | I am friends with myself | 6.81 |
| I can usually find something to laugh about | 6.00 | I can get through difficult times  | 6.72 |

Table 3

Student Adjustment to College

|  |  |
| --- | --- |
| Top three items  |  Pretest *M* |
| I am pleased about my decision to attend this college | 8.00 |
| I am satisfied with the number of variety of courses available at college | 7.63 |
| My academic goals are well defined | 7.54 |
| *\*Post-test will be administered at the end of the students first semester.* |

Table 4

Measure of Well-being

|  |  |
| --- | --- |
| Top three items  |  Posttest *M* |
| Interested in life | 5.63 |
| Good at managing the responsibilities of your daily lifeConfident to express your own ideas and opinions | 5.635.54 |
| *\*Scored on a different scale* |  |

**Qualitative**

Participants provided qualitative feedback. The following are examples from aparticipants illustrating the general mood of participants who were asked, “what as the biggest take-away from your trip”?

Leaving high school I didn't expect to be this involved with [the university] so early, and I'm so glad I am. I am so thankful I heard about [this university program] because it made me realize my love for the outdoors. I definitely feel more prepared because I know I've made some awesome friends and I look forward to seeing everyone around campus and hopefully we can all get together again! (Female participant, age 18)

My biggest take away was definitely the fact that I was able to be comfortable with everyone right away. I feel like I've known you all for awhile, I don't really open up to anyone about my personal life and the obstacles I've been through, especial this past year, but I feel like I could trust any of you guys in a heartbeat. (Female participant, age 18)

The biggest thing I took away from the trip is that new beginnings can exist if you get yourself out there confidently and try new things! Before the Ocracoke trip I never was one to be open with new people or new adventures such as surfing, but once I tried it out I loved it! (Female participant, age 19)

When asked, “How did the trip help you?”

This trip helped me learn new things, come out of my comfort zone and make new friends before we move in. (Male participant, age 18)

The trip helped me in two different ways: learning that it's easier than I anticipated making friends and realizing that adventure is around all corners. Not 48 hours after the trip I was craving the outdoors again, so I hiked Old Rag with my sister which I wasn't interested in doing before the trip. I am very thankful for my new-found love for being outdoors. (Female participant, age 18)

Met upperclassmen and learned info. (Male participant, age 18)

**Conclusion**

**Discussion**

The researchers hypothesized that students participating in the university outdoor orientation program would demonstrate significant gains, as found in other studies (Shellman & Hill, 2012. In particular, previous studies using the MHC-SF scale demonstrated increased participant scores on all three domains of well-being: psychological, emotional, and social(Shellman & Hill,2012). Unfortunately, our sample size did not allow for the same analyses. Additionally, this current study focused on the impact of a 4-day program, while other studies have conducted longer programs (Bell, 2006; Kuh et al., 2010).

Sample size aside, non-parametric statics provide statistical support for significant increased skill transference and resilience from pretest to posttest. Histogram analysis of the pretest/posttest scores from the 11 participants indicated that, in both skill transference and resilience, 8 out of the 11 participants (72.7%) had higher posttest scores after participation in First Ascent. These findings supported our overall hypothesis of significant gains from participation in the university outdoor orientation program in our pilot study. According to Cohen (1992), our findings indicate medium to large effects from pretest to posttest scores on skill transference and resilience.

Individual items from each subscale showed additional promise of student improvement in transference, resilience, adjustment to college, and well-being. For example, participants reported significant gains in such as items the “ability to function effectively under difficult circumstances,” which is a transfer skill that increased by over a point from pretest to posttest. Furthermore, students reported almost a point increase in participant resilience, when asked “I can get through difficult times because I’ve experienced difficulty before.” In addition, when asked to rate “I am pleased now about my decision to attend this college in particular,” the participant mean was 8.0 on a Likert type scale from one to nine. This shows that students are excited about attending college, and more specifically, institutional attachment.

The “take-aways” from the First Ascent program are the importance of leading yourself and not being afraid to ask for help. Results from this study and others provide evidence outdoor orientation programs provide students with skill transference, resilience, and a greater connection to the university (Bell, 2006; Gass, Garvey & Sugerman, 2003), the skills necessary to succeed in college and after graduation, and are more resilient (Shellman & Hill, 2012). Flourishing is a common term for university campuses but there is debate on how best to accomplish this outcome. Although our study intended to measure this outcome, we were unable to do so due to the low sample size. Future studies should identify measures (e.g., Mental Health Continuum), and determine which of the most effective way to address flourishing and adjustment for college students.

**Limitations and Suggestions for Future Research**

Clearly, our findings were limited to a small N, and delimited to one university program. As such, we were unable to run psychometric properties on the scales. This study explored four dimensions as outcomes, thus the questionnaire became very long (i.e., 79-item posttest). Future studies should consider minimize the number of constructs to be measured. Furthermore, our study focused on domestic students transitioning from high school to university. Other university orientation programs have explored adjustment of international students and indicate positive results between leisure pursuits and the transition to a university setting (Gómez, Urzúa, & Glass, 2014). Outdoor orientation programs and the role they can play in the adjustment specific to international students should be an area of further exploration. Exploring student adjustment to college, retention, and investment in a specific college might impact quality of life on campus, morale, attrition, and even future donors. These are areas of great interest to college administrators. Universities across the country have interest in retention. This line of research should further explore tracking those students involved in outdoor orientation programs regarding their grades, completion of degree, and likelihood to give back to their university, and compare outdoor orientation students to their peers who did not attend the outdoor orientation program. Information from such data could assist in laying the groundwork for outdoor orientation programs to become the standard as a high-impact practice for campuses nation-wide.

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