

Hamline University

DigitalCommons@Hamline

School of Education Student Capstone Theses
and Dissertations

School of Education

Spring 2019

Collegebound: Assessment of an Outdoor Orientation Program

Kyle Rauch

Hamline University

Follow this and additional works at: https://digitalcommons.hamline.edu/hse_all



Part of the [Education Commons](#)

Recommended Citation

Rauch, Kyle, "Collegebound: Assessment of an Outdoor Orientation Program" (2019). *School of Education Student Capstone Theses and Dissertations*. 4453.

https://digitalcommons.hamline.edu/hse_all/4453

This Thesis is brought to you for free and open access by the School of Education at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education Student Capstone Theses and Dissertations by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu, wstraub01@hamline.edu, modea02@hamline.edu.

COLLEGEBOUND: ASSESSMENT OF AN OUTDOOR ORIENTATION PROGRAM

By

Kyle D. Rauch

A capstone thesis submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Education: Natural Science and Environmental Education

Hamline University

Saint Paul, Minnesota

April 2019

Primary Advisor: Betsy Parrish
Secondary Reader: John Geissler
Peer Reader: Tyler Thompson

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION.....	5
Background of Outdoor Orientation Programs.....	6
Background of Collegebound.....	7
Assessing the Impact of Collegebound.....	11
Summary.....	12
CHAPTER TWO: LITERATURE REVIEW.....	14
Transition and Adjustment to College.....	15
Personal-Social Outcomes of OOPS.....	17
Academic Outcomes of OOPS.....	19
Summary.....	22
CHAPTER THREE: METHODS.....	24
Study Design.....	24
Study Participants.....	25
Data Collection.....	26
Data Analysis.....	28
Summary.....	29
CHAPTER FOUR: RESULTS.....	30
Academic Outcomes.....	30
Personal-Social Outcomes.....	32
Interpretation and Discussion of Results.....	39
Outdoor Appreciation Outcomes.....	45
Summary.....	46
CHAPTER FIVE: CONCLUSION.....	47
Limitations.....	48
Recommendations.....	49
Implications and Conclusions.....	50

REFERENCES.....	54
APPENDIX A.....	59
APPENDIX B.....	60

LIST OF TABLES

TABLE 1: New Entering Students by Year.....	27
TABLE 2: Retention Data.....	31
TABLE 3: GPA Data.....	31
TABLE 4: Survey data.....	34

CHAPTER ONE

Introduction

Colleges and universities around the United States provide orientation programs intended to aid the transition of new students to the college environment. These orientation programs have different models, priorities, and lengths. One orientation model that has become popular in recent decades is the outdoor orientation program (OOP) (Bell, Gass, Nafziger, & Starbuck, 2014). Two joint liberal arts colleges in the Midwest have been offering an optional outdoor orientation program for over three decades to incoming first-year students. This research will assess the history, practices, and outcomes of this outdoor orientation program, *Collegebound*. As director of the program, I intend to use this data as a baseline to build upon with future program design and assessment.

Collegebound participation numbers have grown substantially in the past three years to over 10% of the incoming first-year class in 2017 (115 Collegebound-students of the 984 total new entering students). In the previous decade, program numbers for Collegebound ranged from 35-48 student-participants, 4-5% of the incoming class. With a significant number of students attending the program over the past few years, it becomes even more important to conduct formal assessment as a means to show value and outcomes to administrators and prospective students. The long-term effects and outcomes of higher education programming, including OOPs, dictate their overall support and presence on a college campus. Although Collegebound has been offered to incoming

first-year students for over thirty years, no formal assessments have been conducted. As program director, it is my interest and responsibility to better understand the student outcomes of Collegebound participation.

Background of Outdoor Orientation Programs

Bell et al. (2014) define outdoor orientation programs as small group experiences (fewer than 15 students) that spend at least one night away from campus (usually camping) and engage in outdoor adventure activities (e.g. backpacking, canoeing). In a 2012 census of OOPs, Bell et al. (2014) found 191 outdoor orientation programs operating in the U.S. with over 25,000 students participating each year. Although programs have discontinued over the years due to a number of circumstances, for example budget cuts or loss of key personnel, there has been a general increase in the number of OOPs over the past decade with an average of 5.35 programs added each year (Bell & Vaillancourt, 2011).

Outdoor orientation programs have their roots in the Dartmouth College Outing Club dating back to 1935 (Bell, Holmes, & Williams, 2010). The focus of this first OOP was to introduce new college students to the outing club prior to the start of their first semester. It was not until 1968 when Prescott College began the first official OOP that outdoor adventure education and college orientation were coupled together to provide students with a new orientation model to aid their transition to college (Miner & Boldt, 1981). More schools followed suit over the next decade including many well established programs at Earlham, Wheaton, and Northland colleges.

Typical outdoor orientation programs follow the Outward Bound (OB) or National Outdoor Leadership School (NOLS) model of adventure education (Bell et al.,

2014; Miner, 1981) with components of the college orientation model woven in.

Adventure Education programs such as OB or NOLS use the outdoors and adventure activities as a means to build character and resilience amongst a student group. Similarly, outdoor orientation programs place students in small groups, led by trained upper-class students and/or staff/faculty, participate in adventure activities, and learn about college life at their respective institution prior to the start of their first semester on campus. In many ways the OOP serves as a microcosm of the larger college experience – students go to a new place, meet new people, and are confronted with new challenges along with new opportunities to help them acquire confidence, knowledge, and skills that will contribute to a successful transition to college. This model for outdoor orientation programs has changed little over the decades (Bell et al, 2010), although curriculum and specific goals do vary based on the needs and values of each institution.

Background of Collegebound

The Collegebound outdoor orientation program at my institution was first offered in August of 1987. The program has continued to be offered each year to incoming first-year students as an optional, weeklong, pre-orientation program the week before the traditional on-campus orientation required of all first-year students. The program involves camping in wilderness and front-country locations and all groups participate in at least one adventure activity, for example canoeing, backpacking, or rock climbing. The program is offered and led by an on-campus student organization, the Peer Resource Program (PRP), which is housed in an environmental and outdoor education department at the institution.

The PRP was established within the Counseling and Career Services office in the 1978-79 academic year as a student-led, peer-counseling group, which focused on providing peers with advice and programming that assisted in healthy lifestyles, positive relationship formation, and college success (Board of Directors, 1980). The PRP created short seminars and workshops around campus on topics such as stress management, substance abuse, academic and career planning, relationship conflicts, coping styles, and holistic health (Paur, 1980). The innovative approach of peer-led counseling for fellow college students garnered national recognition at the National Conference on Student Services in November, 1980, with administrators praising the Peer Resource Program as “a progressive model of student leadership and participation in the development of common objectives” (Paur, 1980). In response to the conference presentations by PRP members, at least 15 other colleges contacted the program for advice and information on starting something similar at their institutions (The Record, n.d.).

In the fall of 1986, the PRP faculty-advisor, along with students in the PRP, created the Outdoors Group as a sub-group of the PRP (PRP newsletter, 1987). The PRP Outdoors Group focused on using outdoor adventure experiences, such as spring break backpacking trips or weekend campouts in the campus forest, to provide similar peer support and assistive services to students that the PRP typically did in traditional on-campus settings and programs. In August 1987, the PRP Outdoors Group, with their faculty-advisor, initiated and led the first Collegebound program for a small group of male students with two PRPs and their faculty-advisor doing the trip leading (Irvine, 1987). A statement from an article in the student newspaper written by one of the student-participants sums up the goals and impacts of Collegebound from year one: “I

learned about determination and teamwork and the kind of people that would be at college. Knowing those 10 guys from Collegebound made my transition to college a lot easier” (Kirby, 1987, p. 11).

The following year, 1988, the PRP and Collegebound came under the direction of John Clarkson in Counseling and Career Services, who directed the program for the next twenty-plus years (Clarkson, personal interview, 2018). Clarkson emphasized the importance of building leadership qualities amongst PRP leaders and participants through outdoor adventure programs so that the program was peer-led as opposed to being led by faculty, staff, or contracted adventure guides. This model of student-led adventure programming coupled with peer-advising and support has been the hallmark of PRP and Collegebound over the decades. It continues to be the mission of the student organization and the OOP to this day.

In 1994, Collegebound grew to include first-year women from the partner institution while continuing to serve men in separate, single gendered groups (Connections, 1994). Throughout the 1990’s into the 2000’s, Collegebound continued to be directed by Counseling and Career Services. During this time, university staff from Admissions and Academic Advising assisted with the program and led trips due to their direct work with first-year students. Trip options expanded to include sailing and backpacking, however, participant numbers were kept low due to program capacity.

Due to tightening budgets during the recession years and the need for some departmental restructuring, in 2010, the Peer Resource Program (and other “Adventure Programs”) including Collegebound were moved under an environmental and outdoor education department at the institution, where they are currently housed and supported

(Barret, 2010). As a staff member of this department, I direct Adventure Programs and Collegebound. Adventure Programs use the outdoors and adventure activities as a means to promote healthy risk-taking, personal development, social interactions, and environmental awareness/appreciation. Although the direct influence of Counseling and Career Services is now less since moving under the outdoor education department, much of the PRP mission has remained consistent as a student-led, peer-support program.

Collegebound has undergone some changes in departmental housing and administrative leadership over the years, however, the goals have remained the same. Collegebound seeks to ease the transition and aid in the adjustment to college life for incoming first-year students. Collegebound aims to provide students with new challenges and opportunities that will serve them well on the program and back on campus. The program curriculum combines adventure education practices with an informal, less-structured new college student orientation. The curriculum is designed to help students increase their confidence and self-esteem; develop intrapersonal skills such as personal independence, perseverance, and personal reflection; build meaningful relationships with peers; learn interpersonal skills such as teamwork, trust, and communication; and gain an understanding of college that will support them in their overall development and college success.

Collegebound places small, single-gendered groups in outdoor and wilderness settings for a week prior to the traditional on-campus orientation. Two or three upper-class students from the PRP lead the small groups. Leaders (PRP's) and participants (first-year students) engage in a variety of adventure activities such as canoeing, rock climbing, and backpacking; group activities such as making camp, cooking meals,

playing games, and travel; and reflection time such as group or one-on-one discussions, journaling, and solo time. The PRP student-leaders play a unique role in helping to guide decision making and providing group support and processing, however, it is the student-participants who make the group decisions on where to travel, what to do, what to eat, what to discuss, etc. This Collegebound model of an OOP allows for participants to direct their own learning experience and therefore gain more from the less structured or prescribed orientation.

Assessing the Impact of Collegebound

Collegebound has been a small, yet popular program over its three-decade history. As the program has expanded in participation to over 10% of new entering students in recent years, it has become clear that thorough assessment, review, and evaluation are needed. Galloway (2000) found that many outdoor orientation programs lack formal assessments and this can be a reason that a program is discontinued or lacks administrative support. A goal of this study is to develop a foundation of research and records that can be used for future assessment and evaluation of Collegebound to guide the program as it continues to evolve.

This research seeks to determine the degree to which the experiences, relationships, knowledge, and confidence gained by Collegebound participation directly contribute to the student's college success. The overarching question guiding this research is: *What are the student outcomes of Collegebound participation?* Specifically, the study seeks to answer these two questions:

- 1) What are the academic outcomes of Collegebound students compared to non-Collegebound students of the same entering year?

2) What are the personal-social outcomes reported by students participating in Collegebound?

Since the overall goal of the OOP is to assist in student-participants' success in college, academic outcomes such as retention and GPA could be an indicator of that success. Student-participants program feedback and perceived impacts of Collegebound are also important in assessing program outcomes especially as they relate to personal-social outcomes. Personal-social outcomes include impacts on self-confidence, comfort in beginning college, friendship formation, sense of community, and knowledge about campus groups or academics.

Academic data used to answer the research question regarding academic success will be assessed by comparing first to second year retention rates of Collegebound student-participants with non-Collegebound students of the same entering year. Academic success will also be assessed by comparing the cumulative GPA of the two groups after their first year of college. In order to assess the personal-social outcomes, a survey instrument has been designed for Collegebound students to self-report their perceived impacts or outcomes from participation in the program.

Summary

As colleges and universities try various methods to enhance student development, outdoor orientation programs have become a popular and effective means of doing so. The impact of a short, immersive, and unique experience provided by an OOP has the potential for outcomes that serve the student and institution well through the four years of undergraduate work. In the competitive, high stakes environment of higher education, institutions must consider proven methods for attracting and retaining students. Strong

academic programs coupled with diverse co-curricular programs provide for the holistic education promised by many institutions, including the two liberal arts schools that support Collegebound.

Collegebound has stood the test of time helping to bridge the home-to-college gap for over 30 years. It is one of almost 200 outdoor orientation programs found around the country that focus on student transition and adjustment to college. Collegebound claims many benefits for students, however little formal assessment has been conducted. With more formal assessment and understanding, program administrators can continue to improve the program for first-year students, which in return will support institutional goals.

The next chapter will include a Literature Review of outdoor orientation program research and the impact they have had on college transition and student success. Subsequent chapters will address the methods used for data collection and measurement of Collegebound outcomes along with the results and discussion of that data. The final chapter will discuss limitations of this research as well as provide recommendations for future Collegebound program design and assessment.

CHAPTER TWO

Literature Review

Research would suggest (Pascarella and Terenzini, 2005; Astin, 1993) that academic success is dependent on a successful transition and adjustment to college life. Research over the past two decades (Bell et al., 2014; Gass 1999) indicates that outdoor orientation programs (OOPs) do support students in their transition to college. The program being assessed in this study, Collegebound, has been offered to students for over thirty years with the primary goal of assisting them in their transition and adjustment to college. The question directing this research is: *What are the outcomes for students participating in the outdoor orientation program, Collegebound?* The specific outcomes being assessed are academic and personal-social outcomes.

This chapter will review some of the existing research on OOPs and the effect the programs can have on student success in college. The chapter will delve into the importance of a successful transition to college in the first year, the impact of OOPs on academic success (retention and GPA), and the impact of OOPs on the personal-social development of students. A growing body of research on OOPs, led by University of New Hampshire researchers Brent Bell and Michael Gass, has produced important results that support outdoor and adventure education curriculum being integrated on the college campus in a variety of ways, including outdoor orientation programs, for the development and success of students.

Transition and Adjustment to College

Outdoor orientation programs have been shown to aid in students' transition to college. Using an adventure education model and curriculum within a college orientation program allows OOPs to provide added benefits to students transitioning from home to college. In her extensive review of adventure education research McKenzie (2000) found that adventure programs succeed in their goals due to dynamic program characteristics such as the program setting (outdoors, wilderness), adventure activities, group and individual processing and reflection (applying the experience to life), group culture and dynamics (influence of group on individuals), effective instructors, and participant backgrounds. All of these program characteristics are found within OOPs, including Collegebound. Gass (1999) theorizes that OOPs are effective at assisting with first-year student transition to college because they help students create meaningful relationships with peers; improve faculty-student interactions; provide focus and clarity on career development and major course of study; improve academic/institutional interest; provide greater college preparation by the insight gained from upper-class student-leaders; and create transferrable skills and experiences that students can apply to the new college setting. Of these program characteristics or goals, forming relationships with peers, or simply making friends, is the most common goal of any OOP (Galloway, 2000).

The successful transition to college for a young adult is partly dependent on forming meaningful relationships with peers and finding ways to engage and connect with the college setting. In one of his monumental works of higher education theory, Astin (1993) considers the development of friendships and relationships with peers as one of the most important steps in growth and development during the undergraduate

experience. He attributes the intellectual and emotional development of a young adult to, perhaps more than any other influence, the peer group.

In their exhaustive research of thousands of higher education studies, Pascarella and Terenzini (2005) concluded that meaningful social interactions with peers contribute more to a student's persistence and graduation from college than any other influence. In addition to connecting socially with peers, they found that students who were engaged in college activities that complemented and reinforced the academic experience were more successful in the social and academic setting of higher education. Tinto's (1987) model of student retention in higher education revolves around academic and social integration. Students who integrate into the academic and social environment on college campuses tend to persist through graduation. Research has shown that the first-year of college is especially difficult for students and a strong system of support (e.g. advising, co-curricular programs, and learning communities) is needed for colleges to retain those students to their second-year (Tinto, 1999).

As noted in many studies (Astin 1993; Tinto 1999; Pascarella and Terenzini 2005), students' ability to adapt to college, especially in the first-year is paramount for institutions. Ribbe Jr., Cyrus, and Langan (2016) explored the impact of an OOP on student adaptation to college. Using the Student Adaptation to College Questionnaire, the researchers measured the adaptation of 168 OOP students and 287 non-OOP students eight weeks into their first semester. OOP students showed significantly higher gains compared to non-OOP students in overall adaptation, social adaptation, and attachment to institution. However, the focus of the OOP (wilderness-based, camp-based, and urban-based) did not show any significant differences, suggesting that the outdoor or wilderness

component may not be as important in adaptation to college as the formation of a peer group and the informal orientation components of an OOP.

The importance of building a peer network for new entering students in the college setting cannot be overstated. OOPs provide the opportunity to form these relationships and friendships through their unique design and program model. Upper-class student leaders also provide further insight to first-year students during an OOP by sharing knowledge from their own learned experience about campus culture and college opportunities. This informal and honest orientation may allow first-years to find their place and seek specific opportunities for engagement right away in their first semester as opposed to learning it on their own during the first year. The combination of social and institutional connections are perhaps the two most important qualities that lead to a successful transition to college and an OOP emphasizes both in its curriculum.

Personal and Social Outcomes of OOPs

Outdoor orientation programs influence student adjustment through personal and social development. These developments directly contribute to college transition and success. Vlamis, Bell, and Gass (2011) examined the effects of an OOP on student development behaviors at a small liberal arts school in New York by comparing OOP-students to non-OOP students of the same entering year at the institution. After analyzing the results of the Student Development Task Inventory-2 survey (Winston and Polkosnik, 1986), a commonly used instrument in higher education designed to measure students psychological development that was issued to both groups of students, researchers found OOP students showed significant gains in developing autonomy, developing purpose, emotional autonomy, mature relationships with peers, and

appropriate educational plans. The researchers attribute the new and challenging experiences of the OOP coupled with the flexibility in curriculum design as the reason for OOP participants' significant gains in student development behaviors compared to non-OOP students.

Bell et al. (2014) theorize that the most important outcome of an OOP experience in aiding the transition to college is the development of meaningful peer relationships. In a 2006 study, Bell and Williams found that Harvard students participating in an OOP were more fearful of fitting in socially on campus than they were of the academic rigors of Harvard or connecting with the faculty. The OOP students in this study had significantly higher levels of social provisions including social integration and attachment compared to non-OOP students. This study found that OOP students and other pre-orientation program students (e.g. athletics or service groups) had similar results in social integration, suggesting that the outcome of social development is dependent on meaningful and extended experiences together as opposed to a specific setting like the wilderness, similar to the Ribbe Jr. et al. (2016) conclusion.

The personal gains made during an OOP – confidence, independence, trust, and reliability – are all important characteristics for students to develop as they begin college. Using the survey instrument, Trait Emotional Intelligence Questionnaire - Short Form (TEIQue-SF) developed by Petrides (2003), a self-reported emotional intelligence survey, Schwartz & Belknap (2017) found gains in trait emotional intelligence (one's perceived ability) in OOP students. Comparing the results of pretest surveys with posttest surveys completed by study participants, they attributed the gains in TEI to the unique learning environment provided by an OOP that allows for students to reflect on one's own

perceptions as well as connecting with and learning from peers on a deep and personal level. The novel setting of the wilderness coupled with the milestone of starting college allows students to open their minds to new ideas, challenge assumptions, and develop relationships with people from different backgrounds.

In a 2017 study investigating the connection between outdoor orientation and the theory of student thriving, Rude, Bobilya and Bell (2017) found OOP participants had a greater sense of campus community, which predicted their personal thriving. In this study, thriving was defined by students' propensity for campus engagement, energized learning, making connections between academics and real life, and spirituality. The Thriving Quotient instrument (Schreiner, 2014) was used to measure student thriving among 295 study participants representing three different higher education institutions in the U.S. and Canada. Study participants from the three institutions were a mix of OOP and non-OOP students. After controlling for a number of variables including race, gender, high school GPA, major certainty, school choice, and living on campus, an indirect pathway between OOP participation and thriving was found via the increased involvement in campus life and greater sense of community measured in the study. The "gateway" experience of an OOP introduces new college students to campus life and the variety of engagements available to them along with facilitating peer interactions. These new experiences lead to students thriving in the college setting as opposed to just surviving the new challenges.

Academic Outcomes of OOPs

A growing body of peer-reviewed research on outdoor orientation programs indicates that they provide important outcomes for higher education institutions including

retention and student development (Davis & Davis-Berman, 1996; Galloway, 2000; Stogner, 1978). Research has shown positive correlation between OOP participation and student retention and graduation (Bell and Chang, 2017; Brown, 1998; Gass, 1987; Hill, Clark, Erbe, and Waryold, 2014; Michael, Morris-Dueer, and Reichert, 2017). The academic outcomes of OOPs are attributed to the personal and social gains made during an OOP experience.

Studying the University of New Hampshire's Fireside OOP, Gass (1987) conducted the first in-depth study of OOP outcomes. Gass found a statistically significant difference in first to second year retention rates among OOP students compared to students attending the traditional on-campus orientation. Gass also found that OOP students had significantly higher GPAs after two semesters compared to students in other orientation programs at the same institution. A third outcome measured in Gass's study was intra/interpersonal development. Using the Student Developmental Task Inventory (SDTI-2), Gass found OOP students scored significantly higher in the task areas of developing autonomy and developing interpersonal relationships. These student outcomes are important developments for any college student wanting to be successful through their college career.

Brown (1998) built on Gass's work of the 1980's by studying the outcomes of different orientation programs. Brown found that OOP students were retained from first to second semester of their first year at higher rates than traditional classroom orientation students as well as alternative orientation students (arts, science, service oriented). Brown (1998) used the Student Adaptation to College Questionnaire to measure students' adjustment to college and found that OOP students scored higher overall including higher

in each of the four areas of adjustment – academic, social, personal-emotional, and institutional attachment. Both the Gass (1987) and Brown (1998) studies showed positive correlation between OOP participation and academic success.

Hill, Clark, Erbe, and Waryold (2014) studied outcomes of OOP students compared to non-OOP students focusing on student adjustment and academic success. Like Gass (1987) and Brown (1998), Hill et al. found that OOP students were retained at higher percentages than non-OOP students of the same entering class. OOP students also had higher cumulative GPAs than non-OOP students. In a qualitative analysis of post-OOP student surveys, Hill et al. found that OOP students developed self-efficacy, social relationships, and sense of community, which is consistent with findings from Austin, Martin, Yoshino, Schanning, Ogle, and Mittelstaedt (2010), and supports the Bell et al. (2014) theory that the personal-social outcomes of an OOP have positive effects on academic outcomes.

One issue of OOP retention studies is that they do not control for selection bias when recruiting students. In other words, students who are likely to persist and succeed in college may also be the ones enrolling in an optional OOP. To control for this selection bias, Bell and Chang (2017) sought to devise a true experimental study looking at West Virginia University's Adventure WV outdoor orientation program. Stogner (1978) is the only other OOP study to create a true experimental design by randomly assigning students to different orientation programs and studying their outcomes, however the results found no significant differences. Due to program logistics and administration of the Adventure WV OOP in 2006 and 2007, Bell and Chang (2017) were able to create random samples, convenience samples, and covariate matched

samples to compare retention rates of OOP and non-OOP students, while controlling for a number of variables. Their results showed increased retention and graduation rates, albeit not statistically significant, among OOP students compared to non-OOP students. The comparison/convenience sample consisted of students who initially enrolled in the OOP, but did not attend due to program capacity, illness/injury, or another pre-orientation commitment (e.g. athletics, honors program). These students were self-selecting into the program, but ultimately did not attend. This convenience sample group had lower retention rates than the OOP group. For the covariate samples including such variables as gender, race, residency, and expected family contribution (EFC), the authors found that only the EFC variable resulted in significant differences in retention and graduation, thus inferring that students who are less financially advantaged may benefit more from OOP participation. Or put in simpler terms, it may suggest that students with a lower probability for college success may benefit more from an OOP compared to their peers who may already have a high probability for college success.

Summary

Research on the outcomes of OOPs has grown considerably over the past decade just as the number of OOPs being offered has increased. Much of the research has shown positive results that OOPs are effective at aiding the student transition and adjustment to college. Along with student development outcomes, a correlation between OOP participation and an increase in retention and GPA has been recognized. As the research into OOPs and the value of immersive, experiential education programs continues to grow, more institutions will need to consider the value and resources they devote to such initiatives.

The research being conducted in this study will contribute to the overall body of work on the topic of outdoor orientation programs. Key outcomes proclaimed by Collegebound (and many other OOPs) such as personal and social development along with academic success will be assessed. Specifically, the perceived personal-social outcomes of the experience, coupled with the academic outcomes of OOP students compared to non-OOP students, will be measured and assessed to determine how effective the OOP is at aiding students in their transition to college.

The next chapter will delve into the methods used to collect the data and assess the outcomes of the outdoor orientation program, Collegebound. It will provide a thorough description of the study participants along with the methods used to collect data related to program outcomes. Subsequent chapters will analyze the results and discuss implications for Collegebound.

CHAPTER THREE

Methods

The primary goal of Collegebound, as with most other OOPs, is to aid students in their transition to college life by developing knowledge, skills, and abilities that transfer to the college setting. The aim of this research is to measure the outcomes of Collegebound so program administrators understand how well the program is aiding in student transition and development at the institutions served. Student development – both academically and personally – are two outcomes commonly measured to assess OOP effectiveness (Gass 1987, Brown 1996, Galloway 2000).

This chapter will layout the methodology used to answer the two research questions: 1) What are the academic outcomes of Collegebound participants compared to non-Collegebound participants? and 2) What are the perceived outcomes reported by participants as they relate to personal and social development?

Study Design

This retrospective study used a mixed methods design, with quantitative and qualitative survey data being collected and analyzed (Creswell, 1994). Lien and Goldenberg (2012) used a similar design in their retrospective study of OOP participant outcomes at a university in California. For question one, this current study compared retention rates and cumulative GPA of Collegebound students to non-Collegebound students entering their second year of college at the institutions for the years 2015, 2016, and 2017. Quantitative methods were used to collect and analyze the academic data

comparing the two groups (Creswell 1994). The Collegebound students for each incoming class received the “intervention,” being the OOP. The non-Collegebound students did not receive the intervention for this comparative study. No additional variables (student demographics) were controlled for when answering the first research question related to academic outcomes.

For question two, the researcher created a local survey (Appendix A) for students to self-report the extent to which Collegebound has contributed to various student outcomes. The survey was administered to the same Collegebound participants from the program years 2015, 2016, and 2017.

Study Participants

The research participants were incoming, first-year college students at two partner liberal arts institutions in the Midwest. The institutions are two separate, single-gendered schools with a shared academic curriculum and common student experience. They are private schools with a residential, liberal arts education rooted in Catholic and Benedictine tradition. In fall 2017, the institutions had a combined undergraduate student enrollment of 3,704 (1,925 women; 1,779 men). For new entering students over the past five years (2013-17), 78% of the students have come from in-state; about 80% identify their race/ethnicity as white; their mean high school GPA is 3.57; and they rank in the top 25% of their high school class (www.csbsju.edu).

As an optional program for incoming first-year students, Collegebound is open to all new entering students on a first come, first served basis. The program expanded in capacity in each of the three years – 2015, 2016, and 2017 – with over 10% of the incoming class ($n=115$) participating in 2017. In these three years, Collegebound

participants have been evenly split in their self-rating of prior outdoor experience, when choosing between beginner, intermediate, and advanced experience. About one-third of the participants have been from out-of-state and their academic majors of choice have been representative of all disciplines offered at the institutions. Collegebound had full enrollment in each of the three years being assessed with a waitlist of students self-selecting into the program, but unable to attend due to program capacity.

Data Collection

To answer question 1 and assess academic outcomes of Collegebound students, program rosters from the years 2015, 2016, and 2017 were compiled from former program records. Rosters were given to the Institutional Planning and Research (IPR) office to provide the aggregate data for each class year. Individual records and personal identities were not provided to the researcher for this study. The academic outcomes (dependent variables) assessed in this study were first to second year retention rates and cumulative GPA after the first year for both Collegebound (OOP) students and non-Collegebound (non-OOP) students (independent variables) for each entering class in the three respective years. The data used to represent non-Collegebound students was pulled from IPR records. Table 1 shows the number of OOP and non-OOP new entering students for the years 2015, 2016, and 2017.

Table 1: number (*n*) and percentage (%) of OOP and non-OOP new entering students by year.

Year	OOP	non-OOP
2015	60 (6%)	867 (94%)
2016	91 (9%)	873 (91%)
2017	114 (12%)	870 (88%)

To answer question 2 and assess the perceived outcomes of the OOP for Collegebound participants, a mixed methods survey was created. The survey was provided to Collegebound participants 1-3 years after their respective program year – 2015, 2016, or 2017. The survey instrument used in this study was designed using Forms Manager Software. Using the institutional email address system, the survey (See Appendix A) and letter of informed consent (See Appendix B) were sent to all 265 Collegebound participants in the three years being studied. Since the researcher conducting this study does not know which former Collegebound participants are still persisting at the institutions, the survey was emailed to all former program participants from the three years.

Survey questions 1-5 collect basic information about the respondent (gender, OOP participation year, adventure activity, academic major). Question 6 is a quantitative question asking, *to what extent did your Collegebound experience contribute to the following outcomes?* There are 14 individual outcomes respondents will rate. A 5-point Likert scale is used for respondents to rate the extent to which Collegebound contributed to each of the 14 outcomes. Choices for the respondent to choose from include

significantly, moderately, slightly, not at all, and unsure for each of the listed outcomes. Outcomes being assessed include personal outcomes such as their college transition, personal confidence, and openness to other people and ideas. Other outcomes being assessed include social outcomes such as making friends, forming meaningful and lasting relationships, and institutional attachment or sense of community. Lastly, the influence of Collegebound on academic, career, and outdoor outcomes was assessed using the Likert scale in question 6.

Survey question 7 is an open-ended question asking, *in your own words, what do you perceive to be the outcome(s) of your Collegebound experience?* This qualitative question is intended to assess what Collegebound participants perceive to be the most important outcome or impact of Collegebound on their college career after considering the listed outcomes of question 6. A self-reported local survey using mixed methods is a reliable and valid means of measuring OOP outcomes (Lien and Goldenberg, 2012).

Data Analysis

The data analysis for research question one included descriptive statistics to measure retention rates and cumulative GPA between the two independent variables being assessed – OOP and non-OOP students. For research question two, descriptive statistics indicate respondent demographics from survey questions 1-5. For survey question 6, the self-reported ratings for each of the 14 outcomes were quantified using descriptive statistics. A qualitative analysis of survey question 7 was conducted to look for themes that emerged in the respondents' answers. Answers were coded to look for apparent patterns and themes in the responses that appeared representative of the respondent's perceived outcomes from their Collegebound participation.

Summary

The mixed methods used for this research were intended to assess the outcomes of Collegebound. A quantitative design was used to compare academic success of OOP participants with non-OOP participants of the same entering year to answer research question one. A retrospective study design, using a locally-designed online survey, was used to answer research question two in regards to assessing the perceived personal-social outcomes of OOP participants. Chapter 4 will analyze the results of the data collected and discuss the implications of the results.

CHAPTER FOUR

Results

The academic outcomes of Collegebound students may be a result of the personal-social outcomes gained from their participation in the OOP. The evaluation of these outcomes, as part of a larger assessment of Collegebound, is necessary to gain a better understanding of this long-running program and ensure it is meeting its goal of aiding student transition to the college setting. Using mixed methods of data collection and analysis, this retrospective study sought to assess the student outcomes of participation in the outdoor orientation program, Collegebound.

This chapter will analyze the results of the data collected in an attempt to answer the two research questions: 1) What are the academic outcomes of Collegebound participants? and 2) What are the personal-social outcomes of Collegebound participants? Data collected to assess these outcomes include retention rates and cumulative GPAs for academic outcomes and responses from a local survey to assess personal-social outcomes of Collegebound participants. An interpretation and discussion of the results will follow.

Academic Outcomes

Outdoor orientation program research has examined the academic outcomes of students participating in an OOP by analyzing retention rates and cumulative GPA (Gass, 1987; Hill et al., 2014). Other OOP studies have analyzed only retention rates (Bell and Chang, 2017; Brown, 1998; Stogner, 1978). For the most part, these studies have compared retention rates of OOP-students to non-OOP students in the same entering year at an institution.

In this study, the data to compare academic outcomes of Collegebound students to non-Collegebound students was provided by the Institutional Planning and Research office. The retention rate is based on the number of students returning in the fall semester of their second year. Retention numbers are recorded on the tenth day of the fall semester by IPR. Cumulative GPA data is taken at the end of the second semester of their first year in college. The aggregated data comparing retention rates of the two groups in the program years of 2015, 2016, and 2017 is provided in the Table 2. The aggregated data comparing cumulative GPA of the two groups for each program year is provided in Table 3.

Table 2: First to second year retention rates*

Year	OOP	non-OOP
2015	88.3% (53)	85.8% (744)
2016	90.1% (82)	87.3% (762)
2017	89.5% (102)	87.7% (763)

*Retention rate (%) and number (*n*) of OOP and non-OOP students returning in the fall semester of their second year.

Table 3: Cumulative GPA of OOP and non-OOP students after first year of college. GPA based on 4.0 scale.

Year	OOP	non-OOP
2015	3.08	3.07
2016	3.34	3.04
2017	3.22	3.09

The academic outcomes show that OOP students are performing better in college compared to their peers who did not participate in the OOP. Retention data in Table 2 shows OOP students were retained at an average of 89.3% over the three years compared to 86.9% for non-OOP students, a difference of 2.4%. The GPA data in Table 3 shows an average GPA of 3.21 over the three year period for OOP students compared to a 3.06 average for non-OOP students, a difference of 0.15. Although the differences in the results for the respective groups are minor, there does appear to be a trend of higher academic performance for OOP students. It is believed that these academic gains stem from the personal-social outcomes of their OOP experience.

Personal-Social Outcomes

The personal-social outcomes of a college OOP are the keys to aiding the transition and development of new college students. Much of the research on OOPs has focused on personal-social outcomes such as student thriving (Rude et al., 2017); student success (Hill et al., 2014); and student adaptation (Ribbe Jr. et al., 2016). In order to assess the personal-social outcomes of Collegebound participants, a local survey was designed and distributed to all 265 Collegebound participants from the program years 2015, 2016, and 2017. Due to the anonymity of the academic records, the researcher does not know which former Collegebound participants are still persisting at the institutions, therefore the survey was sent to all former participants from those three years. The academic outcomes assessed showed that 28 students were not retained into their second year from the 2015-17 program years. Because student emails remain active whether or not students are still enrolled, it is possible some respondents may not actually

be current students at the institutions, however that does not invalidate their perceived impacts of the OOP.

The survey questionnaire was emailed to former participants inviting them to voluntarily participate in the research by completing the survey. The survey was sent once per week for three weeks and 85 of the 265 former participants completed it, giving a response rate of 32%. Although the response rate was less than hoped for, it did provide an adequate and reliable number of responses to generalize the results for the sample population for this type of research (Nulty, 2008).

The first five questions of the survey were demographic questions to ensure a fair representation of the sample population. Of the 85 respondents, 68% (58) identified as women, 31% (26) identified as men, and <1% (1) identified their gender as “other”. Respondents represented the three program years being assessed with 28% from 2015, 41% from 2016, and 31% from 2017. Respondents also represented the four adventure trip options for Collegebound with 68% participating in canoeing, 14% in climbing, 7% in backpacking, and 11% in camping. About two-thirds of Collegebound trips offered in those three years were canoeing. The backpacking and camping trip options were not offered in the 2015 program year. The rock climbing trip number are intentionally kept low due to limited resources. Of the 85 respondents, 15% (13) identified as First Generation College students. In listing their academic major(s), respondents reported 23 different majors ranging from Environmental Studies and Political Science to Global Business and Psychology with Biology being the most reported (15%, n=14). Based on respondent demographic data, the researcher felt an adequate representation of the study participant population was provided.

Survey question 6 asked respondents to self-select, using a 5-point Likert scale, the extent to which Collegebound contributed to a list of outcomes. Table 4 shows the responses to these outcomes. The average percentage (%) and number (*n*) of respondents for each rating in relation to each outcome is provided. The bolded value on each row represents the mode or most selected rating for that outcome.

Table 4: Personal-social outcomes as rated by survey respondents

<i>To what extent did your Collegebound experience contribute to the following outcomes?</i>	<i>unsure</i>	<i>not at all</i>	<i>slightly</i>	<i>moderately</i>	<i>significantly</i>
<i>aiding your transition and adjustment from home to college</i>	1.2% (1)	1.2% (1)	1.2% (1)	18.8% (16)	77.6% (66)
<i>your self-confidence and self-esteem starting college</i>	0.0% (0)	2.4% (2)	1.2% (1)	34.1% (29)	62.4% (53)
<i>your awareness and knowledge about college life</i>	0.0% (0)	0.0% (0)	15.3% (13)	47.1% (40)	37.6% (32)
<i>your respect and openness to others and their ideas</i>	1.2% (1)	1.2% (1)	8.2% (7)	45.9% (39)	43.5% (37)
<i>making friends</i>	0.0% (0)	2.4% (2)	4.7% (4)	14.1% (12)	78.8% (67)
<i>making meaningful and lasting relationships with peers</i>	0.0% (0)	4.7% (4)	9.4% (8)	14.1% (12)	71.8% (61)
<i>feeling part of and connected to the larger campus community</i>	0.0% (0)	1.2% (1)	7.1% (6)	21.2% (18)	70.6% (60)
<i>your choice to join peer groups, organizations, or clubs</i>	1.2% (1)	4.7% (4)	21.2% (18)	29.4% (25)	43.5% (37)
<i>your choice of academic major(s) or minor(s)</i>	5.9% (5)	51.8% (44)	29.4% (25)	9.4% (8)	3.5% (3)
<i>your career choice and goals</i>	1.2% (1)	44.7% (38)	27.1% (23)	21.2% (18)	5.9% (5)
<i>your awareness and appreciation for the outdoors</i>	1.2% (1)	0.0% (0)	7.1% (6)	31.8% (27)	60.0% (51)
<i>your concern for environmental issues and problems</i>	1.2% (1)	3.5% (3)	16.5% (14)	38.8% (33)	40.0% (34)
<i>your interest and participation in other outdoor or adventure activities</i>	1.2% (1)	2.4% (2)	7.1% (6)	25.9% (22)	63.5% (54)
<i>your overall college success at this point in your college career</i>	1.2% (1)	7.1% (6)	22.4% (19)	30.6% (26)	38.8% (33)

In comparing demographic information to question number 6 answers, no apparent trends or themes emerged. Both men and women responded equally across the range of options. The same can be said of First Generation students to non-First Generation students.

Survey question 7 was an open-ended question designed to assess what respondents perceived the outcomes of their Collegebound experience to be. Answers were coded based on themes that emerged in the responses, mostly related to the outcomes listed in question 6 and categorized into four overarching types of outcomes: *social*, *personal*, *outdoor appreciation*, and *college success*. In fact, the perceived impacts or outcomes reported by respondents in question 7 touched on all listed outcomes in question 6. All listed quotes in these results come from different responses. In other words, respondents were not quoted more than once.

The responses to question 7 provided a better sense of what respondents considered to be, perhaps, the most important outcome(s) of participating in the Collegebound program. Of all 85 written responses, 73 students (86%) reported a positive *social outcome* from the experience. Themes such as community, connection to others, part of a group, and making friends were identified and coded as *social outcomes*. The actual word “friend” or “friendship” was reported on 56 (77%) of the 73 answers coded as a social outcome, although the degree and longevity of the friendship seemingly varied from “friendly face on campus” to “best friend” and “lasting friendships.” The following list of quotes exemplify the social outcomes perceived by Collegebound participants:

- *“I think Collegebound provided me a basis to how strong the community is here.”*
- *“Of my closest friends, the majority of them were on Collegebound.”*
- *“My best friends are still the people I met on this trip.”*
- *“I think the biggest impact is the chance to meet a group of people in a very personal environment that people do not usually get the chance to do with complete strangers.”*

- *“As a transfer student, it introduced me to a large group of students before I even stepped foot on campus.”*
- *“It was a huge adventure to begin college. Although I did not make lasting friendships, I was able to connect with people during this trip.”*
- *“I can’t possibly describe how much easier it was to start college with a solid group of friends.”*

Another theme to emerge in question 7 responses suggests **personal outcomes** for participants. 48 of the 85 responses (56%) reported personal outcomes based on themes such as confidence, comfort, preparation, and easing the transition. 18 of the 48 personal outcome responses specifically mentioned that the program helped or aided their “transition” to college. A list of quotes helps reveal the most common personal outcomes reported:

- *“I gained confidence in my independence.”*
- *“...made me feel more comfortable going into college.”*
- *“Collegebound is a unique experience in that it allows you to step out of your comfort zone in ways you never have—socially or physically—and grow in ways you didn’t realize you could.”*
- *“I felt that I was pre-educated on college life from the facilitators, which gave me reassurance before entering my first week of college.”*
- *“Collegebound made me feel better prepared and open during orientation, which made me feel more willing to participate.”*
- *“It really helped me transition into college, I went in not really knowing anyone and ended up making some close friends on the trip.”*

- *“I have learned that it is beneficial to step outside your comfort zone and try new things. It may be scary, but in the end is worth it.”*
- *“After the trip, I had so much more belief that I was going to be fine in college.”*
- *“It helped me come into college with an open mind and a willingness to try anything.”*
- *I learned that I could work with and like people that had different values and interests than me, which was a valuable tool that I have applied ever since.”*

The role of the outdoors in this program had an important effect on many respondents. Themes related to the outdoors, environment, nature, and adventure were identified in 27 of the 85 responses (32%). The following list of quotes highlights the ***outdoor appreciation outcomes*** of Collegebound participants:

- *“I learned to appreciate the power of nature.”*
- *“Collegebound solidified my love of the outdoors and nature.”*
- *“I have been on many trips now with PRP and have gained a greater appreciation for the outdoors.”*
- *“I gained a fondness for the outdoors that I hadn’t previously had.”*
- *“It was a great way to introduce myself to new people and learn about others while we hiked through the woods and had fun in the outdoors.”*
- *“It helped me create an opinion on climate change and how we treat our environment.”*
- *“...a huge part of why I want to work with and in the outdoors for the rest of my life.”*
- *“My Collegebound experience opened my view on the outdoors and nature.”*

A final major theme that emerged in the open-ended responses had to do with respondents' perception of Collegebound's overall impact on their *college success*. 20 of the 85 responses (24%) were coded for this theme. The following list captures those perceptions:

- *"It's no exaggeration to say it changed my life."*
- *"So much of who I am as a college student is directly related to going on Collegebound."*
- *"I think that this program is a life altering experience."*
- *"This experience continues to be a highlight of my college career."*
- *"Collegebound had a great impact on my life going into college and has stuck with me ever since."*

A minor theme that emerged, but was less expected was the impact of upper-class student-leaders (PRPs) on the student-participants experience and overall transition to college. 11 of 85 respondents (13%) specifically noted the importance of getting to know and learn from older students. Responses coded for this theme included:

- *"From my leaders I learned a lot about college life and what to expect. It was really helpful to hear from them because we were all pretty nervous coming into it."*
- *"Greatest impact was the mentorship/relationship with Collegebound leaders."*
- *"I did have a positive connection with one of my leaders who helped me get involved in some community on and off campus."*
- *"Collegebound provided meaningful mentorship and support from my upperclassmen facilitators."*

Overall, the open-ended responses showed positive perceptions of the OOP. However, five responses (6%) were coded as negative or indifferent perceptions. These responses included statements such as:

- *“Not much of an impact.”*
- *“I enjoyed the experience, but I don’t think it had an effect on me in the long run.”*
- *“Very impactful at the beginning, but little follow-up down the road.”*
- *“Honestly I felt excluded because it created an atmosphere that was too honest and permissive about party culture and relationship choices that I felt uncomfortable for having a different opinion during our conversations.”*

Interpretation and Discussion of Results

The results show that overall Collegebound is succeeding with its goal of aiding first-year students in their transition to college. The results of the academic outcomes along with the self-reported impacts of the local survey are evidence of this.

Academic outcomes. Retention rates from first to second year range from 1.8% to 2.8% higher for Collegebound students compared to non-Collegebound students over the three years studied. The institutions supporting Collegebound already have particularly high retention rates when compared to the national average of 80.1% in 2017 for full-time students in similar four-year, private, non-profit institutions (National Student Clearinghouse Research Center, 2018). Although there is only a marginal difference between Collegebound students and non-Collegebound student retention rates, there is still a practical significance to the minor increase for the OOP students. When considering finances alone, one student’s yearly tuition cost is roughly the same as the entire Collegebound budget for that year. Retaining an extra student or two covers the

budget while providing important outcomes for the other 100 or so students attending Collegebound.

The cumulative GPA for Collegebound students at the end of their first year was also slightly higher compared to non-Collegebound students. Aggregated GPAs ranged from .01 to .30 higher for Collegebound students over the three-year period. Although this is not a major difference, there is a small trend that may suggest that Collegebound students do better in coursework possibly due to being better prepared and comfortable starting college. The academic rigors of college compared to high school can be quite a surprise for first-year students beginning their college experience. A student who adjusts to the new environment sooner will likely see better grades over the course of the first year.

One academic outcome that Collegebound seems to have had little impact on was the student's choice of academic major or minor. Based on survey responses, over 50% of students reported that the OOP had no impact at all on their academic choices and another 30% reported the program had only a slight impact on their choice of academic study. Since the program is not targeting any one group of students or student interests and is therefore not trying to impact students' academic choices, this result was not surprising. Collegebound seeks to attract students from a wide range of backgrounds and interests including academic goals, which brings a broader perspective to the group experience. However, the survey results do show that for a small number of students, the OOP did have a significant impact on their academic and even career choices, 3.5% and 6%, respectively. This suggests that although it's not a primary goal of the program,

Collegebound may provide encouragement and direction for students unsure on what they want to study and pursue in their college experience.

The primary academic outcomes (retention and GPA) measured in this study both showed slightly higher results for OOP students compared to non-OOP students, which is consistent with other OOP studies (Gass, 1987; Hill et al., 2014). This academic data is paramount for institutions and is the baseline data many institutions and their programs use to gauge their success. The academic success of OOP students may be attributed to the personal-social outcomes of participating in an outdoor orientation program.

Personal-social outcomes. The personal-social outcomes of Collegebound students were assessed using the locally designed online survey. Over three-quarters of respondents (78%) reported that Collegebound had a significant impact on their home to college transition. A successful college transition is dependent on students developing interpersonally with peers and the larger campus community as well as through intrapersonal development by gaining confidence, comfort, independence, and perseverance to succeed in the new setting.

Social outcomes were the highest rated outcomes on the survey. Significant impacts reported by respondents such as making friends, forming meaningful relationships, and feeling part of the larger campus community were the highest rated outcomes on the Likert scale questionnaire as well as the most noted outcome listed on the open-ended survey question. These OOP outcomes of friendship formation and peer relationships are consistent with many other findings in OOP research (Gass, 1987; Vlamis et al., 2011). The immersive group experiences of an OOP require participants to work together and open up with each other in a way that creates real, personal

connections between them that ordinary interactions may not offer. A week of travel, camping, meals, and adventure activities provide the stimulus for participants to put themselves out there to develop meaningful relationships with peers based on trust, respect, teamwork, and cooperation. These relationships transfer back to the college campus where students feel connected to and a part of the larger community as their social circles grow. Over 75% of the survey respondents reported a moderate or significant impact on their choice to join a peer group, club, or organization on campus. As noted in chapter 2, the importance of developing peer relationships is perhaps the most important piece of the puzzle for first-year students transitioning to college (Astin, 1993; Bell, 2006; Pascarella and Terenzini, 1991). The peer relationships established on an OOP can have far-reaching impacts on a student's overall college success.

The experience an OOP provides can allow students to open up their beliefs or challenge assumptions they've had about others. Starting college is a major milestone in a young adult's life. It gives people an opportunity to try new things or change things about themselves. Over 90% of survey respondents reported a moderate or significant impact on their respect and openness to others and their ideas as a result of participating in Collegebound. A socially immersive program like Collegebound not only helps facilitate friendships amongst peers of similar backgrounds, but may also provide an important opportunity for students to connect with peers from different backgrounds.

Individual or **personal outcomes** from Collegebound included the perception that the OOP experience contributed to student self-confidence, independence (or autonomy), and preparation going into college. Over 96% of respondents reported a moderate or significant impact specifically on their self-confidence. These personal outcomes on

student development are gained through the challenging and unique experiences provided by an OOP. Respondents noted how they were forced to step out of their comfort zone during the OOP to try new things. By overcoming these challenges such as rock climbing or camping in the wilderness or opening up in conversation with a stranger, students gain a new sense of confidence to try and accomplish new things. These are transferrable experiences that apply directly to the college setting where students will be confronted with new challenges they must navigate.

In the open-ended responses, many respondents indicated that they felt better prepared to start college after attending Collegebound. They noted the importance of having upper-class leaders to provide insight about their own college experience and answer any questions they might have. 85% of respondents reported a moderate or significant impact on their awareness and knowledge about college life from their Collegebound experience. The unstructured and informal pre-orientation of the OOP gave student-participants an honest understanding of not only the college setting, but much more about the college culture that a student can only learn first-hand. This firsthand knowledge helped students feel more prepared and comfortable starting college.

Without their parents or guardians accompanying them on the Collegebound program, student-participants also gained a new sense of independence. The program requires participants to take care of their basic needs while in the outdoors. There are real and immediate consequences for not tending to any number of these things – eating, resting, and hygiene – that students learn to take responsibility for themselves and in return contribute to the group's well-being by helping with meal preparation, dish cleaning, camp setup, route finding, etc. These seemingly mundane tasks in everyday life

are important must-do's in the outdoors and the lesson transfers back to the college campus where first-year students must recognize and balance their new found independence and the responsibilities that come with it.

There were few negative perceptions of the Collegebound experience. Only 7% of respondents reported that Collegebound did not contribute at all to their college success. Only 1% and 2% reported that the program did not contribute at all to their college transition or making friends, respectively. 6% of respondents reported negative or indifferent experiences in their open-ended answers. These responses are important and help guide program changes such as first and second semester follow-ups with participants, as well as a sensitivity to all participants' thoughts and feelings, especially when they differ from the majority. Although Collegebound aims to provide something for everyone, the program cannot expect to meet all student-participants' expectations in a week-long program, but must be inclusive and be more than just a one week adventure trip. This assessment does suggest that program facilitators and the director should consider ways to meet the desired outcomes for all student-participants using a variety of activities and curriculum methods.

The overall results of the survey show that Collegebound impacted students in significant ways and had important outcomes for their college experience. Over one-third of respondents reported a significant impact on their overall college success. Statements from the open-ended responses backed these results up. OOPs are specifically designed to set students on a trajectory for success by facilitating personal and social development among student-participants that transfers back to the college setting.

Outdoor Appreciation Outcomes

The outdoor appreciation outcomes of an OOP experience for students are less emphasized by many programs, including Collegebound, however they are goals that many programs still have since the majority of the OOPs take place in natural environments. Since Collegebound is housed under an outdoor and environmental education department, it is part of the larger departmental goal of environmental literacy. Environmental literacy is awareness and knowledge about the environment, as well as appreciation and concern for the environment that inform sustainable behaviors and lifestyles (Biedenweg, Monroe, and Wojcik, 2005). Survey respondents reported moderate or significant impacts on their awareness, appreciation, concern, and interest for the outdoors and environment as a result of their OOP. These findings are consistent with Thompson's (2015) findings on environmental outcomes of an OOP. Marchand (2014) found similar results in measuring environmental values of college students enrolled in outdoor-related classes compared to control who did not participate in outdoor classes.

Besides teaching Leave No Trace environmental ethics and some basic "sense of place" background information, Collegebound has little environmental or outdoor focused curriculum in the program. Based on survey responses it is clear that Collegebound participants are being impacted by the outdoor setting of the program. This assessment indicates that intentional environmental and outdoor literacy focused curriculum could be added to the program to assist students further.

The opportunity to enhance environmental literacy on an OOP is obvious since students are actively engaging with the natural environment throughout the program. The

importance of environmental literacy in society is clear as environmental issues and problems touch all facets of life for people around the globe. Environmental literacy cannot be directed only to those students entering an environmental or natural science academic major or pursuing an environmentally-related career. Environmental literacy development, like personal and social development, is an important piece of a holistic education that students should be afforded in higher education. Just as Collegebound strives to produce personal-social outcomes for student-participants that serve them well in their college experience, it too is able to provide important environmental outcomes that will serve the students and their environs well over time.

Summary

Collegebound produces important outcomes for its student-participants. While the academic outcomes measured through the analysis of retrospective data indicate small gains in retention and GPAs, they are gains that contribute to the economic and reputational health of the institutions represented in this study. Collegebound sets students on a trajectory that helps ease their transition into college and aids them in a successful first-year. Collegebound students reported noteworthy impacts on personal and social development that contributed to their successful transition and first-year of college. Students also reported important outdoor appreciation outcomes as a result of their experience. The final chapter of this study will summarize the research and its findings. Limitations to the research as well as future recommendations for research and assessment will be discussed.

CHAPTER FIVE

Conclusion

In an assessment of the outdoor orientation program, Collegebound, I discovered that the program is meeting its primary goal of aiding first-year students in their transition to college, which is consistent with Ribbe Jr. et al. (2016) findings. Although year-to-year participant feedback surveys are conducted, no formal program assessment has been done on Collegebound in its over 30 years of being offered to incoming first-year students. The results of this study provide a foundation of knowledge and benchmarks that the program can use for future program design and assessment.

The results of this research have helped answer the over-arching research question guiding this study: What are the student outcomes from their participation in Collegebound? Results showed that, although minor, Collegebound students did have higher academic outcomes than non-Collegebound students with regard to first to second year retention and cumulative GPA at the end of their first year over the three years assessed – 2015, 2016, and 2017. Collegebound students reported social outcomes from the experience including significant impacts on making friends and feeling part of the larger campus community. Surveys also indicated that students experienced personal outcomes with critical impacts on their self-confidence, comfort, and preparedness to begin college after the OOP experience. A final outcome of increased outdoor appreciation was reported by survey respondents as they noted significant impacts on their awareness and appreciation for the environment.

The findings of this research and assessment are consistent with a number of studies on OOPs. The social outcomes of making friends and meaningful relationships with peers is one of the most common and most important outcomes of OOP research and assessment (Bell et al., 2014; Vlamis et al., 2011). Personal outcomes such as increases in self-confidence (Lien and Goldenberg, 2012) and developing autonomy or independence (Gass, 1987) have been noted in previous studies. These personal-social outcomes are believed to have a direct influence on academic outcomes (Bell et al., 2014) such as retention and GPA as found in Gass (1987), Brown (1998), and Hill et al. (2014). The outdoor appreciation outcomes assessed in this study were consistent with findings from an undergraduate thesis assessing the same program (Thompson, 2015).

Limitations

A major limitation of this research, as is the case with most OOP research, is the issue of selection bias for both those students self-selecting into the Collegebound program as well as those who selected to participate in the survey portion of the study. For those students self-selecting into the OOP, they were, perhaps, already likely to have higher retention rates and GPA regardless of Collegebound participation. Due to Collegebound enrollment being based on those students able to pay the registration fee and commit to the program dates/times, the program may be attracting students with an already high probability of college success. Although scholarship funding for Collegebound participants is increasing, the cost alone may be a barrier to attracting students who may have a lower probability of college success and, therefore, could benefit from the Collegebound experience as noted in other OOP studies (Bell and Chang, 2017)

The other limitation of this assessment is the selection bias regarding those who chose to respond to the survey. With 85 survey respondents of the 265 sample size (32% response rate), there is the possibility that many of the respondents were feeling nostalgic about the program or are involved with the program beyond their first-year participation and wanted to provide positive feedback. Although a 32% response rate was a valid amount for an online survey (Nulty, 2008), a stronger response would have provided more confidence in making generalizations about program outcomes for the entire Collegebound participant population.

Recommendations

One way to account for the selection bias of those self-selecting into the program would be to compare the Collegebound group to the group of students who self-selected into the program, but were unable to attend for one reason or another, similar to the Bell & Chang (2017) study. There have been these small “waitlist” groups each year that could be used as a “control” for selection bias in future assessment.

Another group of the Collegebound program that was not assessed was the student-leaders themselves, the PRPs. Surely these students are experiencing impacts and outcomes as a result of their role in the program that have broader implications on their college success. A more thorough assessment of their experience would contribute to the overall program assessment as well as contribute some important research to the outdoor orientation program field and adventure education as a whole.

This Collegebound research was a broad assessment of the program. Future assessment could delve more into student demographics to gain a better understanding of how the program impacts students of different backgrounds (e.g. race/ethnicity, in or out

of state students, socio-economic status). This research found little difference in student outcomes reported on the survey based on the collected demographic data (i.e. gender, major, etc.), however the survey data was limited by response rate and the actual demographic information requested as demographic variables was not a priority in this research. As the institutions student population becomes more diverse, the Collegebound student groups should reflect that diversity as well as the Collegebound student-leader team in order to make the program experience comparable to the college experience.

Implications and Conclusion

The results of this study indicate that the outdoor orientation program, Collegebound, has measurable and meaningful outcomes for student-participants. These outcomes support student and institutional goals for success. The findings along with other research on OOPs show that the impact of a short, immersive experience at a life milestone such as starting college can have far-reaching benefits for the student-participants. These OOP experiences transfer back to the college setting where new entering students have the confidence, knowledge, friendships, and aspirations to begin a successful college career.

Collegebound plays an important role in the student affairs division. The importance of co-curricular programming in student affairs at higher education institutions, especially private, liberal arts schools, has become well recognized (Gansemer-Topf, Beatty, Zhang, and Paja, 2014). This assessment is therefore relevant to program coordinators, administrators, and current and prospective students. Programs must be able to show their value to students and the institution in order to remain relevant in the ever-changing world of higher education. This assessment has laid the foundation

for continued program evaluation that can support Collegebound and the institutions into the future. It also contributes to the growing body of research on the topic of outdoor orientation programs.

This research will be presented at the institutions supporting Collegebound during one of the weekly forums focused on scholarly work completed by faculty, staff, and students on campus. This will provide an opportunity to share the findings and implications with the campus community that may spark future collaboration or insight from community members to enhance Collegebound. Other broader means of disseminating the work may include submission for publication to a number of outdoor and experiential education journals such as the *Journal for Experiential Education* or the *Journal for Outdoor Recreation, Education, and Leadership*. These two peer-reviewed journals account for most of the published work on outdoor orientation programs and were a major source of information for this study.

As director of Collegebound, this research has helped me recognize the many approaches to program assessment and how future assessment might be conducted. The findings will allow me to adjust program design and curriculum to better meet Collegebound goals. For example, this research has prompted me to be more explicit about our program goals to direct and improve student-leader training and help student-participants better understand the intent and purpose of the program to help them make the most of it. It also helps me consider new ways of structuring the program to accommodate students and facilitate program goals. For example, we could have more intentional programming after the trip during the students' first and second semesters to build on the impacts of Collegebound and continue aiding the student's adjustment to

college. The trip portion of the program could also include new activities or initiatives to facilitate program goals. There's also the option of adding more trip dates to the program calendar as Collegebound did in the 1990's and a number of other schools currently do. If the program is producing important and measurable outcomes, consideration must be given to expanded offerings to students. However, due to program constraints such as qualified student-leaders, training schedules, gear and equipment requirements, and transportation limitations, Collegebound seems to have met its participant capacity of roughly 115 students. Creative and collaborative efforts will be needed to grow the program capacity at this point.

The amount and depth of research on the topic of outdoor orientation programs helps me consider new methods or models for coordinating Collegebound. The importance of consistent and accurate program surveys issued each year will provide future data to measure the impacts of Collegebound and gain more immediate impressions from student-participants. New ideas to enhance Collegebound such as offering college credit to student-participants or to the student-leaders who go through extensive training and development in their role could be an important way to combine the co-curricular program with the academic side of college. As schools look to update or change their common curriculums, co-curricular programs like many OOPs should be considered viable options to provide student learning and development, and therefore, should be given the associated credentials and recognition. Research focused on how an OOP impacts students of different backgrounds also encourages me to think how Collegebound can enroll a diverse student group that is representative of the institutions student population, and what further assessment of these groups would look like.

Overall, this study has helped me become a better program director, researcher, and teacher, while providing Collegebound with an important program review and assessment. With a successful program delivering measurable outcomes, Collegebound has proven its value to the institutions. With program tweaks and continued assessment, it can continue to provide important and transferable experiences to students beginning their college careers.

REFERENCES

- Astin, A. (1993). *What matters in college?: Four critical years revisited* (1st ed. ed., The Jossey-Bass higher and adult education series). San Francisco: Jossey-Bass.
- Austin, M. L., Martin, B., Yoshino, C., Shanning, K., Ogle, D., & Mittelstaedt, R. (2010). Using the wilderness to facilitate adjustment to college: An updated description of wilderness orientation programs. *Journal of Experiential Education, 19*, 22-28.
- Bell, B. J. (2006). Wilderness orientation: Exploring the relationship between college pre-orientation programs and social support. *Journal of Experiential Education, 29*, 145-167.
- Bell, B. J., Holmes, M. R., & Williams, B. G. (2010). A census of outdoor orientation programs at four-year colleges in the United States. *Journal of Experiential Education, 33*, 1-18.
- Bell, B. J., & Vaillancourt, C. (2011). When college programs end: A grounded theory investigation of program discontinuation at four-year colleges in the United States. *Journal of First Year Experience & Students in Transition, 23*(1), 103-119.
- 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*(1), 31-46.
- Bell, B. & Chang, H. (2017). Outdoor orientation programs: a critical review of program impacts on retention and graduation. *Journal of Outdoor Recreation, Education, and Leadership, 9*(1), 56-68.
- Biedenweg, K., Monroe, M., & Wojcik, D. (2005) *Across the Spectrum*. NAAEE.

- Bobilya, A., Akey, L., & Mitchell, D., Jr. (2011). Outcomes of a spiritually focused wilderness orientation program. *Journal of Experiential Education*, 33, 301-322.
- Brown, D. A. (1998). Does an outdoor orientation program really work? *College and University*, 73(4), 17-23.
- Chickering, A. (1969). *Education and identity* ([1st ed.]. ed., The Jossey-Bass series in higher education). San Francisco: Jossey-Bass.
- Clarkson, J. (2018). *Collegebound Interview*. April 2018.
- Davis-Berman, J., & Berman, D. (1996). Using the wilderness to facilitate adjustment to college: An updated description of wilderness orientation programs. *Journal of Experiential Education*, 19(1), 22-28.
- Frauman, E., & Warywold, D. (2009). Impact of a wilderness orientation program on college student's life effectiveness. *Journal of Outdoor Recreation, Education, & Leadership*, 1(2), 191-209.
- Galloway, S. (2000). Assessment in wilderness orientation programs: Efforts to improve college student retention. *Journal of Experiential Education*, 23, 75-84.
- Gansemer-Topf, A., Beatty, C., Zhang, Y., & Paja, S. (2014). Examining factors influencing attrition at a small, private, selective liberal arts college. *Journal of Student Affairs Research and Practice*, 51(3).
- Gass, M. A. (1984). *The value of wilderness orientation programs at colleges and universities in the United States*. ERIC database.
- Gass, M. A. (1987). The effects of a wilderness orientation program on college students. *Journal of Experiential Education*, 10(2), 30-33.

- Gass, M. A. (1999). Adventure programs in higher education. In J. Miles & S. Priest (Eds.). *Adventure Programming*. Venture Publishers.
- Gonsalves, J. (2017). Effects of outdoor orientation program participation on honors program completion. *Journal of the National Collegiate Honors Council*, 18(2), 163-175.
- Hill, A., Clark, C., Erbe, D., & Waryold, D. (2014). Student success through outdoor orientation programs. Retrieved from <https://www.outdoored.com/articles/student-success-through-outdoor-orientation-programs> on April 11, 2018.
- Jones, J. J., & Hinton, J. L. (2007). Study of self-efficacy in a freshman wilderness experience program: Measuring general versus specific gains. *Journal of Experiential Education*, 29, 382-385.
- Kirkby, D. (1987). Climbing, paddling, and fishing your way toward college: The Collegebound Experience. *Partners Winter* 2(2), pp. 9-11. Retrieved from SJU Archives, <http://cdm.csbsju.edu/digital/collection/SJUArchives/id/20810/rec/2> on April 9 2018.
- Lien, M., & Goldenberg, M. (2012). Outcomes of a college wilderness orientation program. *The Journal of Experiential Education*, 35, 253-271.
- McKenzie, M. (2000). How are adventure education program outcomes achieved?: a review of the literature. *Australian Journal of Outdoor Education*, 5(1), 19-28.
- Michael, J. M., Morris-Dueer, V., & Reichert, M. S. (2017). Differential effects of participation of a wilderness education program for incoming students. *Journal of Outdoor Recreation, Education, and Leadership*, 9(1), 43-56.

- Miller, V. (1988). Collegebound: Orientation in the great outdoors. *The Record*, Nov. 3, 1988, p.9. Retrieved from SJU Archives, <http://cdm.csbsju.edu/digital/collection/CSBArchNews/id/37058> on April 9, 2018.
- Miner, J., & Boldt, J. (1981). *Outward Bound U.S.A. : Learning through experience in adventure-based education*(1st ed. ed.). New York: Morrow.
- National Student Clearinghouse Research Center. (2018). Persistence and Retention – 2018. <https://nscresearchcenter.org/snapshotreport33-first-year-persistence-and-retention/>.
- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, 33 (3), 301-314.
- Okada, M., Okamura, T., and Zushi, K. (2013). The effects of in-depth outdoor experience on attitudes toward nature. *Journal of Outdoor Recreation, Education, and Leadership*, 5(3), 192-209.
- O’Keefe, M. (1989). An assessment of freshmen of wilderness orientation programs in higher education: A descriptive Delphi study. Unpublished Dissertation. Boston University, Boston.
- Pascarella, E., & Terenzini, P. (1991). *How college affects students* (First edition. ed., The Jossey-Bass higher and adult education series). San Francisco: Jossey-Bass.
- Paur, R. (1980). Vice President’s Report: Student Affairs. *Peer Resource Program*. Community Newsletter: Public Information Office. December 11, 1980.
- Stogner, J. D. (1978). The effects of a wilderness experience of self-concept and academic performance (Unplubished doctoral dissertation). Virginia Polytechnic Institute and State University, Blacksburg.

- Thompson, T. (2015). *Collegebound: Integrating Environmental Ethics into College Outdoor Orientation Programs*. Unpublished baccalaureate thesis.
- Tinto, V. (1987). *Leaving college : Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1999). Taking retention seriously: rethinking the first year of college. *NACADA Journal* 19 (2), p. 5-9.
- Vlamis, E., Bell, B. J., & Gass, M. A. (2011). Effects of a college adventure program on student development behaviors. *Journal of Experiential Education*, 34, 127-134.
- Wolfe, B. D., & Kay, G. (2011). Perceived impact of an outdoor orientation program for first-year university students. *Journal of Experiential Education*, 34, 19-34.

Appendix A

Collegebound Outcome Survey

1. What year did you participate in Collegebound as an incoming first-year student?

2015; 2016; 2017

2. Which Collegebound adventure activity did you participate in?

Canoeing, climbing, backpacking, North shore camping

3. What is your gender?

Male, female

4. What is your major(s)?

5. Do you identify as a First Generation student?

Yes, No

6. *To what extent* did your Collegebound experience contribute to the following outcomes?

Choose from one of these five choices: *significantly, moderately, slightly, not at all, unsure*

- Aiding your transition and adjustment from home to college
 - Your self-confidence and self-esteem starting college
 - Your awareness/knowledge about campus and college life
 - Your respect and openness to other people and their ideas
 - Making new friends
 - Making meaningful and lasting relationships with peers
 - Feeling part of and attached to the larger college community
 - Your choice to join peer groups, organizations, or clubs
 - Your choice of academic major(s) or minor(s)
 - Your career choice and goals
 - Your awareness and appreciation for the outdoors
 - Your concern for environmental issues or problems
 - Your interest and participation in other outdoor or adventure recreation
 - Your overall college success at this point in your college career
7. In your own words, what do you perceive to be the outcome(s) of your Collegebound experience?

Appendix B

Informed Consent Letter

Date

Dear Respondent,

As a former Collegebound participant, I am inviting you to participate in a project to study the outcomes of Collegebound. I am conducting this study as partial fulfillment of a Master of Arts in Education with a focus on Natural Science and Environmental Education at Hamline University in St. Paul, MN. Through your participation in this study, I hope to better understand the impact Collegebound has had on your college transition and undergraduate career.

Your participation in the study involves completing a survey that will take approximately 5-10 minutes. The survey questions will gather basic demographic information and program outcomes. For program outcomes, you will use a 5-point scale to rate the extent to which Collegebound contributed to a number of listed outcomes. The final question is an open-ended question that allows you to respond, in your own words, what you perceive to be the most important outcome of your Collegebound experience.

Every effort will be made to ensure confidentiality. The survey responses are anonymous and will not be associated with an IP address or login credentials. This survey has been emailed to all Collegebound participants from the 2015-2017 program years. No other identifying information was used or collected other than the basic demographic information in questions 1-3 (i.e. participation year, gender, academic major). Please note that absolute confidentiality cannot be guaranteed due to the limited protections of internet access, similar to risks associated with a person's everyday internet use.

Your participation in this study is voluntary and there is no penalty if you do not participate. If you do participate, please be honest and sincere in your answers as you reflect upon your Collegebound experience and the impacts of it.

If you have questions about completing the survey or about being in this study, you may contact me at krauch01@hamline.edu. You may also contact my research advisor, Betsy Parrish, at Hamline University, bparrish@hamline.edu. This study will be published and made available to the public on Hamline's Bush Library Digital Commons.

Please follow this link to access the survey: _____

Sincerely,

Kyle D. Rauch
Graduate student in M.A.Ed.: NSEE
Hamline University