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ASSESSING REMEDIAL COURSE TRANSITIONAL INTERVENTION
EFFECTIVENESS FOR FIRST GENERATION COLLEGE STUDENTS

by

John Day

A capstone submitted in partial fulfillment of the
requirements for the degree of Master of Arts in Education.

Hamline University

Saint Paul, Minnesota

August 2015

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To my wonderful family Allie, Nolan, and soon to come Baby Girl Day. I could not have done this without your love and encouragement.

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I would like to thank my Hamline Capstone Committee for the efforts in seeing me through this journey, and challenging me to push for more. Also, thanks to the staff at our test university who have provided me an opportunity to stretch professionally and personally, and encouraging my further knowledge of the first generation college student population. Thank you to mom and dad who have loved me every day, and asked about my capstone research all the time. And finally thanks to God who guides my steps each day, I am wonderfully blessed.

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CHAPTER ONE

Introduction

Introduction

Students who are the first in their family to attend college face a decided number of unique challenges that their non-first-generation peers do not. While many are able to overcome these obstacles and graduate, there are others who find this transition to the environment of higher education insurmountable. The value of a college degree comes with long-term ramifications on the future outcomes of life circumstances. Those with a bachelor's degree stand to earn a higher-paying wage upon graduation and throughout their lifetime. While not all first-generation college students are in need of additional support, aligning interventions that promote early success can set the path to graduation on a much more attainable trajectory for all.

Students who are first-generation college students stand out as a growing population that demands more of our attention as we seek to serve the ever-changing needs of all degree seekers. First-generation college students are defined by Saenz & Barrera (2007) as “those whose parents have had no college or post-secondary experiences” (Saenz & Barrera, 2007, p.1). There have been many studies that reveal these students to be at a higher risk for dropping out of college (Shepler & Woosley, 2011, p. 700). Research by ACT, the Iowa-based

testing organization as quoted by Adams (2013), also points to this population entering college with a lack of standardized preparedness for the rigors of college, “just over half (52 percent) of ACT test-takers who would be first-generation college students failed to meet any of the ACT College Readiness Benchmarks, compared with 31 percent of all ACT test-takers” (Adams, 2013).

Research Question

This subject is one that I care about deeply, so the manner in which my research is framed needs to be well informed and specific. Following an examination of a variety of models, my research will center around the following question: do remediation courses as a transitional intervention correlate to confidence in academic success and improved knowledge of campus resources for first-generation college students in small, liberal arts higher education institutions? This question is of great importance to many institutions as they wrestle with assessing the effectiveness of their programming to meet the needs of a diverse student base. My hope is that this research around the remedial courses will shed light on the subject and allow us to expand the reach to other intervention techniques.

One of the current intervention trends in higher education is bringing “high-risk” students in as part of a summer bridge program that typically will focus on academic strategies that often lead to success in the classroom. Within these programs, part of the curriculum occasionally includes pairing a first-generation student with an upper class student who has experienced success at the university in a sort of mentoring and coaching role. Students are also enrolled in these

remedial courses as part of this programming, keeping a cohort of students together throughout the experience. There are additional intervention models that I will be exploring as well to best determine effectiveness on overall academic success. While this question is relevant to any traditional institution of higher education, I believe it has a particularly strong level of interest with goals at smaller institutions where each student represents a proportionally larger piece of the enrollment pie. With an increased effort on retaining students, ensuring the students admitted under a provisional acceptance have as much opportunity to succeed as possible is vital. Therefore, it stands to reason that our goals in academic support should be well aligned with research that points to effective practices for this demographic.

Chapter Overview

This chapter will primarily introduce my desire to expand the existing knowledge base of this topic. I have found that my interest in the success of first-generation college students is very much derived from a personal narrative that dates back for several generations. I will also share how this professionally impacts the work community that I operate in and what changes could be made to better influence the long-term success and viability of my institution as demographics expand with time. This introduction will also serve as a point of organization for the upcoming research content, and ensure that all is aligned with the research question of examining the effectiveness of remedial coursework interventions for this population. I will also provide a conclusion that wraps up the section and allows a transition to the next.

Personal Interest

While the outcomes of this research have significant impact on the students actually affected, the purpose for pursuing this information is rooted in my personal interest in serving this population. My family has always valued education and the many benefits that come with it. My father completed his bachelor's degree in physical education from California State, at Stanislaus, and his Master of Divinity from Bethel University. Their immediate families also understood the significance of education for a person's future, with my grandfather completing his degree at Marquette University and my grandmother attending a prep school and nursing school. My grandparents were even college educated, attending Yale University. This led to opportunities for them that might not have been available otherwise. My grandfather used his education to spur several of the Apollo space programs in the 1960s. My grandmother was an influential military nurse, using her education to give care to wounded soldiers in World War II. My mother completed her education at Normandale Community College, and both of her parents attended Simpson College. With all of my immediate family experiencing higher education, it is clear to me that this was of great significance to our lives collectively.

It was not spoken explicitly often, but my family held expectations that I was to use the gifts given to me to better the world we live in. I did not always make this connection at the time, but the primary means to broaden my impact was through advanced education. As an only child, choosing to bypass college was never a realistic option. I had the support of my family, both emotionally and

financially, to see me through this important stage of life. It was not enough to simply graduate, but the tone of our family was to use our education in the workplace to better our surroundings while supporting each other.

A few years of employment in corporate America left me empty and seeking more. Education had always been of interest to me given my life experiences, so I sought to learn more about teaching. Through Teach For America, an organization that promotes educational equity for all children, I taught English as a Second Language in two low-income areas of both Minneapolis and Chicago. I was inspired to see how hard my students worked, in spite of worrisome trends in national achievement gap data. Part of our curriculum was instilling the immense value that a college education has, and that the students' aim should be nothing less than completing a bachelor's degree. We visited institutions as field trips, named classroom small groups after local universities, and celebrated the heritage of Historically Black Colleges and Universities.

These experiences have deepened my desire to see that the students I experienced working so hard in their grade levels have the same opportunity that I had to earn a college degree. Educational equity is something that I have internalized as a life goal, to see college as a realistic option for any student. There are absolutely unique challenges that first generation college students face that I will never be able to relate to. I was born into a socio-economic status and family that afforded me advanced access. This research is meant to bridge the gap between admittance and graduation.

Working in higher education has always been a goal of mine, given my family history and understanding of its value. While teaching primary school afforded me the opportunity to work with younger students and promote educational advancement, working with students and developing a relationship is a top priority. When students leave their home for the first time, there is a wealth of transitional effects that play out in this environment. This is certainly magnified for those students whose parents did not attend college.

Professional Interest

While I maintain a personal connection with seeing first generational students experience success in college, my role at a university requires that level of commitment to remain on a professional level. I was employed as a Program Manager in the academic support department at a small, Christian, liberal arts university in Minnesota.

In a 2014 press release by Awasom (2014) at the test university, the institution reported 3378 total students in all venues (Awasom, 2014). The number of first generation college students at the test university is not disclosed. While the university largely serves students in the greater Minneapolis/St. Paul area, it is also a growing destination for international students who are seeking a Christian experience of higher education. Although the university is located in the 16th largest metropolitan area in the United States, the school is located in a suburb about 10 miles from either city center (United States Census Bureau, 2013). Forbes reports the annual tuition to be about \$28,000, with \$40,000 being the total

cost after room and board are added (Forbes, 2015). The listed ACT composite tests range from 22-27, with an admissions percentage of 69%. 100% of students are reported to receive financial aid of some sort. Forbes also reports that the student body is made up of 41% male, 59% female, and 86% report their race or ethnicity to be white (Forbes, 2015).

The academic support department fulfills a variety of academic support functions for students in all venues of the institution, including traditional undergraduates, online undergraduates, adult undergraduates, Post-Secondary Enrollment Options (PSEO), and even support for our master's level students in some capacity. The office breaks down their services in four distinct programs: Disabilities Office of Support Services (DOSS), Academic Learning Program for Higher Achievement (ALPHA), Culture, Language, and Transition (CLT), and Passport to Success Program (PSP).

The program I managed is PSP, which stated goals are to provide "Wrap-around services for students using strategies that include academic coaching and mentoring to support long-term success" (ATLAS Website, 2015). I assessed student cases differently based on the individual situation and need. A freshman art major coming from a homeschool background responds differently to interventions than a senior football player on academic probation. In this way, the services were very much catered to fit the need as effectively as possible. Generally, PSP services take the form of regular connections between the Program Manager and the student to discuss his or her academic life. For many students it began with an organization session that frames the semester and gets

them started out right. I also collaborated with the students' professors and academic advisor to receive updates on coursework from their perspective; my meeting time with students was centered on what the evolving needs are. This offered the ability to implement additional or adjusted interventions such as securing a subject tutor, establishing a writing center appointment, or using assistive technologies among many others. These regular connections allowed the students an opportunity to gradually increase in their responsibilities as the semester progresses. For instance, at the beginning of the semester, I would help the student dig into various organizational methods and plug them into a system that supports their learning style, while asking them the specifics about each course. Further along, I allowed the students to self-guide our meetings so they were informing me of the work they were completing instead of me asking class-by-class. In addition to checking in on coursework, we covered any number of study strategies that are essential to success in higher education.

Students are also able to participate in the Peer Academic Coaching program (PAC) which falls within the PSP. This program typically pairs incoming students with a seasoned college student who has achieved certain level of academic success. This is a service that is particularly helpful for students who are experiencing a higher level of transition, such as first generation college students.

The university currently automatically enrolls students with subpar incoming high school GPA or standardized test scores into a mandated Study Strategies course. This remediation course is the basis of the research provided in this study.

Many students who are enrolled in the course are also first generation college students. The primary objectives of the course will be stated further on, but generally it is to best assist with the transition to higher education by exposing students to skills and resources that have previously been proven useful.

My work was crucial to the retention of students at a higher risk of not graduating due to academic performance. Improving retention rates is a growing concern in the higher education world for all student populations. According to Lang (2002), “the issues surrounding student retention in higher education are still important because the attrition rates of students are still too high for all students regardless of their racial or ethnic backgrounds, and especially for racial and ethnic minorities” (Lang, 2002, p. 218). This means there must be appropriate services offered to help improve retention rates, especially when enrollment concerns are present.

My students were connected to our intervention programming through a variety of channels. Some are designated to participate involuntarily based on their admissions data, as referenced earlier, while others are referred to our department based on academic standing from the registrar’s office or faculty who see the need for increased coaching around college readiness techniques and strategies. If a student is on academic suspension or probation as determined by a sliding GPA scale dependent on the number of total credits attempted, he or she will be asked to attend a strategizing meeting with me as part of PSP. The goal of this meeting is setting up appropriate interventions to get the student back in good academic standing by the end of the subsequent semester. Many of these students

decide to enroll in the Study Strategies remedial course as part of their intervention package. After 60 credits have been attempted, students must maintain a 2.0 GPA to not only remain in good academic standing but also to graduate. My role at the institution was very much tied with retention as it relates to students who are struggling primarily with academics. We found that outside life circumstances certainly have a correlational effect on academics as well.

As such, the first generation college student population is one that I interacted with frequently, and I have become increasingly aware of the unique challenges this group faces in their transition to higher education. Not only are they navigating the new environment of classes, but typically the reference point for what to expect from parents is lacking in clarity or accuracy, which in turn makes the process significantly more difficult. Ware and Ramos (2013) affirm that “a combination of strong social support and timely, accurate information play roles in their successful paths to college” (Ware & Ramos, 2013, p. 151). This is where this student population is of particular interest to me. I seek to bridge the information gap, to support accuracy in expectations and resources that can build a strong foundation for four years of higher education success.

Significance to Stakeholders

The research that follows will be important as our institution aims to retain all students. Our academic support department had a motto: “early connect equals early success.” While many of the students on my caseload were introduced to me after an academic struggle, we also aimed to proactively connect with students. This helps ensure they are better equipped to handle the transition that

is challenging on different levels at the front end of their higher education journey. Determining the effectiveness of remedial course interventions for first generation college students will allow for a model to be developed that supports them from the time they register for classes through graduation. The test university stands to benefit as our demographics shift to better align with the diverse community in the Minneapolis/St. Paul area. Professors would likely find that their incoming students are better prepared to meet the rigor of their courses if the successes from transitional remediation course objectives can be expanded to larger audiences. Families who are sending their child as a first generation college student may also benefit from hearing what can be done on the front end before they even arrive, which can promote readiness and better integration with the academic community. It is possible that if a family knows there are effective supports in place, the college decision of potential students could be swayed. Other institutions should benefit from this research as well--especially those that share common small, Christian, private university traits.

Conclusion

This topic remains of utmost importance to the changing landscape of higher education. We will see more students over the next few decades that are first generation college students, and our role as educators is to ensure they have an excellent opportunity to flourish there. I have described the role that education has played in the life of my family, illustrating how higher education retains the ability to put people on a different trajectory with their career. I also shared how my life thus far has pointed to the importance of developing this research.

Professionally, there is an immense opportunity to discover and share remedial course intervention models that are for the long-term benefit of not only my position in academic support at the test university, but also for the institutional viability as demographics evolve. There are a wealth of stakeholders that stand to benefit along the way as well. Of course, the need to elaborate on what we know to this point about first generation college students will need to be stated to the community. The research that has already been compiled by colleagues on this topic will serve to frame this discussion as my own research practice builds upon the foundation, as described in further chapters.

CHAPTER TWO

Literature Review

Introduction

The purpose of exploring this topic is primarily to enhance the ability of first generation college students to experience success in higher education, especially in their transition. Many institutions are increasing their focus on retaining the students that come through their doors. The rationale is clear; students who do not persist through to graduation are not in line with collegiate goals of generating scholars to represent their institution in research or leadership. Keeping the student body intact reduces the financial burden of attracting new students to replace those who leave. The spotlight inevitably shines on subsets of enrollees that pose a higher risk to leave the school, for any number of reasons. Thus it stands to reason that educators ought to truly understand their students and what makes them unique, in order to best meet their educational and community outcome goals.

From a research standpoint, much has been written about the first generation college student population. Taking a deeper look at what others have compiled is an important step in developing both my own theories but also creating a recommendation for future interventions after completing my research. It is necessary to get a full picture of who first generation college students are,

including their demographic data. From there, observable tendencies show up that give educators and administrators an idea of what can be expected prior to their arrival and through their full experience of college. All of this is examined within the lens of the climate of higher education in the United States today and how it affects first generation students in particular. Many institutions implement various interventions that have an impact on different stages of the transition. I will investigate these existing interventional structures with the end goal of formulating research methods to determine effectiveness of remedial courses specifically. The research implemented in this study will serve to measure the confidence levels of students in key college success traits who are enrolled in a remediation course against those who do not.

Demographics

The landscape of higher education is changing rapidly, buoyed with a steady influx of first generations students. According to Engle and Tinto (2008), over the past decade, in excess of 4.5 million first generation students were enrolled in postsecondary institutions in the United States (Engle & Tinto, 2008, p. 2). Engle and Tinto (2008) also elaborate that approximately 24% of students enrolled in postsecondary undergraduate education are first generation (Engle & Tinto, 2008, p. 2). This trend is likely to continue in the near future, as the doors of opportunity are widened with educational reform placing more emphasis on college as an achievable destination for the masses.

Chen (2005) continues to cite a study by the National Center for Education Statistics from 1992 through 2000, in which 43% of first-generation students

enrolled in post-secondary institutions left college without obtaining a degree in the United States (Chen, 2005, p. iii). Petty (2014) confirms this figure represents the reality that first generation students are nearly four times more likely to leave without a degree than their counterparts (Petty, 2014, p. 258). While the trend line points to higher overall numbers of first generation students attending college, the harsh reality of their experiential gap is leading to subpar retention numbers. The task is evident; something must be done to bridge this gap, so that first generation students enjoy the same benefits that come with a college degree that their peers experience.

This gap must be examined in order for proper interventions and strategies to take root on a macro level. Just who are these first generation college students? Unverferth, Talbert-Johnson, and Bogard (2012) cite research by several scholars that identifies this population segment as “generally minorities, women, immigrants, parents, low income, and above the age of 24” (Unverferth, Talbert-Johnson, & Bogard, 2012, p. 239). Often there are challenges that accompany these characteristics in the higher education realm. Moreover, studies by Jenkins, Belanger, Connally, Boals, Duron (2013) point to the economic gap representing a significant variable to account for which is often paired with ethnic status; “they more often come from lower socioeconomic status (SES) families or from racial and ethnic minority cultures” (Jenkins et al., 2013, p. 129). According to Dr. Patrick Terenzini (2014), these students are more likely to be English language learners as well. First generation students will also likely choose a high-paying major, such as business, pre-medical, or nursing. In addition, many are attending

public schools over private schools, and they attend college only part-time (Terenzini, 2014). Each of these distinctions make up the generalized perspective on first generation students, although the reality is individual situations and demographics tend to have the most overall impact on long-term success.

Tendencies

Students who are the first in their family to attend college have a steep hill to climb, especially in comparison to their non-first generation peers. This comes in many forms, but typically in social capital, academic readiness, financial means, and even stress. Research by Jenkins, Belanger, Connally, Boals, & Duron (2013) about first generation college students reveals that they “may be subjected to stressors associated with those social positions, such as low-income neighborhood violence and racial and ethnic discrimination” (Jenkins et al., 2013, p.129). The following sections will outline several more of these general tendencies in the first generation population.

Social capital. One of the areas that is commonly identified as a trend within the first generation demographic is an inherent lack of social capital. Mikael Rostila (2011) defines social capital as “social resources accessible through participation in various types of social networks, making possible the achievement of certain ends, returns or benefits that in its absence would not be possible” (Rostila, 2011, p. 310). The minimal existing social network structures in place to support first generation college students puts them at a decided disadvantage when navigating higher education. This has a profound impact on the achievement levels of students, who are unable to benefit from these

otherwise common human resources. While many first generation college students are coming from a minority background, the challenges are exacerbated by the fact that many institutions do not share a diverse faculty or staff base that match the experience of many in this group. Research by Cushman (2007) points to the effects that come with this lack of social capital, “They feel the tensions of entering new territory, and their parents are unable to reassure them. Their fellow college students often seem to be members of a club of insiders to which they do not belong” (Cushman, 2007, p. 44). The transition into college is admittedly difficult for most students; however, those who do not benefit from a largely white cultural reciprocity stand to further delay and inhibit their collegiate learning curve.

Atherton (2014) further develops these ideas in relation to how students are prepared academically from the onset: “The lack of social capital transmitted from family and friends contributes the lack of awareness to the extent that lower standardized scores and GPA might affect their academic outcomes” (Atherton, 2014, p. 828). Not only are first generation students disadvantaged by a mismatch of cultural relevance once they step on many campuses, they are also not able to capitalize on knowledge gleaned from family or friends based on their experiences. Many non-first generation college students have access to people in their lives to serve as guides for the transition- everything from what to expect in a dorm, the appropriate way to address a professor, or even how to purchase textbooks. This deficit tends to have a damaging effect, even before such a student arrives on campus.

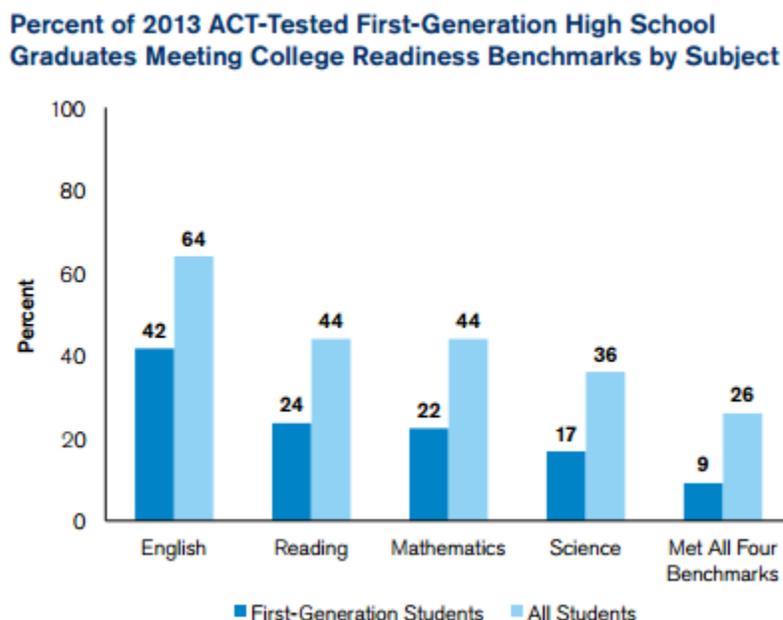
Academic Readiness. There is mounting evidence that the majority of students in the United States are entering college woefully underprepared. According to college entrance testing company ACT:

In 2012, only 25 percent of all ACT-tested high school graduates met the College Readiness Benchmarks in all four subjects, meaning that they earned the minimum score needed to have a 50 percent chance of obtaining a “B” or higher in corresponding first-year college courses. (As cited in Venezia & Jaeger, 2013, p. 119)

SAT scores would seem to validate these same concerns about all incoming students. This massive deficit in readiness results from a myriad of variables: family dynamics, teacher turnover, peer relationships, extracurricular activities, and standardized testing inconsistencies, among many others. The reality is there are about 3 million students graduating from high school annually, and they are not adequately prepared for the rigors of higher education (Venezia & Jaeger, 2013, p. 118).

Of course, this is only magnified when students are the first in their family to attend college. As referenced in the Figure 1 below, only nine percent of first generation high school students meet all four benchmarks for college readiness as measured by the ACT (ACT, 2013).

Figure 1- Percent of ACT First Generation High School Graduates Meeting College Readiness Benchmarks by Subject



In addition, it seems that in each individual readiness benchmark measured by ACT, first generation students are about 20 percent behind their non-first generation peers across the board. This represents an alarming data point that illuminates how first generation college students seemingly come in with a lower chance to succeed, simply based on their academic readiness from high school. Many of the external variables that first generation high school students face in that environment are constant when entering higher education, and in some cases they are magnified.

Work Expectations. While the academic readiness of first generation students is certainly a troubling start, an additional variable comes in the expectations around earning money while in college. According to the National Postsecondary

Student Aid Society (2000), “74% of undergraduates work an average of 25.5 hours per week while going to school” (as cited in Dundes & Marx, 2007).

Dundes and Marx also quote a study by King (2002), in which the research points to students who work more than 15 hours per week being less likely to graduate in four years (as cited in Dundes & Marx, 2007). It seems that students with this elevated work responsibility point to an added element of difficulty in balancing academics and work responsibilities, to the point where traditionally on-time graduation is at risk.

The net result of working long hours may be well known at the onset; however, the realities of home life for first generation college students may necessitate the need for these longer shifts. Curtona, Cole, Colangelo, Assouline, and Russell (1994) state, “these students are more likely to work longer hours and have greater family responsibilities than their later generation peers” (Curtona et al., 1994). Longer hours in the workplace leaves less time for other development experiences that are necessary for future success. It takes away valuable time from reviewing class notes, reading textbooks, homework, and preparing for future class sessions. According to the Association for American Colleges and Universities author Alexander McCormick (2011), “In higher education, a well-established rule of thumb holds that students should devote two hours of study time for every hour of class time” (McCormick, 2011). At many institutions, a full-time student is categorized as taking at least 12 credit hours, meaning students should be spending about 24 hours studying per week if they are to keep up with the rigor of the material. The number of studying hours only increases as

students take on more courses than the minimum, which is incentivized at institutions with flat-rate tuition costs above the full-time threshold. While the rule of thumb for studying provides an appropriate guide for students to use, the reality is current students are using much less of their time on academics outside of the classroom. The National Survey of Student Engagement (NSSE) found, “on average, full-time NSSE respondents only study about one hour for each hour of class. This figure has been relatively stable from 2000 through 2010” (as cited in McCormick, 2011).

In addition to coursework, students who are engrossed in employment responsibilities are likely to miss out on social opportunities that help develop interpersonal skills. These social opportunities serve as an important connector to the collegiate community, thereby increasing retention rates and the sense of belonging to the institution. Many campuses thrive on and promote students participating in activities such as student government, theater, music, and intramural athletics as key cogs of the overall experience. If students are unable to participate due to work responsibilities, the tie to the institution is diminished significantly.

Family Role. The family responsibilities of many first generation college students are increased, especially when tied to working longer hours. Given that parents are not college graduates, they are much less likely to be earning a higher wage than their undergraduate-degree-holding peers. A study by Danielle Kurtzleben (2014) shows that the gap between earnings for college degree holders and high school diploma holders is widening by the year. The study offers a

current picture of the situation: “median annual earnings for full-time working college-degree holders are \$17,500 greater than for those with high school diplomas only” (Kurtzleben, 2014). This increasing variance can be reflected in a need for first generation students to support their family financially, in addition to paying their own tuition. Unverferth (2012) posits that many first generation students live at home and commute to school, weakening their ability to connect socially at the institution. As you will notice, many of these tendencies are intertwined, creating a cumulative effect of disadvantage.

Stress. Not only is this increased level of stress apparent in research, but there is also a decreased probability that a first generation student will disclose these challenges to a peer or mentor. Barry, Hudley, Kelly and Cho (2009) note that these lower levels of disclosure in this population “reflect(s) a lack of social network with relevant experiences in which discussions of details of college-related stressful life events can take place” (Barry et al., 2009, p.63). This is tied directly to a lack of parental experience in the so-called “hidden curriculum” of higher education (Gullatt & Jan, 2003). This refers to many of the underlying, unspoken understandings of how to navigate the environment. Students may face additional acculturation stress when learning to discuss grades with professors, prepare for registration of courses, utilize on-campus services, or even how to translate a syllabus.

Additionally, Dyson and Rank (2006) along with Tinto (1987) reaffirm that “social stresses associated with the college transition may include anxiety about moving away from home, family, friends, and a familiar environment and the

need to forge new social relationships with roommates, friends and dating partners at college” (as cited in Barry et al., 2009, p. 56). Finkelstein, Kubzansky, Capitman and Goodman (2007) studies found “high school students with less educated parents perceive more stress, which relates to more disengagement coping, less engagement coping, less optimism, compared with more educated parents,” and these stressors may be more severe for first generation students (Finkelstein, Kubzansky, Capitman & Goodman 2007). Jenkins et al. (2013) continue to suggest that college counselors screen first generation college students regularly for post-traumatic stress syndrome, in addition to depression and life satisfaction with relation to socioeconomic status. (Jenkins et al., 2013, p. 140). Each of these distinct challenges represents a stressor for most students, yet it is magnified for first generation students.

Current Climate in Higher Education

In the current realm of higher education, there are several significant changes increasing in importance. Many schools are faced with a landscape that features uneasy financial footing. Students are finding less-traditional approaches to continuing their education. The rise of dual enrollment options, Massive Open Online Courses (MOOCs), and a wealth of online-only universities make the standard route less appealing. Traditional undergraduate institutions are forced to make difficult decisions about how to best adapt to, or embrace these changes. Institutions take on wide-sweeping tuition hikes, combined with exaggerated discounts of sorts that factor in financial aid in primarily gift and grant form. This presents challenges when left unchecked, as can be the case with institutions with

faulty business models. At the behest of Chapman College president James Doti (2014), “All colleges must systematically and steadily monitor the effectiveness of their pricing strategies — or ignore them at their own peril” (Doti, 2014). Students are also responsible for an ever-growing balloon of debt, which now totals over \$1 trillion (Heller, 2015). Affordability is a continued concern. In fact, according to a report by Moody’s Investor Service in an article by Troop (2014), “one in 10 colleges is suffering ‘acute financial distress’” (as cited in Troop, 2014). The financial situations of institutions that students are choosing from have an effect on their final decisions.

Many times the target student has so many educational alternatives that traditional enrollment has begun to dip. Smaller schools are closing their doors, as opposed to changing their ways to meet the current trends. More traditional institutions are relying on the sheer value of accreditation to steer them through rough waters. Unfortunately, this may not be enough. Admissions standards tend to lag in an effort to make up for the lack of ideal targets. Millennial students are proving to be a unique study in how to appropriately meet the needs of a changing society. Monaco and Marti (2007) assert that “although millennial students face some of the same developmental and transitional challenges as past generations, their learning styles, educational expectations, and socialization characteristics challenge the traditional programs, services, and instructional strategies offered by many colleges” (Monaco & Marti, 2007). As strategies change, schools are placing an added emphasis on not just the admissions process, but also retaining the students that step foot on campus.

This is where first generation college students enter onto an unstable terrain. Given the tendencies of their trailing academic readiness, their options and choice of institution may prove less than that of their non-first generation peers. Additionally Barry, Hudley, Kelly, and Cho (2009) reference several studies that state, “first generation college students are less likely to apply to college, less likely to attend college, and more likely to apply to less prestigious colleges” (as cited in Barry, Hudley, Kelly, & Cho, 2009, p. 56). Although they may not be only sending their applications to Ivy League schools, the efforts to retain first generation students need to be fully addressed and examined at whatever institution they attend. Ishitani (2006) further describes that “first-generation students whose parents had some college education were 99% more likely to leave their initial institutions than their counterparts were.” (Ishitani, 2006, p. 872). This is reiterated by Soria and Stebleton (2012): “first-generation students have lower retention and less academic engagement as compared with their peers” (Soria & Stebleton, 2012, p. 683). As with any student, retention for first generation students starts as early as possible. Many schools have chosen to offer intervention services as a part of the enrollment package.

Transitional Interventions

The concept of offering interventions to students is not without precedent. Like many trends in higher education, students are accustomed to varied experiences from their time in the pre-college education world. Students are often grouped by ability, behavior, language needs, and even interests to provide a more customized and targeted experience that maximizes the student’s growth

potential. While it may not be a completely new experience, collegiate interventions for first generation college students aim to fill a similar need. It is quite typical to focus on the initial stages of the college transition, as this formative period can make or break the experience for a student in relation to the institution. Shepler and Woosley (2011) describe that “early experiences appear to play a critical role in providing a foundation upon which an entire college experience may be based” (Shepler & Woosley, 2011, p. 710). The manner in which these interventions are carried out can be quite varied, however, and thus deserve varied scrutiny.

Many universities utilize a bridge program, which aims to acclimate students to the college experience before courses actually begin. Students are invited to move-in to campus early to take part in a variety of activities and even courses taught by faculty or staff. This helps build preparation for what is to come. Some research points to this being a critical period for social growth as well, which can be a key indicator of retention efforts. Petty (2014) describes, “the social component and the need to belong are critical to motivating and retaining these students in college in order for them to succeed” (Petty, 2014, p. 260).

Some schools have developed mentoring programs in addition to the bridge concept. One of the more unique versions was described by Tucker (2014), which gave first generation students an opportunity to share in a Breakfast Club of sorts; its aim was to connect faculty with students once a month to discuss what success looks like both in college and beyond (Tucker, 2014). Others still have experimented with an online model of mentoring in conjunction with a bridge

program. The research indicated that while these interventions were successful in assisting with general college awareness and information, the social and emotional connections of a true mentorship were often lacking as a result of the delivery medium (Ware & Ramos, 2013).

Another common method of intervention that this study will focus on is requiring students to take remediation courses as they relate to academic needs. While many institutions offer a course that orients all first-year students, it is common to find additional courses that focus on the basic collegiate skills necessary to find success at that level. Attewell, Lavin, Domina, and Levey (2008) assert that “remedial education acts as a gatekeeper and quality control in higher education” (Attewell, Lavin, Domina, & Levey, 2008, p. 916). Some estimates indicate that upwards of 40% of undergraduates take some sort of remediation course (Woodham, 1998). This could be to fill a gap in a specific subject area such as math or English, but it could also be manifested in a college study skills type of course. In these courses, students will typically earn a credit that does not count towards their GPA or degree but is a prerequisite for future courses within their curriculum plan. These courses effectively open doors to admitting students provisionally who might not otherwise be able to attend certain institutions. Attewell, et al. (2008) assert, “if higher education adopted a policy of not admitting students needing remedial coursework into four-year institutions, then the impact on minority students would be especially heavy.” The stakes are especially high to ensure the effectiveness of such courses, to set up such students involved for success. The purpose of this study will be to determine the

effectiveness of targeted instruction on key college success characteristics and how they affect the confidence level of students taking a remediation course compared to those who do not.

Summary

In summation, it is quite evident that first generation college students typically take on a much more challenging goal when it comes to completing their undergraduate degree than their non-first generation peers. As listed above, many schools are attempting intervention programs that are more specifically geared towards only first generation college students. These programs are not limited to institution-developed interventions, as Gullatt and Jan (2003) detail the benefits of other national programs such as TRIO, GEAR UP, and AVID. “Pre-collegiate academic development programs currently provide the most consistent means of providing educationally disadvantaged students with learning opportunities that provide an alternative to the ‘hidden curriculum’ of public schools” (Gullatt & Jan, 2003, p.3). Many of these programs stretch across multiple institutions, making their collected data quite reliable and valid. The methods of intervention discussed in this chapter, including bridge programs, mentorship programs, and remediation courses, are equally in need of validation to ensure the longevity of a higher education system that is admitting students who are less prepared now more than ever.

Although the aim of my particular research is focused on one intervention of remedial coursework, it is evident that institutions are taking on varied and multi-layered steps to determine how to best support this population. Each intervention

is similarly aligned with the shared goal of increasing rates of student success.

Understanding which methods of intervention are most potent is a key aspect of developing a rich strategy at the institutional level.

CHAPTER THREE

Research Methodology

Introduction

The methodology section of the capstone begins to put to action the first two chapters that are largely preparatory information. The content now will shift to the exact steps that will be taken in order for the research to take place. The goal will be exploring the following question: do remediation courses as a transitional intervention correlate to academic success and improved knowledge of campus resources for first generation college students in small, liberal arts higher education institutions? This will take the form of determining self-reported confidence levels in key college success traits. This section will provide detail to the paradigm my research will follow, more about the setting of the university where data will be collected, a discussion of who will be participating in broad terminology, the actual methods that will be followed for conducting the research, any tools that are needed in the process, and a brief preview of how the data will be analyzed. This section will begin to apply some of the research gleaned in the literary analysis, and unpack the intricacies of remediation courses that first generation college students tend to be a part of.

Research Paradigm

For my findings to carry any semblance of weight and generalizability, I'll need to be increasingly committed to a research paradigm. That is, what style my data collection techniques will represent most closely in order for others to find the results useful and reliable. For this specific research project, I have decided to focus most wholly on the quantitative measures, for a few reasons. Creswell (2014) indicates that "quantitative research questions inquire about the relationships among variables that the investigator seeks to know" (Creswell, 2014, p. 143). Given that my study will seek to discover relationships between several variables, such as first generation college students and their outcomes from taking remediation courses, quantitative research seems to best fit this mold. As the larger purpose behind the research question unfolds into a process, it seems that there is inherent value to an institution by including numerical data sets to backup claims about remedial coursework interventions. I am convinced that in order to truly effect change at my institution, based on the direction of data-driven decision making that is prevalent; I would be wise to proceed with a purely quantitative heading.

I will discuss in detail the full process of data collection, but the primary instrument will be a survey to participants that allows a numerical value to be assigned to confidence levels in certain outcomes that are goals for the remedial transition course. A survey was chosen as the primary means of research due to the turnaround time to administer, along with the ease of analysis after the fact. For this study, research will be considered cross-sectional, as Creswell (2014)

defines, “data collected at one point in time” (Creswell, 2014, p. 157). A survey will also allow great flexibility needed to extract data in the proper treatment and control groups, which should yield more reliable data.

As a part of the quantitative design, I will include a hypothesis that connects to previous information discovered in the literary analysis. My hope is by creating a working hypothesis, I will have crafted data collection instrument and methodology that accounts for all variables in an appropriate manner.

Setting

The test university is located in a suburb of the Twin Cities, Minnesota. It is a small, private, liberal arts school with a strong component of nondenominational Christian education tied into the curriculum. In fact, all students will graduate with a minor in Biblical Studies. According a 2014 university press release (2014), the test university reported 3378 total students in all its venues. (Awasom, 2014). The institution is located in the 16th largest metropolitan area in the United States as listed by the US Census Bureau of 2013 (United States Census Bureau, 2013).

Forbes reports the annual tuition at the test university to be about \$28,000, with \$40,000 being the total cost after room and board are added (Forbes, 2015). Each student has some level of financial aid, which comes in many forms such as grants, scholarships, and student loans. Forbes also reports that the student body is made up of 41% male and 59% female, and 86% report their race or ethnicity to be white (Forbes, 2015). U.S News reports the freshmen retention rate to be 78%, tends to be an indicator of student satisfaction with the university (U.S. News,

2014). Students have the choice of a wide variety of majors; the larger-on campus departments include education, business, ministry, and sciences. Students at the test university are required to attend daily chapel services, which focus on spiritual formation through a variety of speakers. All students also sign a covenant of community life, which prohibits alcohol use. The school participates in Division III athletics as a member of the NCAA, which draws many athletes to the university.

The students sampled will have all attended the test university at some point between 2011 and 2015. Participants are not required to have graduated from the test university in order to be considered for this study.

Participants

The participants of the study will come from a variety of cultural backgrounds, but the focus will be on the variables of students who identify as first generation college students who also completed the remediation course intervention, known as Study Strategies. This will be in direct comparison to the first generation students who did not take this remedial course. Participants will range from ages 18-29, but the vast majority will be at the front end of that spectrum. Three hundred seventy three students will be offered the survey, with a gender breakdown of 222 females and 151 males. This sample chosen is any first generation student who attended the test university between the Fall 2011 and Spring 2015 academic terms. This sample timeline was selected based on a four-year window, with comparable outcomes of course material, which aims to help

control the variable of institutional change while allowing for a significant enough sample size to draw conclusions.

Control Group - first generation college students who did not enroll in the Study Strategies course.

Treatment Group - first generation college students who enrolled and completed the Study Strategies course intervention with a passing grade. These students will be mostly freshmen, with the occasional transfer student in the sample who will not be a freshman by credit.

Methods

Human Subjects Review Process. Securing permission for research at the test university will require several steps being completed. Permission is required by both the test university and Hamline University. Initially, I will seek research from the test university by following their Institutional Review Board (IRB) procedures. A training period is necessary to inform the researcher of the proper steps to complete the IRB process. This requires a full outline of intended research, along with details of data collection instruments and their intended participants. A committee reviews the study application and determines approval for research, along with assessing compliance with the Family Educational Rights and Privacy Act (FERPA) to ensure legality and confidentiality is maintained throughout the study.

Secondly, I will need to similarly complete the steps as outlined in the Human Subjects Committee (HSC) Procedures Handbook at Hamline University, which includes a detailed layout of the methodology for research, a Letter of Informed

Consent to participants, the inclusion of the survey instrumentation, and confirmation of approval at the test university. A committee convenes to review the submission of all relevant documentation before consent is given. Upon approval, research and analysis will begin as directly outlined in the submission process.

Process

The primary method of data collection will come in the form of a short survey. The treatment group will be asked identical questions as the control group. A Google form will act as the survey instrument, and can be seen in Appendix A. Students will be given two weeks to complete the survey, which will be sent by email. The window for survey completion will open September 3, 2015 and close September 17, 2015. The purpose of the survey will be to determine the confidence level of first generation college students as it relates to collegiate preparedness in a variety of elements. The survey will be completed at the beginning of an academic year, so participants will be asked to use their best recollection of their confidence levels at the conclusion of their first semester at the test university. This equates to both the control and treatment group having the same exposure time at the test university, although they will be scattered over a four-year period.

At the time of survey, both sets of students will be asked to rate their level of confidence related to stated remedial course objectives, which are aligned with first generation college student challenges. The remedial course objectives are listed below:

- Demonstrate an understanding and a willingness to be a competent college student.
- Come prepared to focus, show discipline, and use critical thinking skills during the learning process.
- Share reasons why you want to be a successful student.
- Use strategies to manage time, read actively, take notes, prepare for and take exams, and have a method for retrieving information.
- Know and understand your learning style and how it impacts your success.
- Investigate what is needed to succeed in your major field of choice.
- Understand and utilize key campus resources to support your success.

Confidence will be measured on a scale of 1-10, with “1” signifying no confidence, and “10” representing an extreme level of confidence. Students will be encouraged to share honestly; their names will be kept confidential, and no reference will be made to the Study Strategies course in any of the communications received by participants. This is to intentionally disconnect a thought process that would influence their answers as a direct result of taking the course.

Participants will also allow research to be done based on their final cumulative GPA at the test university. This data will be collected in addition to survey information in an effort to determine if the treatment group participants made significant gains in their academic success as a result of completing Study

Strategies. To accomplish this, I will analyze the GPA differences between the treatment and control groups.

Tools

The following items are materials needed to perform this research and are included as part of the study:

- Control and treatment survey via Google Forms. APPENDIX A
- Letter of Informed Consent. APPENDIX B
- Email communications with survey directions. APPENDIX C

Because the survey will be given electronically, protection of data will be paramount. Google allows for settings to be activated that keep the information private to only me as the researcher. The format of the survey will be easy to follow and succinct. Participants are informed that the survey will take roughly five minutes to complete. Results will be displayed to me in a separate spreadsheet that logs the results in real-time. If a student is unable to access the electronic version of the survey, a hard copy will be provided with a post-marked return envelope, which minimizes any chance incompleteness due to access. The results will be analyzed using Microsoft Excel, as described below.

Data Analysis

While the main tools of data collection are important to discuss, it is of greater significance to determine how the information will then be analyzed once it is actually collected. The primary purpose of the analysis will be to determine whether or not the treatment group has any advantage in confidence of stated objectives compared with the control group. This determination can best be made

using appropriate quantitative analysis techniques. I will make use of Microsoft Excel to track and analyze data in order to make this assessment. Once all of the survey data is collected, I can then make an evaluation of the findings compared to my hypothesis.

Information about the student GPA will come from a report generated by the test university. Various data analysis tools will be utilized through Microsoft Excel to determine if change in semester GPA can be in any way linked to the completion of the Study Strategies course by the treatment group.

Limitations of the Study

While this study will shine light on whether or not remedial courses are an effective intervention for first generation college students in this setting, there are naturally some limitations to consider. Primarily, the sample size can always be enlarged to enhance the validity of the data. Ideally this survey could be applied at multiple institutions who share alignment with remedial course goals. Every effort will be made for students to complete the survey, but in reality it is unlikely that all students will fully participate in both the control and treatment groups.

Ideally, this study could also be expanded to cover multiple academic years over several similarly aligned universities in the area. Again, this would raise the sample size considerably but also lend itself to greater generalizability across a broader array of institutions. This survey is strengthened by the fact that all of the treatment group is subject to the exact same course material and experience, given they all shared the same Study Strategies course. If the survey was expanded to

track GPA changes over multiple academic years, the potential to identify where improvements are made could be added to the study.

While this survey aims to give some level of detail about the knowledge of essential skills for first generation college student academic success, it should be noted that many students who enroll in the Study Strategies course are classified as weaker academic students. These students enrolled at the test university with typically sub-standard high school GPA's and lower standardized testing scores. This could have an impact on the results to some extent, given the control group is not necessarily entering the college experience with similar academic challenges in their prior experiences.

Pascarella (2006) aptly sums up a major challenge that is largely unavoidable but necessary to note with this type of research:

Much of the research on college impact that seeks to estimate the causal effects of some intervention or special program is the frequent absence of information illuminating just why the intervention or program has the effect that it does. When this happens, it not only makes the study difficult to replicate, it also makes the intervention or program difficult to implement in a different context or setting. (Pascarella, 2006, p. 515)

This type of intervention is not easily replicated across institutions because there are a multitude of variables that are simply too challenging to control for. Nevertheless, this study does have a stronger impact on like-oriented universities with similar curricula and student populations.

Summary

To this point, the research has taken shape and is ready for implementation. Outlining the research paradigm, setting, participants, methods, tools needed, data analysis, and limitations of the study all help to form the planning stages of the research project. Looking through each component is vital to the overall success of the end product. Given the information known at this point in the study, I would expect the students in the treatment group to have a very slight advantage over the control group peers in confidence levels given the direct instruction of the Study Strategies course. However, I do not think it will be overwhelming given the pre-collegiate characteristics of both groups. From this point on will be an examination of the study and results, along with a discussion about the implications moving forward.

CHAPTER FOUR

Results

Introduction

As the literature review and methodology have shifted to research completion, the results of the study gave further clarity to the mindset that first generation college students have while transitioning to the higher education environment. The findings of this section will also give further insight to the research question: do remediation courses as a transitional intervention correlate to confidence in academic success and improved knowledge of campus resources for first-generation college students in small, liberal arts higher education institutions? It will show how the levels of confidence shift as a function of being a first generation student while either being exposed to targeted instruction through a remediation course, or not having that experience at all.

Returned Surveys

The survey was sent to 397 people who were at one time or currently are students at the test university between Fall semester 2011 and Spring semester 2015. Each of these individuals is a first generation college student. Ninety-eight individuals responded to the survey, for a response rate of 24.7%, each fully completing the survey in its entirety as shown in Figure 2. The survey was sent out initially by email link to a Google Form on September 3, 2015. A reminder

email was sent to nonrespondents on September 10, 2015, and the survey closed on September 17, 2015. Within the 98 respondents, 9.2% were in the treatment group which indicates that the student enrolled in and completed the Study Strategies course. This left 90.8% of the respondents in the control group meaning they did not enroll in the Study Strategies course in their time at the test university.

Figure 2- Response Rate

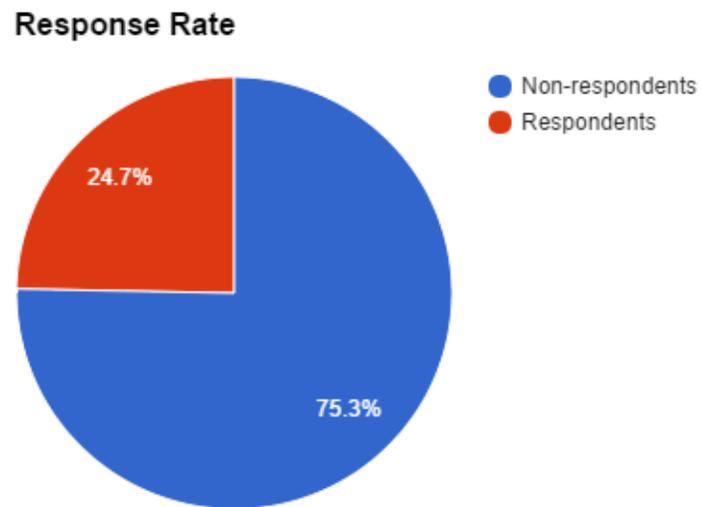
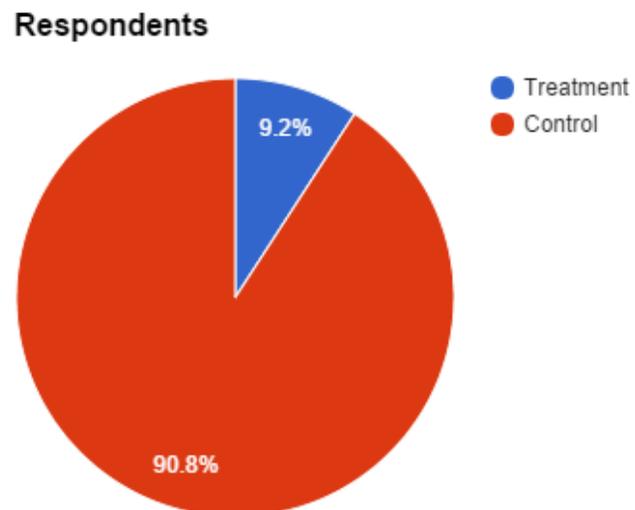


Figure 3- Respondents by Group



Characteristics of Respondents

As it may be deduced through other points in this study, the first generation students on most campuses share some unique characteristics that distinguish them from their peers. Yet within those participants in the study that shared their first generation status, there was a wide variety of characteristics that must be examined in order to analyze the results with proper perspective. It should be noted that while first generation students in a larger sample increases the likelihood of sharing the traits discussed in previous chapters, each student represents his or her distinct situation with individual nuance that can be difficult to quantify. This section will seek to identify some of those nuances within this sampling of participants.

ACT

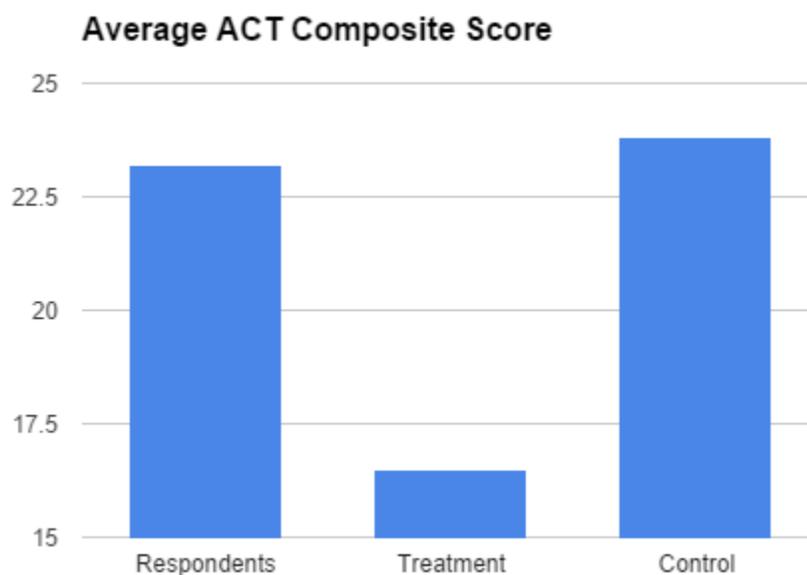
Respondents in the sample reported to the test university an average ACT composite score of 23.2. According to ACT:

“A score at or above the ACT College Readiness Benchmark indicates at least a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in first year college courses, such as English Composition, College Algebra, Social Sciences, and Biology” (ACT, 2015).

For 2015, the benchmark score is 21.25 (ACT, 2015). This assumes the first generation students who participated in this study have less than a 50% chance of obtaining a B or higher in their first year courses.

The variance increases when comparing the control and treatment groups. Students in the control group reported ACT composite scores with an average of 23.8, while those in the treatment group scored only 16.5. This equates to a difference of 7.3 between the two groups. This did not come as a surprise, given the students who are required to enroll in the Study Strategies course in the treatment group are those who have a lower incoming ACT composite score. It turns out that ACT scores may have had a larger impact on overall results than originally anticipated.

Figure 4- Average ACT Composite Score



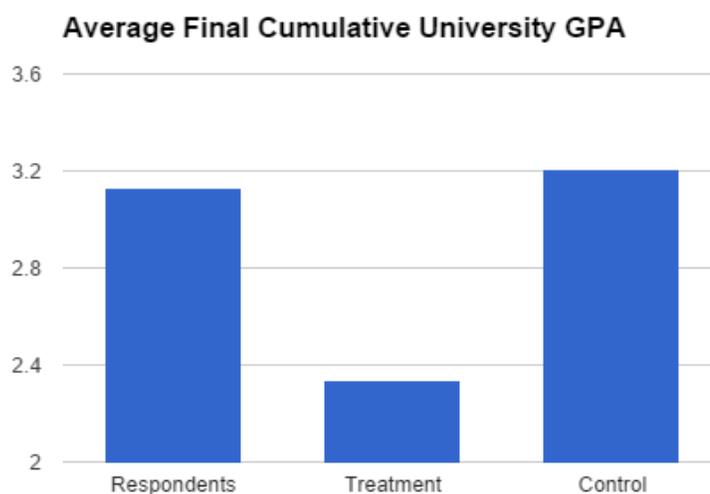
GPA

Similarly of interest is developing a firm perspective on precisely how well the participants finished academically while at the test university. Academic success

is primarily measured using GPA, although this is not a perfect measure across fields of study. It does, however, give the best holistic picture of if the student was well prepared for the rigor of academics, taking into account several of the factors that first generation students may be exposed to in greater intensity than their peers. The survey examined some of these components in greater detail.

When looking at the GPA data, it is important to note that not all of the participants completed their education to the point of a bachelor's degree at the test university. The GPA listed is a final cumulative GPA at the test university only. This did not account for a student who experienced an academic performance shift if he or she had left the test university at a later date. For some participants the cumulative GPA is representative of only one semester of work, while for others it could represent a graduating GPA. The overall respondent average GPA was 3.13, while the treatment group was significantly lower at 2.34, with control group averaging a 3.21.

Figure 5- Average Cumulative University GPA



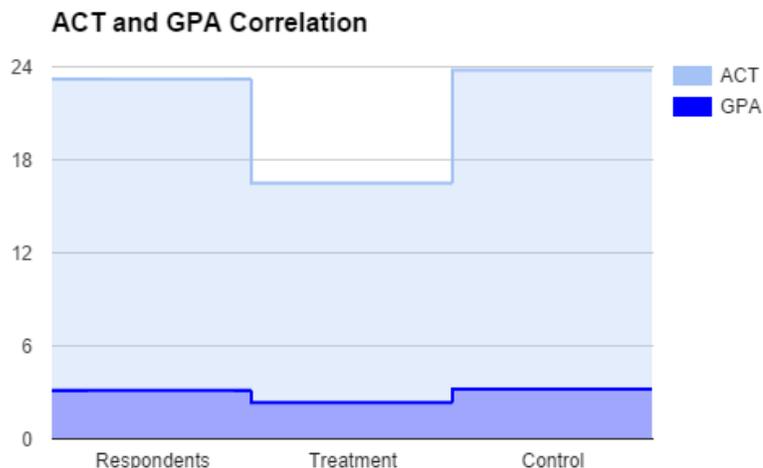
Connection Between ACT and GPA

When analyzing the connection between incoming ACT score and exiting cumulative GPA across the total respondents, treatment group, and control group, it is clear that the two variables were incredibly related. An incoming ACT score seems to have had a profound predictive quality on a cumulative GPA. Again, this should not come as a surprise, given ACT is in the business of determining the readiness of high school students for college. While it was expected that the ACT would be predictive of the cumulative GPA, it did seem to be abnormally accurate. As shown in Table 1, the treatment GPA was 71.1% of the total respondents' GPA, and treatment ACT was 74.7% of the total respondents' ACT. The control GPA was 102.5% of the total respondents' GPA, and control ACT was also 102.5% of the total respondents' ACT. Figure 6 gives a graphical representation of this data. Undoubtedly, the connection between these two variables is strong.

Table 1 - Comparison of Group divided by Respondents, ACT and GPA

	ACT	GPA
Treatment/Respondents	71.1%	74.7%
Control/Respondents	102.5%	102.5%

Figure 6- ACT and GPA Correlation



Additional Characteristics

It is also of interest to note the breakdown between males and females in the respondents. Of the 98 respondents, 40 were male and 58 are female. This is again highly correlated with the overall institutional male-to-female ratio of 41/59, which makes for a useful sample. The treatment and control groups were made up of a similar ratio as well. Additionally, within the respondents, there were 24.5% who were at one point involved in university sponsored athletics, while 75.5% were not. Of the respondents who identified their ethnicity, the majority (45.9%) identified as white. The other representation came from Hispanic, Multi-Racial, Black or African American, or Asian/Pacific Islander each with small quantities. 45.9% also chose not to identify their ethnicity during their admissions process.

Figure 7- Male and Female Breakdown

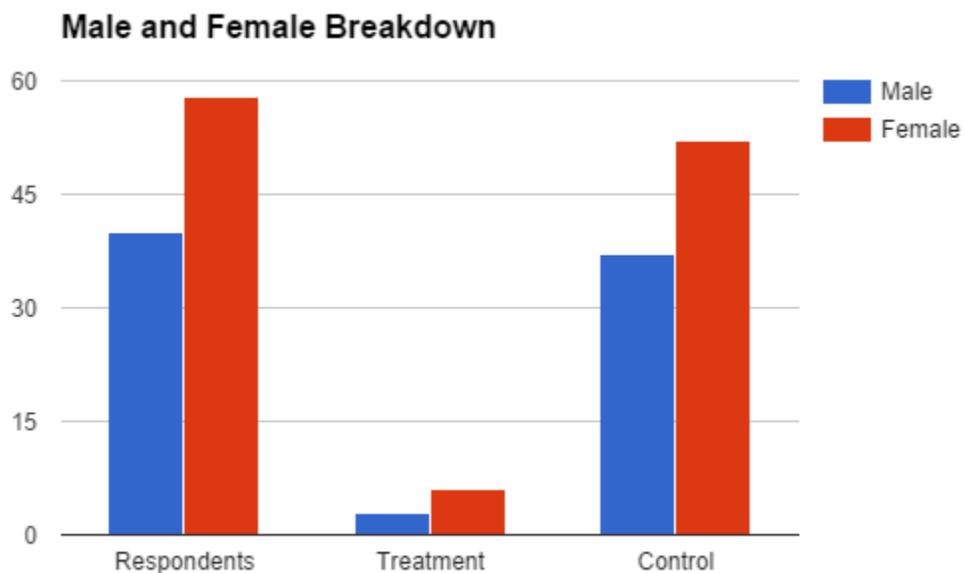


Figure 8- Athletic Breakdown

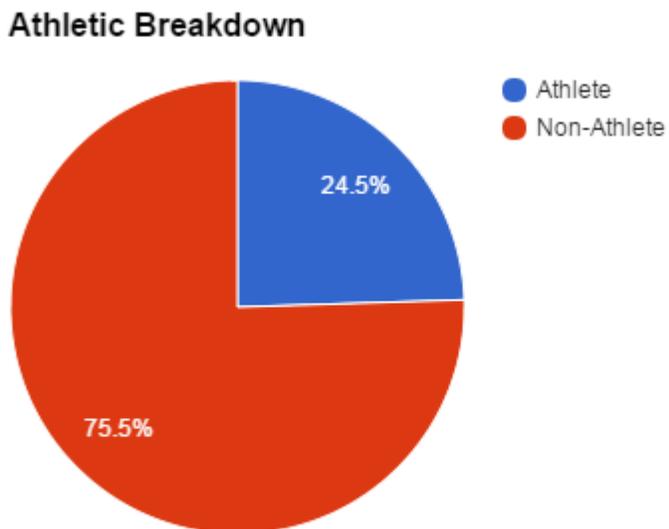
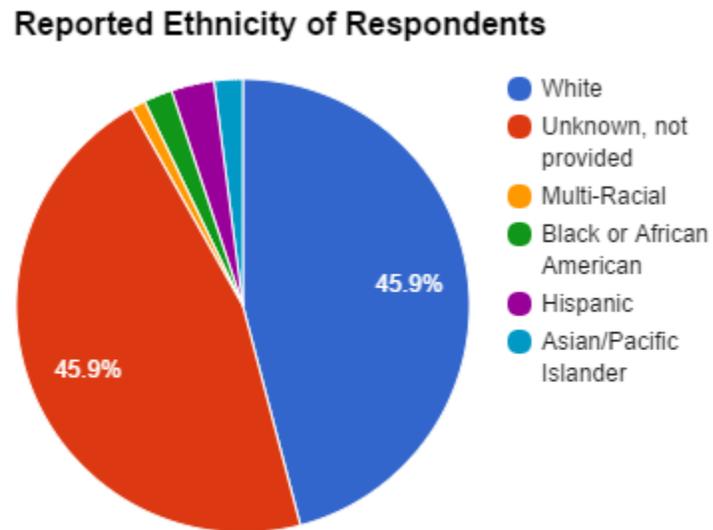


Figure 9- Reported Ethnicity of Respondents



Survey Results

After understanding the characteristics of the respondents, it allows a fuller context to be developed for the results of the survey. Respondents were asked to rate their level of confidence during their first semester at the test university in the following areas:

- your understanding of what it took to be a competent college student
- your ability to think critically in the classroom
- your ability to manage your time
- your ability to organize your assignments
- your ability to take college exams

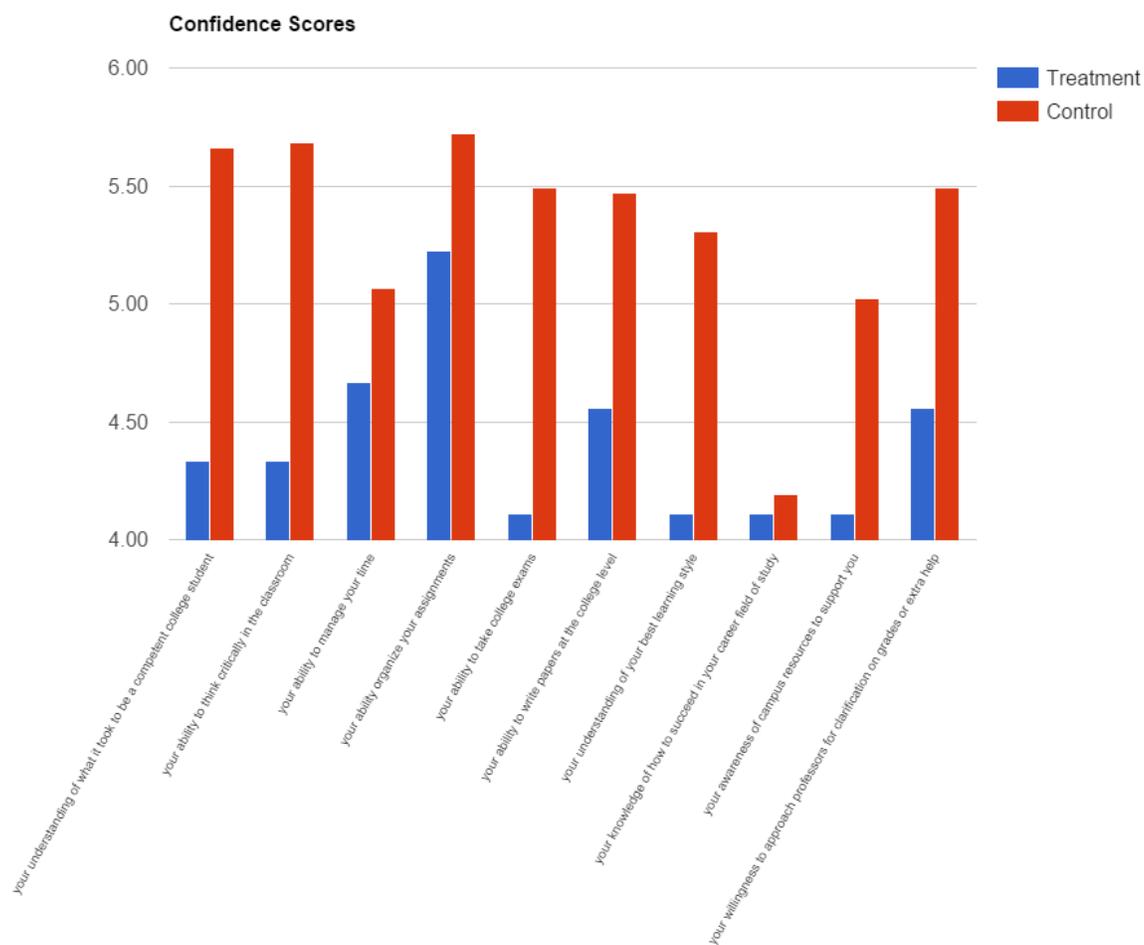
- your ability to write papers at the college level
- your understanding of your best learning style
- your knowledge of how to succeed in your career field of study
- your awareness of campus resources to support you
- your willingness to approach professors for clarification on grades or extra help

The respondents rated their confidence level on a scale from 1-10, with “1” indicating “no confidence” and “10” indicating “extreme confidence.” The results are shown in the Table 2, which are conditionally formatted to visually illustrate the variance across each question. Green was used to represent lower levels of confidence, while red shows higher levels of confidence. The treatment group is the first row of data, followed by the control group data in the second row, while the third row signifies the difference between the groups. A higher number in the “Difference” row shows the level by which the control group has a confidence increase over its treatment group peers. Figure 10 gives the question prompt results in graphical format, where the treatment group is represented by blue and the control group is represented by red.

Table 2- Survey Results

	your understanding of what it took to be a competent college student	your ability to think critically in the classroom	your ability to manage your time	your ability to organize your assignments	your ability to take college exams	your ability to write papers at the college level	your understanding of your best learning style	your knowledge of how to succeed in your career field of study	your awareness of campus resources to support you	your willingness to approach professors for clarification on grades or extra help	Overall
Treatment	4.33	4.33	4.67	5.22	4.11	4.56	4.11	4.11	4.11	4.56	4.41
Control	5.66	5.69	5.07	5.72	5.49	5.47	5.30	4.19	5.02	5.49	5.31
Difference	1.33	1.35	0.40	0.50	1.38	0.92	1.19	0.08	0.91	0.94	0.90

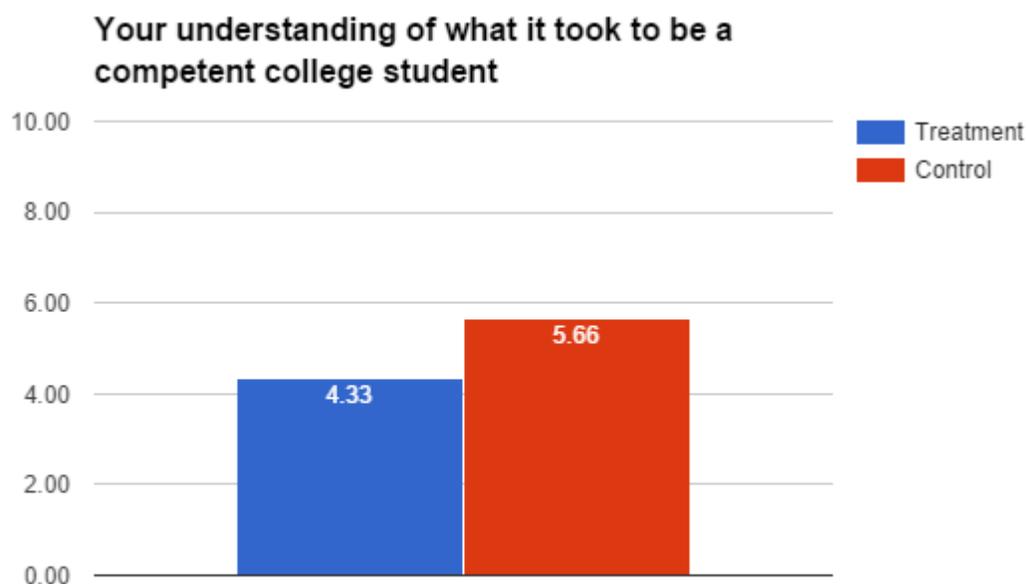
Figure 10- Survey Results by Group



The following pages will include a graphical representation of each question prompt results, where blue indicates the treatment group and red indicates the control group. A brief analysis of the findings of each prompt result will follow.

Question Prompt 1: On a scale of 1-10, indicate your confidence level related to your understanding of what it took to be a competent college student.

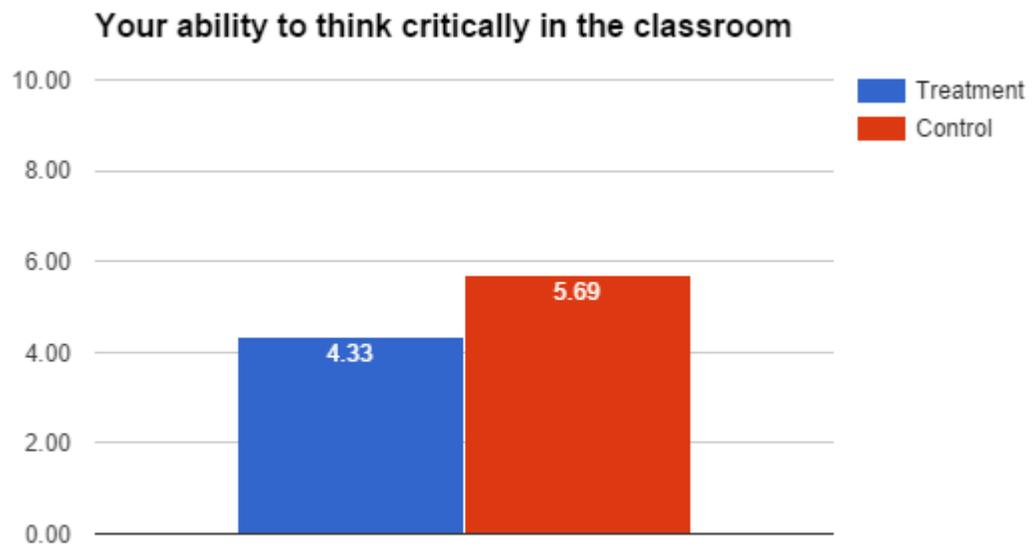
Figure 11 - Question Prompt 1



Summary of Results: The figure shows the control group had a higher average confidence score of 5.66 than the treatment group at 4.33. This equated to a difference in averages of 1.33. This represented the third largest gap of any of the question prompt results. The prompt offered the participant an opportunity to give an overall self-assessment as they entered college.

Question Prompt 2: On a scale of 1-10, indicate your confidence level related to your ability to think critically in the classroom.

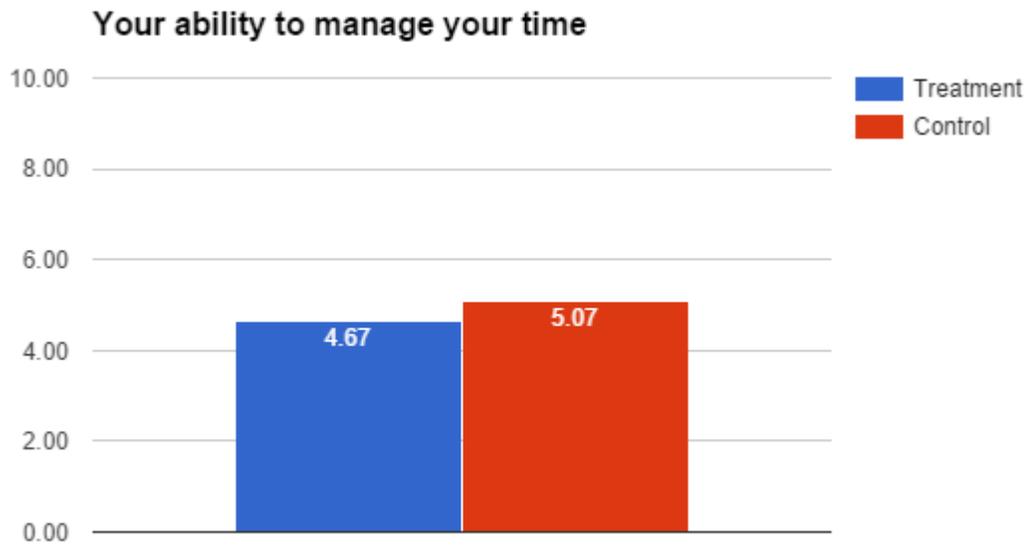
Figure 12 - Question Prompt 2



Summary of Results: The figure shows the control group had a higher average confidence score of 5.69 than the treatment group at 4.33. This equated to a difference in averages of 1.36. This represented the largest gap between the two groups of respondents. This was very interesting to analyze, as the ability to think critically is something that is assessed on the ACT exam and more crucial to master at the college level.

Question Prompt 3: On a scale of 1-10, indicate your confidence level related to your ability to manage your time.

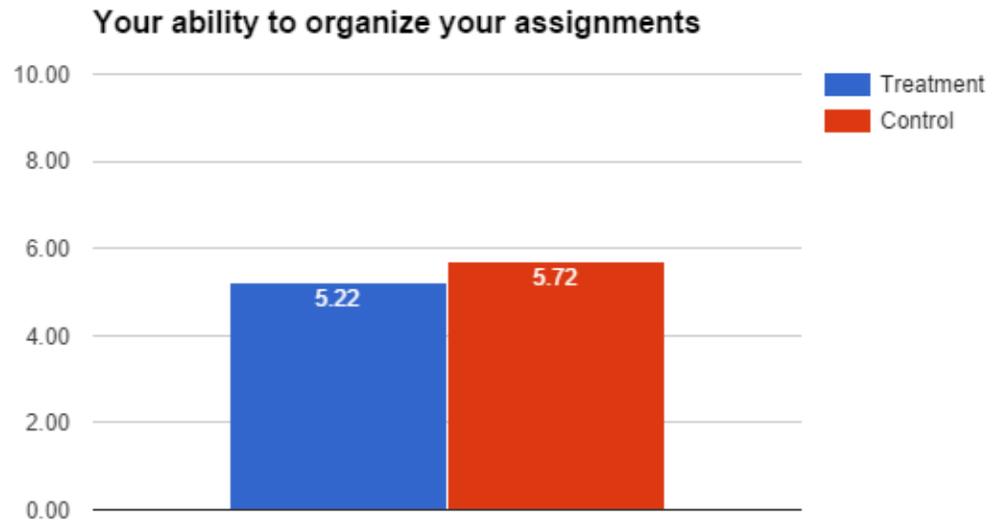
Figure 13 - Question Prompt 3



Summary of Results: The figure shows the control group had a higher average confidence score of 5.07 than the treatment group at 4.67. This equated to a difference in averages of 0.40. There was not a significant difference between the two respondent groups.

Question Prompt 4: On a scale of 1-10, indicate your confidence level related to your ability to organize your assignments.

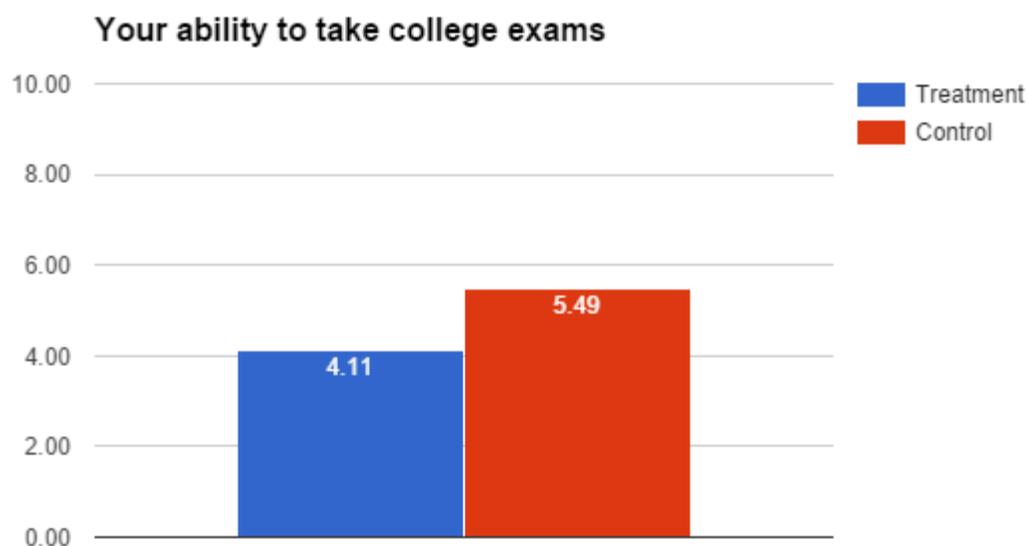
Figure 14 - Question Prompt 4



Summary of Results: The figure shows the control group had a higher average confidence score of 5.72 than the treatment group at 5.22. This equated to a difference in averages of 0.50. While the difference was minimal, these averages represented the only confidence scores that are each above 5.00, indicating this was collectively where the respondents as a whole were most confident.

Question Prompt 5: On a scale of 1-10, indicate your confidence level related to your ability to take college exams.

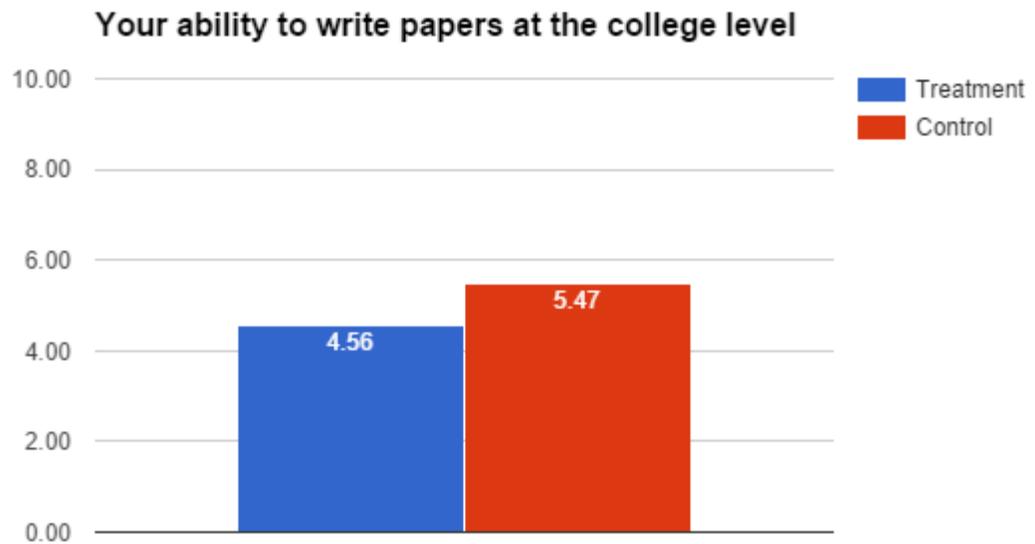
Figure 15 - Question Prompt 5



Summary of Results: The figure shows the control group had a higher average confidence score of 5.49 than the treatment group at 4.11. This equated to a difference in averages of 1.38. The ability to take college exams proved to be the second largest gap represented in this study.

Question Prompt 6: On a scale of 1-10, indicate your confidence level related to your ability to write papers at the college level.

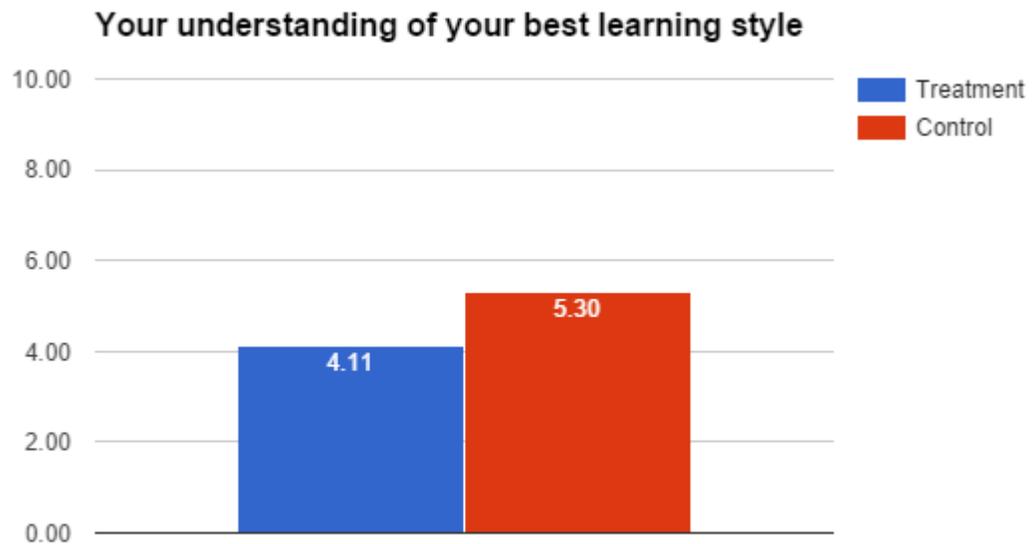
Figure 16 - Question Prompt 6



Summary of Results: The figure shows the control group had a higher average confidence score of 5.47 than the treatment group at 4.56. This equated to a difference in averages of 0.91. This question prompt was a midpoint of sorts for both groups, rating neither highly or lowly in confidence score.

Question Prompt 7: On a scale of 1-10, indicate your confidence level related to your understanding of your best learning style.

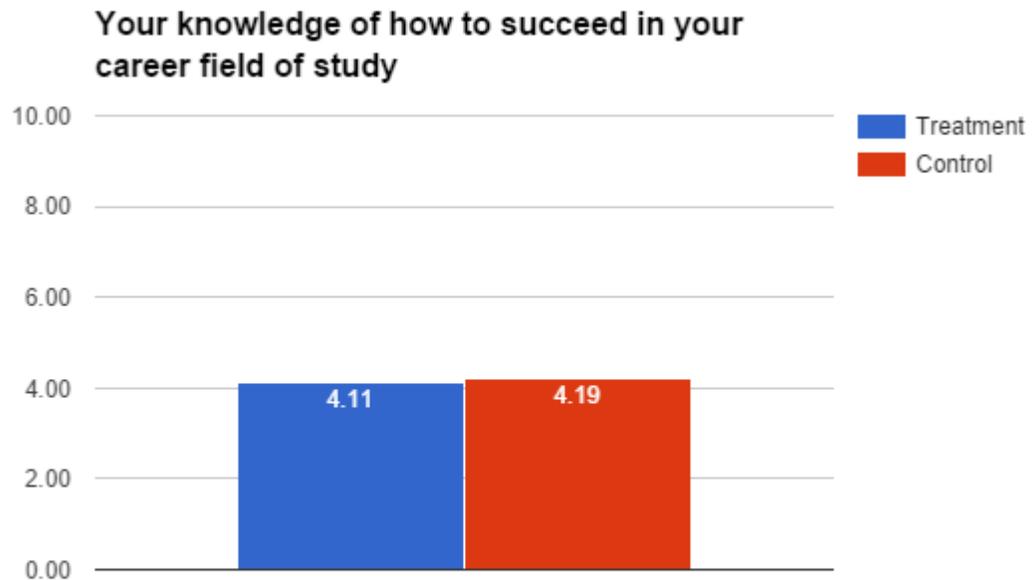
Figure 17 - Question Prompt 7



Summary of Results: The figure shows the control group had a higher average confidence score of 5.30 than the treatment group at 4.11. This equated to a difference in averages of 1.19. This was one of four question prompts that had equally the lowest confidence score for the treatment group. This was a subject that is covered in great detail in the Study Strategies course, so it was interesting to see it score so lowly within the treatment group.

Question Prompt 8: On a scale of 1-10, indicate your confidence level related to your knowledge of how to succeed in your career field of study.

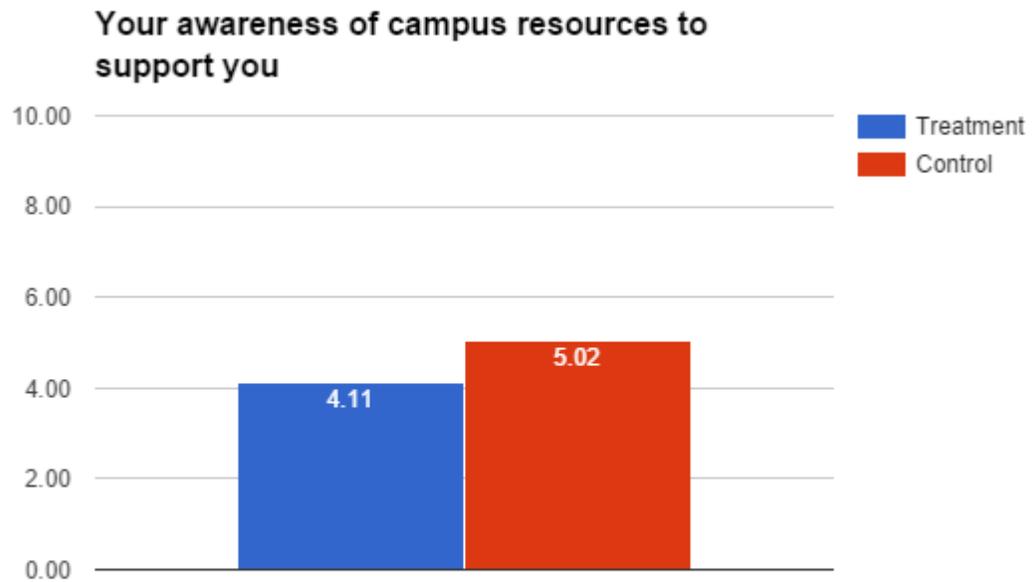
Figure 18 - Question Prompt 8



Summary of Results: The figure shows the control group had a higher average confidence score of 4.19 than the treatment group at 4.11. This equated to a difference in averages of 0.08. The confidence scores for both the treatment and control groups marked the lowest for any question, in addition to the smallest gap in values.

Question Prompt 9: On a scale of 1-10, indicate your confidence level related to your awareness of campus resources to support you.

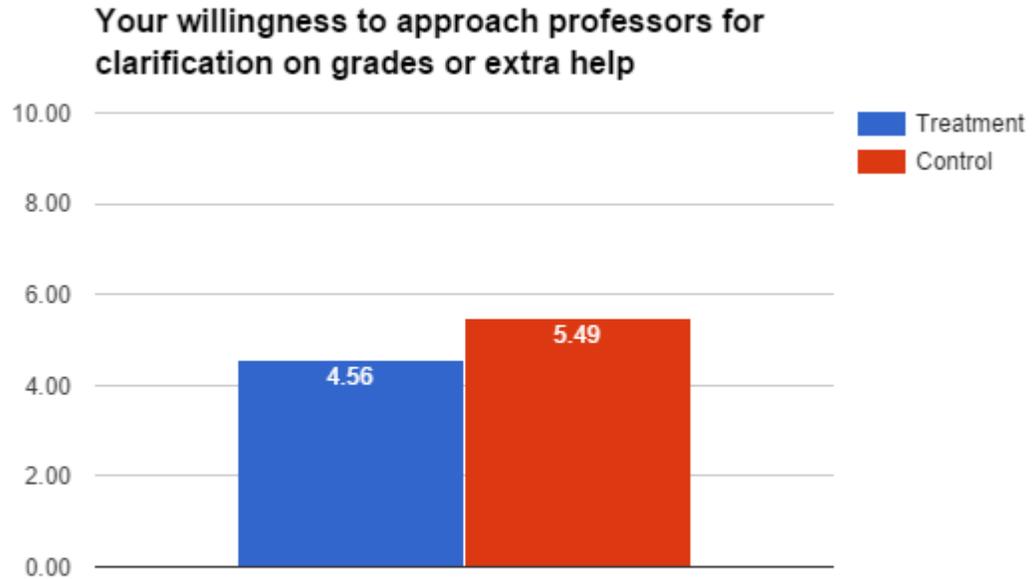
Figure 19 - Question Prompt 9



Summary of Results: The figure shows the control group had a higher average confidence score of 5.02 than the treatment group at 4.11. This equated to a difference in averages of 0.91. Again the treatment group was registering its lowest confidence score, which is to some surprise given level of attention given to this topic in the Study Strategies course.

Question Prompt 10: On a scale of 1-10, indicate your confidence level related to your willingness to approach professors for clarification on grades or extra help.

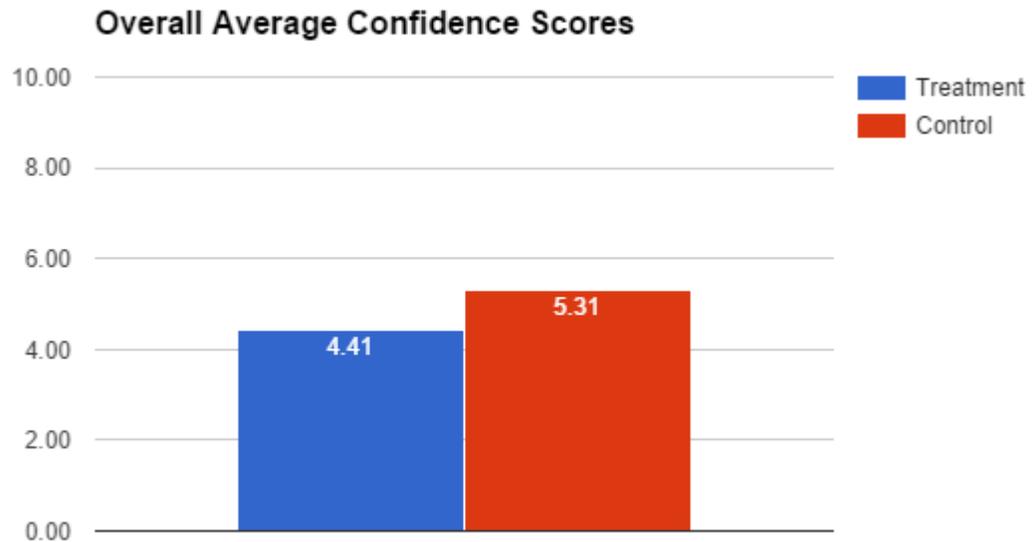
Figure 20 - Question Prompt 10



Summary of Results: The figure shows the control group had a higher average confidence score of 5.49 than the treatment group at 4.56. This equated to a difference in averages of 0.08. This question prompt was another midpoint, where both groups scored within the norm compared to their other responses.

Overall Average Confidence Scores: On a scale of 1-10, student averages across all prompts were calculated.

Figure 21 - Overall Average Confidence Scores



Summary of Results: The figure shows the control group had a higher average confidence score of 5.31 than the treatment group at 4.41. This equated to a difference in averages of 0.90. On average, the control group who did not take the Study Strategies course held close to a full point of confidence score over their treatment group peers.

Analysis

As an overall assessment of the results, it was quite apparent that the students in the treatment group, who were not a part of the Study Strategies course, were less confident as a whole than their control group peers. As an aggregate average of the question prompts, the control group was almost a full point more confident, at .90 specifically. What made up this aggregate average was the range of outcomes for each of the question prompts, with some indicating a larger gap in confidence level than others.

It is particularly interesting to see that there were certain question prompts that generally all of these first generation students were more confident in than others, regardless of what group they were in. The respondents overall were most confident in their ability to organize their assignments, 5.22 for the treatment group and 5.72 for the control group. It could be deducted that since these students typically have been working longer hours and carrying additional family responsibility, it could be an asset when organizing coursework. This question prompt was the only one out of 10 prompts to have had greater than the midpoint answer of 5.

Curiously, the question prompt that elicited the consensus lowest confidence level in all respondents was related to their knowledge of how to succeed in their career field of study. This prompt also happened to be the smallest gap between the treatment and control groups, with a difference of only .08. It is possible that the nature of being a first generation college student would represent a natural

lack of understanding about how to apply a college degree to a career, since their parents would not have paved that path in their previous generation.

The greatest difference between the control group and treatment group in their answers to a question prompt was related to confidence in ability to take college level exams. This was tied for the lowest confidence score as well for the treatment group, at only 4.11. Their non-Study Strategies peers in the control group were significantly more confident in their ability to take exams, at a score of 5.49. A similar theme was shown with the question prompt related to confidence in their ability to think critically in the classroom. For this prompt the control group had a confidence score of 5.69, while the treatment group lagged with a score of 4.33, for a difference of 1.35. After examining the characteristics of both the treatment and control groups, it did not come as a surprise that the control group, with significantly higher ACT scores, would be much more confident in their ability to think critically in a classroom forum. This also was reflected in their differences with final academic results shown previously in their GPA discrepancies.

Reflection

The underlying trend in each of these scores was the fact that the students who were enrolled in the Study Strategies course were most definitely less confident in the various question prompts across the board than their peers in the control group. Initially it would have been predicted that the students in the treatment group, who were exposed to specific strategies to address each of these aspects of being successful in and beyond college, would have higher confidence scores than

their control group peers. It turned out that this was not the case. It did give useful insight to exactly which strategies need to be improved in the course methodology so that these first generation students can reach the same levels of academic success as the control group. The hope with enrolling these students in such a course would be to close that gap as much as possible by the time the first semester is completed.

The results of this study indicated that there is in fact a significant need for all first generation college students to have support in their transition. The outcome was different than the expectation that the treatment group would have an advantage after receiving specific instruction related to these prompts. What the survey did show, however, was that as a general consensus the group of respondents was not overly confident in its ability to succeed in several aspects of college. While it may have been deducted to some extent that first generation college students would have such lowered expectations, it is a troubling indicator that institutions of higher education and even high schools can be doing more to prepare this population.

CHAPTER FIVE

Conclusion

Introduction

Now that the data has been collected and analyzed, it allows for and expanded conversation on what the ramifications are for the higher education landscape.

The results also bring further data points to help answer the research question: do remediation courses as a transitional intervention correlate to confidence in academic success and improved knowledge of campus resources for first-generation college students in small, liberal arts higher education institutions?

This final chapter will revisit the literature review, discuss limitations and further research opportunities, how this information will be used to illuminate changes in strategy, and finally a reflection on the author's personal growth.

Initial Reflection

The reflections of this study come in the form of both overall analysis of the numbers and also in the implications on individual students, each with a unique story to tell. Since the foundation of the research is a quantitative methodology, the primary focus of the data returns is able to shed light on a seemingly growing problem in higher education. As institutions open their doors to a more diverse population, across socio-economic status, ethnicities, cultures, and especially first generation college students, the need for universities to adapt becomes obvious. It

is critical to move with the changing demographics in order to remain viable with the challenges facing higher education.

The need is not merely a financial one, but also of stewardship towards the admitted student. The general standard should remain that any admitted student is offered an opportunity to succeed. If an institution is not able to provide a stable environment to its specific subset of students, it is a key indicator that such students should not pass through the admissions process. Once the institution moves to accept students who are less than capable, it seems to follow that the structural well-being of that institution is not solidified. The data collected in this research study seems to suggest that regardless of academic history coming into college, by the time the first semester of college has ended, the resounding response is students in this population are barely halfway confident in various collegiate success measures.

Additionally, the data seems to point out that those students whom we know will be at a deficit, based on key admissions data points such as composite ACT scores, will struggle to an even greater extent than their first generation peers with a history of success. Interestingly, the students who were in the control group received targeted instruction on these very same question prompts, so the assumption could be made that without this style of intervention, the gap between the control group and treatment group would be even wider. Since each of the respondents in this study represent an individual history and set of circumstances, it is difficult to make broad sweeping assumptions. What is clear, however, is

there is something to suggest that the first generation students are still quite a ways from feeling confident in their abilities after their first semester.

Literature Review Revisited

The literature review offered a glimpse into what potential interventions are currently in place and how they may have varying impact. It also showed that this first generation college student population is very unique in its shared traits and tendencies. It identified research by Petty (2014) that confirms the reality that first generation students are nearly four times more likely to leave without a degree than their counterparts (Petty, 2014, p. 258). Although this study did not make significant mention of the demographic variables of the participants as it relates to socio-economic status, we do know from other research that first generation college students are more likely to come from less wealthy families and tend to work longer hours while in school than their peers (Curtona et al., 1994).

We also saw that only nine percent of first generation high school students meet all four benchmarks for college readiness as measured by the ACT (ACT, 2013). This was displayed well in the data collected from respondents, as there was a clear deficit in academic readiness for the treatment group. This illuminates the need to find the most effective interventions to support such first generation students. This study seems to show that although the treatment group was exposed to targeted training in core success areas, it was not enough to match them with their peers who did not require enrollment in the Study Strategies course based on incoming ACT test measures. Interestingly, this research found

the greatest discrepancy in confidence related to test-taking at the collegiate level, 4.11 for the treatment group, and 5.49 for the control group.

Again, Kurtzleben (2014) found that “median annual earnings for full-time working college-degree holders are \$17,500 greater than for those with high school diplomas only” (Kurtzleben, 2014). This seems to be echoed by this study, which shows for both the control and treatment groups the lowest confidence levels seem to be related to how to succeed in their career field of study. The lack of confidence in this area could be a correlation to their parents who may not have been as financially successful as their non-first generation peers. This would be another opportunity for further research, discovering how parental confidence affects the next generation. The literature review served as a foundation for the research but also brings up clarification and points to reconsider going forward.

Limitations

Any study will have several limitations that reduce the overall effectiveness of the outcome data. What is most evident in this study is the somewhat small sample size. Although the overall pool was limited to a small institution that likely has a smaller proportion of first generation college students to begin with, receiving a 24.7% response rate and 98 total responses seems significant to an institution that typically maxes out at about 1700 on-campus undergraduate students. Nevertheless, it would be valuable to see the number of respondents in the treatment group increase, so the data they provided would serve to be more reliable of the overall group.

It is possible that the research could be expanded to similar institutions that offer an introductory course with like-structured content. Another possibility would be to expand the number of historical years the survey requests participation from. Although as the number of years expand, the variable of content delivered and pedagogical style would somewhat dilute the results. Expanded years would also bring about the challenge of institutional mission shifts or even a wave of change in higher education in general that could foster different results over a longer timeframe. A benefit would be in measuring the effectiveness of certain instructors within a timeframe.

The results of this study are confined to a point-in-time analysis that represents a small window within the students' collegiate experience. It is quite possible that a student may reach a fuller realization of his or her college potential a full semester after completing an introductory course. What this information does illuminate is the effects are likely not immediate, as the data does not show significant advantage towards those students within the course.

It also is not clear what amount of growth takes place for each of the respondents. Ideally, this study could be used to measure from a static point at the beginning of the semester, before any instructional intervention is applied to the treatment group. At the conclusion of the semester, the same questions would be asked to both the control and treatment group to measure how much growth in each confidence prompt is naturally occurring in a college setting and how much can be attributed to a semester of general remedial coursework. This seems to be the greatest limitation of the study, ideally remedied by multiple checkpoints of

confidence level throughout the years a student is attending college. The time constraints to fulfill this greater vision were simply too great.

Further Research

It may be of additional benefit to compare students within a range of incoming ACT scores, whether they are required to participate in the course or not. This would nullify any academic advantage that a control group participant would have on his or her treatment group peers, thus offering a clearer picture of the effectiveness of the Study Strategies course.

In addition to researching at what point the information provided in the remediation course intervention became most useful, it would be of great interest to determine which of the respondents in either group persisted through graduation. This could be done in a number of ways, but it seems to reason that this additional research should be focused on the institution in which the students completed the course, not simply that they graduated at some point from any school. Such further study could be used as a rationale for admissions criteria amendment as it gives direct evidence towards retention outcomes that are increasingly important in today's environment of higher education, as outlined in the literature review. The information collected in this research study seems to point to students in the treatment group being less likely to graduate, given their self-assessed confidence level in key success indicator areas. Confidence does not always correlate perfectly with outcomes, but it stands to reason that it does have some tangible impact. Other research seems to point to students enrolled in remediation courses struggling to persist. This is the case even within larger

sample sizes, as research by Attewell, Lavin, Domina, and Levey (2008) affirms that “at four-year institutions, taking some remedial courses did modestly lower student chances of graduation, even after we took prior academic preparation and skills into account” (Attewell, Lavin, Domina, & Levey, 2008, p. 915). This aligns with the assumption from our study based on lower ACT scores that the academic readiness of these students in the treatment group was significantly below average for the test university as a whole. Attewell et al. (2008) continue on to assert that “these lower graduation rates faced by students in four-year colleges predominantly reflected skill problems students brought from high school, rather than a negative consequence from taking remedial courses” (Attewell et al., 2008, p. 916).

Potential Implications and Communication Plan

As the data from this research is processed, it should be noted how these findings could support change at the institutional level. Initially, awareness of the first generation student situation is a significant need on many campuses. It will be valuable to bring to the forefront the various characteristics of this growing population with the lens of the changing higher education climate. This study provides the framework for discussions with key areas of the institution including Enrollment Management, Academic Affairs, Academic Support, Career Services, Student Life, and Counseling Services among others. Knowing detailed information about the students who are admitted to the institution helps faculty and staff better serve their unique needs. Programming can be developed on an integrated level to illuminate the benefits and challenges of being a first

generation student to multiple areas of the campus. As it relates to intervention planning, this research seems to show that there is a significant need to bolster the academic remediation course requirements for students with lower academic readiness indicators with additional supports that go beyond the classroom.

The literature review outlined several other interventions that could connect to the course to more adequately fit the needs. It seems the remediation course on its own is not enough to close the gap to more ready first generation peers, much less students who have the benefit of parents that previously attended college. While the curriculum is aligned with the confidence measures of this study, the pedagogical style could be further analyzed to determine if such methods are most beneficial to this group.

Additionally, Enrollment Management would have a significant stake in understanding the study as it relates to retention measures and admissions selection standards. Academic Support would be able to most readily offer intervention options such as peer mentoring or non-classroom study skills preparation. Career Services would be interested in bridging the gap of a family member who did not experience a transition from graduation to job seeking. Lastly, Student Life would have a stake in understanding the unique family life characteristics and work demands that this population typically comes with.

These results can be shared most efficiently with each individual group as opposed to a large setting. This would allow time for pointed discussion related to each area of the institution with significant interest. Most importantly would be the facilitation of a discussion with the instructor of the remediation course itself,

and how the confidence indicators can shape the course syllabus to provide more instructional time towards the areas students are least confident in. This could also include more time to introducing the other campus resources that are mentioned in this study.

Growth of the Author

The experience of creating and implementing a research study has had an impact on my personal and professional development. Understanding the situation that first generation college students face helps me personally to develop a more well-rounded worldview that accounts for additional experiences outside of my own. As a father, it helps me understand the experiences that I have had in completing various levels of education and the impact that has on my children. Professionally, I am able to better speak into supporting this population at our institution through the various programs that have been developed, with changes that focus on some of the deficits in confidence that our students bring with them. I also feel more confident in advocating for these students on an individual basis, while still seeking to learn more along the way. My role as an educator is emboldened through this research process, and I am thankful for the respondents and the opportunity to grow in these ways through Hamline University.

your willingness to approach professors for clarification on grades or extra help *

1 2 3 4 5 6 7 8 9 10

No Confidence Extremely Confident

By submitting this form you are certifying that you agree to the use of this information as outlined in the "Informed Consent Letter" attached in the email. Your name will remain confidential.

Submit

Never submit passwords through Google Forms.

Powered by
 Google Forms

This form was created inside of Hamline University.
[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)

APPENDIX B - INFORMED CONSENT LETTER

August 7, 2015

Dear _____,

I am a graduate student working on an advanced degree in education at Hamline University, St. Paul, Minnesota. As part of my graduate work, I plan to conduct research this Fall 2015 with students who attended our university between Fall 2011 and Spring 2015. The purpose of this letter is to request your participation. This research is public scholarship as the abstract and final product will be cataloged in Hamline's Bush Library Digital Commons, a searchable electronic repository and that it may be published or used in other ways.

The topic of my master's capstone (thesis) is assessing the transition for students into the university. I plan to survey students about their perspectives and experiences with their confidence in navigating higher education as it relates to academic success at our institution. The survey will be sent electronically and last about 5 minutes. Besides the survey, I will also analyze other factors such as participant results from incoming assessments, high school and college GPA, and demographic information as indicated in the admissions process. After completing the capstone, I will summarize the findings in a report to be distributed to our school.

There is little to no risk if you choose to be surveyed. All results will be confidential and anonymous. Pseudonyms for the school and participants will be used. **The survey will be conducted within a two week window, so there is ample time to fit it into your schedule, with the survey itself taking roughly five minutes.** If you would like the survey in a language other than English, please feel free to contact me.

Participation in the interview is voluntary, and, at any time, you may decline to be surveyed or to have your information deleted from the capstone without negative consequences. A benefit is an increased reflection on your confidence levels in various aspects of college life.

I have received approval from the School of Education at Hamline University and from our institution to conduct this study. The capstone will be cataloged in Hamline's Bush Library Digital Commons, a searchable electronic repository. My results may be included in an article in a professional journal or a session at a professional conference. In all cases, your identity and participation in this study will be confidential.

If you agree to participate, keep these pages. Completing the electronic survey indicates your willingness to participate in this research. If you have any questions, please contact me.

Sincerely,
John Day
3003 Snelling Ave N
St. Paul, MN 55113
johnday85@gmail.com

Informed Consent to Participate in Quantitative Interview
Keep this full page for your records.

I have received the letter about your research study for which you will be surveying students and analyzing characteristics related to our university's transition. I understand that being surveyed poses little to no risk for me, that my identity will be protected, and that I may withdraw from the project at any time without negative consequences.

By submitting the survey you are authorizing the use of the information provided to be used in this research project.

Signature

Date

APPENDIX C - EMAIL COMMUNICATIONS TO PARTICIPANTS

Hello,

I hope you've had a nice summer. I'd like to ask if you would help me out with a graduate level research project that will require very little work on your part. You were selected as a student who attended (TEST UNIVERSITY) at some point in the last 4 years. Namely there will be a short survey that will take about 5 minutes that asks you to share your confidence level after your first semester with several college success related objectives.

EX: Rate your confidence in taking college level tests

The goal will be to better serve students as they transition into college by offering the right resources to meet the right needs. I will leave the survey window open for two weeks.

More information is given in the attached "Informed Consent Letter." I look forward to your valuable contribution to my research!

Please click this link below to take the QUICK SURVEY (5 min).

<http://goo.gl/forms/zto675ZJkT>

If you have any questions at all, please feel free to contact me.

Many thanks,

John Day

REMINDER EMAIL EXAMPLE

Hello,

Thank you for your consideration in participating in this research. To submit, please follow this survey link and complete the five minute survey by (xx/xx/xx).

<http://goo.gl/forms/zto675ZJkT>

Thank you again,

John Day

REFERENCES

- ACT. (2013). *Condition of college and career readiness 2013 - First generation students*. Retrieved from <http://www.act.org/newsroom/data/2013/states/pdf/FirstGeneration.pdf>
- ACT. (2015). *Using your results*. Retrieved from <http://www.act.org/aap/pdf/Using-Your-ACT-Results.pdf>
- Adams, C. J. (2013). College preparation. *Education Week*, 33(12), 5.
- Atherton, M. C.(2014). Academic Preparedness of First-Generation College Students: Different Perspectives. *Journal of College Student Development*55(8), 824-829. The Johns Hopkins University Press. Retrieved March 26, 2015, from Project MUSE database.
- Awasom, A. (2014). The university has grown by more than 300 students over the past four years. Retrieved from https://www.unwsp.edu/web/news/news?p_p_id=122_INSTANCE_UNWBlog&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_r_p_564233524_resetCur=true&p_r_p_564233524_categoryId=424520

- Barry, L. M., Hudley, C., Kelly, M., & Cho, S. (2009). Differences in self-reported disclosure of college experiences by first-generation college student status. *US. Adolescence*, 44(173), 55-68.
- Attewell, P., Lavin, D., Domina, T., & Levey, T.. (2006). New Evidence on College Remediation. *The Journal of Higher Education*, 77(5), 886–924. Retrieved from <http://www.jstor.org.ezproxy.unwsp.edu/stable/3838791>
- Center of Academic Programs for Support Services. (2014). Academic tools for learning and succeeding. Retrieved from <http://atlas.unwsp.edu>
- Chen, X. (2005). First-generation students in postsecondary education: A look at their college transcripts (NCES No.2005-171). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage.
- Curtona, C.E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994) Perceived parental social support and academic achievement; An attachment theory perspective. *Journal of Personality and Social Psychology*, 66 (2), 369-378.

Cushman, K. (2007). Facing the culture shock of college. *Educational Leadership*, 64(7), 44.

Doti, J. (2015, March 30). The dangers of tuition. Retrieved from <http://chronicle.com/article/The-Dangers-of-Tuition/228851/>

Dundes, L., & Marx, J. (2007). Balancing work and academics in college: Why do students working 10 to 19 hours per week excel? *Journal of College Student Retention: Research, Theory & Practice*, 8(1), 107.

Engle, J., & Tinto, V. (2008). *Moving Beyond Access: College Success for Low-Income, First-Generation Students*. Pell Institute for the Study of Opportunity in Higher Education.

Finkelstein, D. M., Kubzansky, L. D., Capitman, J., & Goodman, E. (2007). Socioeconomic differences in adolescent stress: The role of psychological resources. *Journal of Adolescent Health*, 40(2), 127-134.

Forbes. (2015). America's top colleges. Retrieved from <http://www.forbes.com/colleges/university-of-northwestern-st-paul/>

Gullatt, Y., & Jan, W. (2003). How do pre-collegiate academic outreach programs impact college-going among underrepresented students. Retrieved June, 15, 2008.

Heller, D. E. (2013, March 30). The end of college? not so fast. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/The-End-of-College-Not-So/228937/>

Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the united states. *The Journal of Higher Education*, 77(5), 861-885. doi:10.1353/jhe.2006.0042

Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durón, K. M. (2013). First-Generation Undergraduate Students' Social Support, Depression, and Life Satisfaction. *Journal Of College Counseling*, 16(2), 129-142.

Kurtzleben, D. (2014, February 11). Study: Income gap between young college and high school grads widens. Retrieved from <http://www.usnews.com/news/articles/2014/02/11/study-income-gap-between-young-college-and-high-school-grads-widens>

- Lang, M. (2002). Student retention in higher education: Some conceptual and programmatic perspectives. *Journal of College Student Retention*, 3(3), 217-229.
- McCormick, A. C. (2011). It's about time: What to make of reported declines in how much college students study. *Liberal Education*, 97(1). Retrieved from <https://www.aacu.org/publications-research/periodicals/its-about-time-what-make-reported-declines-how-much-college>
- Mehta, S. S., Newbold, J. J., & O'Rourke, M. A. (2011). Why do first-generation students fail? *College Student Journal*, 45(1), 20+.
- Monaco, M., & Martin, M. (2007). The millennial student: A new generation of learners. *Athletic Training Education Journal*, 2, 42-46.
- Norman, T. K. (2013). Determining the impact of remediation on college level course grades, retention and success
- Pascarella, E. (2006). How College Affects Students: Ten Directions for Future Research. *Journal of College Student Development*, 47(5).
- Petty, T. (2014). Motivating first-generation students to academic success and college completion. *College Student Journal*, 48(2), 257.

- Rostila, M. (2011). The Facets of Social Capital. *Journal For The Theory Of Social Behaviour*, 41(3), 308-326. doi:10.1111/j.1468-5914.2010.00454.x
- Russell, B. (2012, Aug 26). Easing transition for college students and parents. *Telegram & Gazette* Retrieved from <http://ezproxy.unwsp.edu/login?url=http://search.proquest.com/docview/1035206299?accountid=12915>
- Saenz, V. & Barrera, D. (2007). What we can learn from UCLA's "First in My Family" data. *Retention in Higher Education*, 21(9), 1-3.
- Shepler, D. K., & Woosley, S. A. (2011). Understanding the early integration experiences of first-generation college students. *College Student Journal*, 45(4), 700+.
- Soria, K. M., & Stebleton, M. J. (2012). First-generation students' academic engagement and retention. *Teaching In Higher Education*, 17(6), 673-685. doi:10.1080/13562517.2012.666735

Steinbacher, M. (2011, Aug 15). Mentors assist college's first-generation students.

McClatchy - Tribune Business News Retrieved from

<http://ezproxy.unwsp.edu/login?url=http://search.proquest.com/docview/883336896?accountid=12915>

Terenzini, P. (2014). *First generation college student characteristics*.

Troop, D. (2014, July 14). Moody's issues negative outlook for higher

education. *The Chronicle of Higher Education*. Retrieved from

<http://chronicle.com/blogs/bottomline/moodys-issues-negative-outlook-for-higher-education/>

Tucker, G. C. (2014). First Generation. *Diverse Issues in Higher Education*, , 24-

28.

Turner, P., & Thompson, E. (2014). College retention initiatives meeting the

needs of millennial freshman students. *College student journal*, 48(1), 94-

104.

Unverferth, A. R., Talbert-Johnson, C., & Bogard, T. (2012). Perceived barriers

for first-generation students: Reforms to level the terrain. *International*

Journal of Education Reform.

United States Census Bureau. (2013). *Fact finder*. Retrieved from
<http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

U.S. News & World Report. (2014). University of Northwestern--St. Paul:
Academic life. Retrieved from
<http://colleges.usnews.rankingsandreviews.com/best-colleges/northwestern-college-2371/academics>

Venezia, A. & Jaeger, L.(2013). Transitions from High School to College. *The Future of Children* 23(1), 117-136. Princeton University. Retrieved March 26, 2015, from Project MUSE database.

Ware, P., & Ramos, J. (2013). First-generation college students: Mentoring through social media. *International Journal of Mentoring and Coaching in Education*, 2(2), 149-162.