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STUDENT INVOLVEMENT AS A PREDICTOR OF ALUMNI ENGAGEMENT

by
Ryan Aloï

A Thesis

Submitted to the
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In partial fulfillment of the requirement
For the degree of
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at
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Thesis Chair: Andrew S. Tinnin, Ed.D.

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Dedication

Dedicated to my family who has always been proponents and believers in the transformative power of education. Thank you for driving me to go further, supporting me, and uplifting me.

Acknowledgments

I would like to acknowledge the thesis chairs Dr. Tinnin, Dr. Walpole, and Dr. McCombs thank you for your guidance and support throughout the thesis process as well as the whole of the graduate program. It is though the guidance and support of all the faculty in the program that we have made it to this point. Through your actions you have given us the tools to turn intuitions in to ideas, ideas into initiatives, and initiatives into changes. With these tools we can go forth as practitioners and hopefully leave a lasting and positive impact on the field to better pave the way for those to follow.

Abstract

Ryan Aloï

UNDERGRADUATE STUDENT INVOLVEMENT AS A PREDICTOR OF ALUMNI ENGAGEMENT

2019-2020

Dr. Andrew Tinnin

Master of Arts in Higher Education

The role of this study is to research the role that student involvement plays on alumni engagement. In an attempt to answer the following questions, a case study was conducted looking at the engagement and giving records of 10 randomly selected profiles from the graduating classes of 2016 through 2019 (N = 40) as well as reviewing the involvement patterns of the general qualifying student population within the ProfLink student involvement platform (N = 4237) and the qualifying engaged population (N = 805). What is the relationship between undergraduate co-curricular experiences and a student's engagement as alumni? What types of specific student involvements have the greatest impact on alumni engagement? What role do student demographics such as major, gender, race/ethnicity, and university housing status have in later engagement as alumni? Lastly what is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni? Comparison between engaged and non-engaged alumni revealed that the engaged population showed higher rates of per person involvement (N = 2.98) vs (N = 3.59). This group also had a higher percentage of white students (N = 83.11%) than the general population (N = 70.99%) and showed more involvement with Leadership roles (N = 7.91%) vs (N = 7.24%).

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Chapter I

Introduction

As the realm of higher education continues to be more reliant on student funding, the struggle between affordability and improved educational experiences has become an issue at the forefront across much of the field. This struggle puts additional pressure on institutions to be more efficient and find additional sources of revenue. The brunt of these cost reductions often falls on student affairs and co-curricular activities as they are not directly connected to essential day to day function of the institution (Ramses, 2000). These experiences, while not an easily quantifiable cost, are a large component of the student learning and development experience and may lead to more engaged alumni. The intent of this research is to better answer the questions, what is the relationship between undergraduate co-curricular experiences and a student's engagement as alumni? What types of specific student involvements have the greatest impact on alumni engagement? What role do student demographics such as major, gender, race/ethnicity, and university housing status have in later engagement as alumni? Lastly what is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni?

Statement of the Problem

In the last several decades, the funding structures of higher education have changed dramatically. Between 1987 and 2012 nearly all states have made substantial cuts to the per student funding for higher education. As of 1990 the revenue stream of higher education was only reliant on the student tuition and fees for about 25% of the cost of operation, by 2013 that number has almost doubled to 47.6%. With shrinking state

budgets and growing student populations; institutions are forced to look for additional sources of revenue and find new ways to increase efficiency (SHEEO, 2012; Pew 2015).

One such source of revenue may come from alumni donations. Because of the changes that are facing higher education, it is now more important than ever to build and maintain relations with alumni. Alumni can be an important factor in the success of higher education moving forward both as a source of funding as well as marketing and public relations capacity (Newman & Petrosko, 2011). Heightened reliance on student contributions to support higher education has been a topic of increased research in the last several decades. This research seeks to answer why some alumni are active association members and donors and others are not.

Significance of the Problem

While there has been substantial progress in identifying what factors contribute to alumni engagement, there are still substantial gaps in the research. The majority of the studies are using quantitative methods to determine the factors that lead a student to be active alumni. Much of the research that has been done is reliant on existing institutional records and surveys to collect information. As noted by Moore (2008) this method may result in data that is not reflective of the student population or the effectiveness of certain activities or programs. Going beyond the better understanding of the connection between student involvement and alumni engagement, this research has the potential to yield several practical applications on the institutional level.

In addition, the use of the NSSE survey provides data that is scalable and easily accessible, as the NSSE is administered annually at hundreds of institutions across the country and the findings are publically available (NSSE, 2020). However, a limitation of

this type of data is that it provides information on broad categories of involvement but may not be able to highlight specific programs and organizations that may be having an impact on future alumni engagement. With the growing popularity of co-curricular transcripts, there may be an opportunity to look with more depth into the impact of particular experiences.

Most of the existing research focuses on small private institutions. Lounsbury and DeNeui (1996) studied the Psychological Sense of Community or PSC. They found substantial differences in the PSC scores of students in small colleges as opposed to large colleges. Individuals at small colleges have much higher PSC scores than peers at large institutions. Since much of the research that has been done thus far has been conducted at small private colleges, the differences in PSC scores may result in different outcomes if the studies were to be reproduced at large institutions.

One of the factors that many of the studies agree on is the positive impact of Supportive Campus Environments and the subsequent positive student experience, which is linked to more engaged alumni. Due to the limitations of the current research, it is unclear if Supportive Campus Environments are effective at producing engaged alumni at all institutions or if that is only true of small institutions. Newman and Petrosko (2011), conducted their research at a large institution and found a negative correlation between positive student experience and continued engagement.

Purpose of the Study

While there has been research into the impact that undergraduate student involvement has on the creation of alumni that will be engaged, much of this data is looking at information collected either through university records or through national

surveys such as the National Survey of Student Engagement or NSSE. While this data is important and valid, it has substantial limitations. University involvement records are often times well documented for activities like athletics and student residential status that are directly managed by the university but can fall short for student managed organizations. NSSE data being collected across the country offers the ability to easily compare results across institutions however this data lacks specificity when looking at involvements only assessing broad types of involvements and not the organizations and activities themselves.

As a growing trend in the field assessment in higher education is turning attention to the learning taking place outside of the classroom (Schuh & Gansemer-Topf, 2010). In response to this, many tools have been developed to better capture, assess, and implement data in student affairs. One such category of system is a student involvement tracker. These systems offer a formalized location for student involvement data to be more accurately captured and stored. As these platforms are often third-party organizations serving multiple institutions, they provide highly specific information that is formatted in a way that is similar across institutions. Such systems open new doors for research that can dive deeper into the lasting role that student involvement plays on a student's engagement patterns in the years after graduation.

One such system, Engage by Campus Labs, known as ProfLink at Rowan University, may offer deeper insights into the impact that student involvement has on alumni. This system keeps track of student engagement data such as club membership and event attendance which is stored with imported and self-reported student demographic data. In quantifying the role that student involvement has on engagement

can help justify spending on student activities and well as identify and cultivate better student engagement practices.

Identifying what organizations and activities are the most successful at developing students that will be engaged after graduation can provide room for further studies so that these practices can be assessed and utilized in the work other organizations are doing, assisting with overall quality and efficiency. It is the purpose of this comparative research study to link student involvement and engagement records with post-graduation alumni data. There is a need to build on the existing understanding of the connection between student involvement and offer deeper insights on the role these activities play in developing students that will continue to engage with and give back to their institution post-graduation.

Definitions

While a clear definition of alumni engagement is not widely recognized in the field, I intend to base my definition on the structure used by Volin in 2015. Volin used alumni engagement as an umbrella term for monetary and non-monetary engagements. A similar definition was used by Newman and Petrosko (2011) to classify different types of alumni engagement. An exact threshold for identifying what it means to be an engaged alumni within the context of this study would need to be determined. When looking at the existing data the definition of minimal levels of meaningful alumni engagement should be statistically significant division point that would set engaged alumni apart from their peers (Volin, 2015; Newman & Petrosko, 2011).

Based on the reviewed literature (Moore, 2008; Maynard 2011; Newman & Petrosko, 2011; O'Neil, 2005 ; Volin, 2015) the following definitions were formed to more clearly illustrate the types of alumni engagement that this paper looks to explore.

- Monetary Engagement: is classified as individuals who have made monetary contributions to the institution. These donations are then ranked by donation size and frequency.
- Non-monetary Engagement: is defined as the level of participation in alumni associated events such as socials, reunions, as well as volunteer opportunities associated with the institution. These participations are then ranked by time hourly committed to the organization.
- Student Involvement: will be quantified by the number of events a student attended, the membership in organizations as well as, leadership positions held in the organizations. This formula would need to be tuned based on the available data to fairly represent time involvements of these students.

Research Questions

1. What is the relationship between undergraduate co-curricular experiences and a student's engagement as alumni?
2. What types of specific student involvements have the greatest impact on alumni engagement?
3. What role do student demographics such as major, gender, race/ethnicity, and university housing status have on later engagement as alumni?
4. What is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni?

Overview of the Report

This study intends to look at the impact that undergraduate co-curricular involvements play in the development of alumni that are engaged after graduation. This study looks to compare undergraduate involvement records to measures of engagement as alumni such as giving records and event attendance.

Chapter II reviews that literature relevant to this topic. This overview focused on topics such as the factors that contribute to alumni giving, the impact of time on the alumni identity, the important findings across studies including the importance of enriching student experiences and supportive campus environments. Chapter II also demonstrates the need for continued research in this area or higher education.

Chapter III will look at the methodological approach that this study intends to use to conduct the research.

Chapter IV will discuss the findings of the study. This section will review the research questions as well as summarize the data collected.

Chapter V will demonstrate the findings of the study as well and limitations, need for continued research, and suggestions for future studies.

Chapter II

Literature Review

Introduction

One of the most important roles that the early higher education system played was to act as a catalyst to forge connections amongst the wealthy and influential young men of early America (Wechler, Goodchild, & Eisenmann, 2007). Despite this fact, alumni associations are a fairly new occurrence, with most not developing until the turn of the twentieth century. Even Harvard, one of the oldest institutions in the United States, did not develop an official alumni association until 1840, 204 years after the institution's founding (Harvard, 2019).

Since its inception, the field of higher education has shifted from being an exclusive and socially restrictive organization to one that serves a diverse population of students (Wechler, et al., 2007). Due to this shift, the need to be competitive has continued to grow in the face of rising student populations and falling governmental support. The field of higher education continues to be more and more reliant on student funding. One of the prominent conflicts that have developed is the struggle to bridge the divide between affordability and improved educational experiences. This challenge puts additional pressure on institutions to be more efficient by cutting costs and finding additional sources of revenue. The brunt of these cost reductions often falls on student affairs and co-curricular activities as they are not connected to essential day to day function of the institution. These experiences, while not easily quantifiable, are a large and valuable component of the student learning and development experience. These

experiences are widely acknowledged to improve student outcomes such as retention and grade point average.

The intent of this literature review is to better answer the following questions by reviewing the available literature: What is the relationship between undergraduate co-curricular experiences and a student's level of engagement as an alumnus? What types of specific student involvements have the greatest impact on alumni engagement? What role do student demographics such as major, gender, race/ethnicity, and university housing status have in later engagement as alumni? Lastly, what is the relationship between undergraduate co-curricular experiences and monetary vs. non-monetary engagement as alumni?

When looking at individuals who are active members of the alumni community, undergraduate experiences seem to be a substantial contributing factor for many students. Volin (2015) found that in his study out of his population of alumni, 74.1% were involved as students. Volin (2015) determined that students who are highly involved on campus were 31% more likely to be engaged and active alumni than their less-involved peers. Beyond simply getting involved, the type of involvement also matters. This sentiment was echoed by many of the other studies examined in this review of the available literature who found that certain types of involvement resulted in statistically significant rates of engagement. While this research provided some answers it also illustrated the need for continued research into the role factors like student/alumni demographics, delivery methods, and specific activities play on the development of engaged alumni. (Berger, 2016; Drew-Brach, 2011; Faisal, 2017; Golz, 2013; Koenig-

Lewis, 2015; Lounsbury and DeNeui, 1996; Maynard, 2011; Moore, 2008; Newman & Petrosko, 2011; O'Neil, 2005; Volin, 2015)

Impact of Time on Alumni Engagement

While positive student experiences seem to hold a clear positive correlation for young alumni, this may not hold true as the population ages. In a 2015 study, Koenig-Lewis looked at the impact of time on recall of the student experience. What Koenig-Lewis found was that older individuals were able to recall academic experiences better than social experiences. Koenig-Lewis (2015) found that as time passes the students' social identity as an alumnus diminishes while the institutional loyalty grows. By this Koenig-Lewis (2015) means alumni are less likely to identify with their social identities as alumni, such as friendships, clubs, and other social experiences, but will continue to identify with the institution and their identity as an academic. This theory seems to be supported by Patten, Renn, Guido, and Quaye (2016). When discussing social identity, they discuss the multiple identity theory and acknowledge that a student's identity is not a static aspect of development but instead something that is in constant flux as the roles in a student's life change in salience and importance. Koenig-Lewis attributes this phenomenon to the fluidity of personal identity; over time social identities are much more likely to change than organizational identities. Across the research, greek organization membership is routinely cited as having a positive impact, (Moore, 2008; Maynard, 2011, O'Neil, 2005; Volin, 2015). These articles cited greek involvement as a predictor of future giving and engagement as alumni. O'Neil looked into alumni giving patterns of greek students and found that greek students historically were more likely to be alumni donors than their nongreek peers. In the context of the Koenig-Lewis (2015), greek

organizations may be less susceptible to social identity degradation as it incorporates a tangible organizational identity much like the academic identity construct.

Koenig-Lewis (2015) hypothesized that academic achievement and increased academic involvement would result in a stronger academic salience, this would line up with Newman and Petrosko's (2011) findings that the attainment of an advanced degree at a different institution reduces the likelihood that that student will be involved with their undergraduate alma mater. Koenig-Lewis's (2015) found that as time passes individuals with a strong social connection were much less likely to identify with their institution and recall their experience than peers that identified more so with an academic identity. This may explain why Newman and Petrosko (2011) found that positive identification of student experiences was correlated with lower rates of alumni engagement amongst older individuals.

Koenig-Lewis (2015) suggests that an individual's social identification with an institution is more at risk than an academic identity because social identities have substantially more competition as an individual ages and their social roles change. This threat to the social identity of a student/alumni can be seen across several studies as the results of studies conducted with young alumni differs greatly from the results of studies with an older sample population (Faisal, 2017; Golz, 2013; Koenig-Lewis, 2015; Maynard, 2011; Moore, 2008; Newman & Petrosko, 2011; Volin, 2015).

This theory of diminishing social identity may offer an opportunity for alumni associations and institutions to better engage and retain alumni through changes to marketing and activities. Taking into consideration the findings of Newman and Petrosko (2011), institutions can be more intentional about reinforcing the social ties to the alma

mater and better targeted marketing to meet the needs of different age groups of alumni. One potential strategy through which older alumni may be better reached may include identifying with the physical campus and academic advancements that the institution has made while highlighting areas of current growth. This strategy would fall in line with the findings of Newman and Petrosko (2011) as they identified that while the college social identity may fade over time, the institutional identity is less likely to degrade. This strategy would market to the academic and institutional identities identified by Koenig-Lewis (2015) while also highlighting the desire of alumni to give to perceived needs at their institution found in both Drew-Branch (2011) and Newman and Petrosko (2011). While the social identity of an individual is more threatened by other social identities and time as noted by Maynard (2011), some involvements that students start in college are carried over to their post-graduate lives. Under Koenig-Lewis's (2015) theory this would typically be a threat to engagement. However intentional collaboration between local service opportunities and other community partners with the institution may offer an avenue to eliminate some of the degradation of alumni social identity. Having the institution vested in the activities alumni are already engaged in provides opportunities to maintain social connections to the institution. Thus involvements that begin in college and persist into graduate life can be identified so there is an opportunity to increase alumni engagement through social means in older alumni.

National Survey of Student Engagement (NSSE)

The National Survey of Student Engagement provided the data for several of the studies that were reviewed that compared with alumni giving records and, in some cases, additional university records. This structure was prevalent due to the convenience of

searching for correlations between two preexisting data sets, NSSE data, and university giving records. While some of the findings were consistent across the studies, there were also some conflicting results. This divergence in findings can be potentially attributed to the differing wants and needs of the participating student populations. (Faisal, 2017; Golz, 2013; Koenig-Lewis, 2015; Lounsbury and DeNeui, 1996; Maynard, 2011; Moore, 2008; Volin, 2015)

Supportive Campus Environments

Moore (2008) found that colleges with a NSSE score that reflects a positive perception of a Supportive Campus Environment held statistical significance since these institutions had higher rates of alumni donations than schools with lower NSSE scores in these categories. The Supportive Campus Environments (SCE) consists of physical space, policies, as well as the relationships forged with faculty, staff, and peers in non-academic settings. Moore (2008) found that the scores pertaining to academic challenge, active and collaborative learning, and student-faculty academic interactions held no statistical significance. Moore (2008) did, however, find that the enriching student experiences which included community service, study abroad, and internships resulted in a slight negative correlation.

Golz (2013), using similar parameters to the 2008 Moore study, came to similar conclusions on the impact of four of the five NSSE categories. Golz (2013) found a positive correlation between the perception of an institution as a Supportive Campus Environment and alumni giving in addition to finding no significance in academic categories. The studies became contradictory however when looking at the impact of Enriching Student Experiences (ESE). While Moore (2008) found that experiences like

internships, volunteerism, and study abroad to have negative impacts on alumni giving, in Golz's (2013) study, however, these activities held a positive correlation. Similar to Golz (2013), Faisal (2017) also concluded that Supportive Campus Environments held a positive correlation to the rates of monetary engagement by alumni, however, Faisal (2017) also found that students' positive perceptions of Student and Faculty Interactions or SFI were a statistically significant contributor to the likelihood that an alumni would give back to the university. This finding differs from both Golz (2013) and Moore (2008) who both found no statistical significance for the SFI section of the NSSE data. However, Faisal's (2017) study was conducted at a small technical school and the difference in findings to Moore (2008) and Golz (2013) may be attributed to the differing needs and wants of the population. Lounsbury and DeNeui (1996) studied the need for a sense of community and found that it was much higher in students at small institutions than it was for students at large institutions. These findings may explain why the relationship between the students and faculty was so impactful in Faisal's (2017) study.

Despite slightly differing results, there is a clear theme throughout the NSSE studies when looking at the role that supportive relationships play in the development of engaged alumni. All the studies discussed in this section draw a connection between the importance of fostering relationships between individuals at the university and the student populations (Faisal, 2017; Golz, 2013; Maynard, 2011; Moore, 2008). While some of the research shows different results in the importance of the Student and Faculty Interactions, this may simply be due to the differing needs of students at particular types of institutions since the needs and makeup of the student population varies depending on the institutional type (Lounsbury and DeNeui, 1996).

Enriching Student Experiences

Golz (2013) attributes the findings that enriching educational experiences promote giving, in part, to Kuh's et al (2008) engagement theory stating that these experiences offer the opportunity for transformational learning, which can be beneficial to the campus community. While this may certainly be the case in looking at the divergent findings through the lens of Astin's (1984) involvement theory, which highlights the importance of students' physical proximity to campus, geographic separation of the community and the level to which the community and the institution are integrated may play a large role in the impact of Enriching Student Experiences.

Maynard (2011) looked at the student population that participated in Enriching Student Experiences at Johnson and Wales, and the impact that it had on alumni giving patterns as well as the way these individuals continued to engage with service projects post-graduation. What he found was no significant correlation between community service as an undergraduate and alumni giving. Maynard, did, however, witness continued involvement with undergraduate service projects and community leadership positions as alumni. This differed from other involvements that Maynard (2011) observed. He found that participation in club activities, greek life, residence hall projects, and service-learning classes held a positive relation to involvement in the alumni community. This finding would support Astin's (1984) involvement theory. Maynard (2011) witnessed many of the students persisting in local service and community leadership roles post-graduation despite not engaging as alumni. Astin (1984) discusses the need for physical presence and sufficient quality and quantity of engagement in order to build the relationships that result and positive student outcomes such as academic

success and student retention. It can be theorized that had that involvement been more directly tied to the institution it would be more likely for these students to be more active alumni and demonstrate more institutional loyalty. It should be noted that Moore (2008) studied 45 small private institutions many of which were in the in the Midwest which likely meant they were in a suburban to rural setting as was the institution in the Maynard (2011) study. Golz (2013) on the other hand, conducted research at an urban institution where the geographic separation was likely lesser than in the other studies.

This may also mean more direct engagement between the community and the institution which could explain why Enriching Student Experience activities were a positive factor in her study. This seems to be supported by Maynard (2011) who mentions an intentionality in the structure of the service projects at his institution, this may explain why, despite similar geographic factors, Maynard found ESE to be a neutral factor of alumni engagement while Moore (2008) found negative correlation.

When looking at the effect of Enriching Student Experiences, the research suggests that it is not the activities themselves but the delivery method that plays a larger role. Despite the similar programs that were included under the NSSE categories each study found different results when looking at the role these involvements play in creating engaged alumni (Golz, 2013; Maynard, 2011; Moore, 2008). In better associating the Enriching Student Experiences back to the university, it may be possible to reduce some of the competition for the students' social identity as discussed by (Koenig-Lewis, 2015; Patton Et al, 2016)

Factors of Alumni Giving

Moore (2008) presents a reason why Enriching Student Experiences may have held a negative correlation. Moore cites income level as an established factor associated with alumni giving. Moore also states that students participating in community service and volunteerism have been found to be more likely to be studying for a career in the service industry. Maynard (2011) came across this pattern in his own study, with the majority of participants who participated in community service and volunteerism were seeking service-oriented jobs. As discussed by Maynard (2011) these careers may require students to pursue a higher degree and are often paid less, both may be acting as barriers to young alumni giving (Moore, 2008). Because of this limitation, the effectiveness of philanthropic involvements on long term alumni engagement may be difficult to accurately assess through donation records of young alumni.

Drew-Branch (2011) found that the most common reason individuals cited for donating was to give back to the campus community and provide opportunities for current students; indicating that philanthropy is an important factor for alumni engagement. This would indicate that students who were a part of the philanthropic works as undergraduates should be represented in higher numbers as engaged alumni. However, due to the reliance of alumni giving as the primary identifying factor of identifying an engaged alumnus, it is possible that donations of time and service, as opposed to money, may be happening, such as the service noted in Maynard (2011), but may be going unnoticed due to current gaps in the literature.

While Drew-Branch's (2011) study primarily looked at why alumni give, Newman and Petrosko (2011) sought to identify who gives. Using existing student

records Newman and Petrosko cross-referenced alumni association members with existing student information to identify factors that impact a student's chances of becoming involved with the alumni association.

The factors that positively contribute to the alumni association involvement are age, proximity to the campus, donor status, and access to information. Older alumni were more likely both to give to the institution as well as participate in events. Close proximity to the institution and access to mailers, email lists, and other forms of advertisement also positively correlated to giving. Newman and Petrosko (2011) found that distance, attainment of a higher degree from another institution, positive perceptions of undergraduate student experiences, and positive perceptions of the institution's current standing are all negatively correlated to alumni engagement. Individuals who perceived that their alma mater was doing well were less likely to donate. Out of state students were much more difficult to engage as the distance provides a barrier to face to face alumni engagement. While it may seem counterintuitive that a positive perception of the standing of the institution is a deterrent, Drew-Branch (2011) encountered a similar pattern in her research. Drew-Branch (2011) found that a primary driver for alumni donation was a perceived institutional or student need. If alumni perceive the institution as doing well and not in need of additional support, they may feel less compelled to donate. Lastly, attainment of a higher degree and positive student experiences are both negatively correlated with alumni association involvement and giving patterns. This negative correlation may be due to the competition for a student's identity salience after their college experience. A student's identity is complex and multifaceted and thus factors that compete against the student's identity as an alumnus and community member of their

undergraduate institution can erode this connection. Both higher degree attainment and a strong salience with the social aspects of college over the academics have been found to result in lower rates of alumni engagement (Koenig-Lewis, 2015; Patton Et al, 2016).

The fact that close distance and residential status as a student are both positively correlated to improved engagement alumni falls in line with one of the most important tenets of Astin's (1984) theory of involvement that a student's physical interaction and presence on campus results in better student retention and success. Volin (2015) and Faisal (2017) both had similar findings to Newman and Petrosko (2011) when looking at student housing records. All three studies indicated that residence on or near campus was positively correlated to more engagement as alumni. Further reinforcing this notion are the findings of Berger (2016) who looked at the alumni engagement rates of online learners as well as Skari (2014) who was looking at engagement rates of community college students. Both of these studies indicated difficulty in involving these nonresidential groups during their student experience and both groups showed low rates of engagement as alumni.

While there have been some potential solutions as to why some students become alumni that give back and are engaged with campus, all of the studies expressed the need for continued research. The motivators that drive a student to give their time and money back to an institution have many contributing factors and is not easily determined. The inclusion of additional demographic information both for an individual's time as a student as well as post-graduation may help clarify the factors that lead to engaged alumni. (Berger, 2016; Drew-Brach, 2011; Faisal, 2017; Golz, 2013; Koenig-Lewis, 2015;

Lounsbury and DeNeui, 1996; Maynard, 2011; Moore, 2008; Volin, 2015; Newman & Petrosko, 2011; O'Neil, 2005; Volin, 2015)

Need for Further Research

Overall there has been substantial progress in identifying what factors contribute to alumni engagement, however, there are still substantial gaps in the research. The majority of the studies are using quantitative methods to determine the factors that lead students to be active alumni. Much of the research that has been done is reliant on existing data and surveys to collect information (Berger, 2016; Drew-Brach, 2011; Faisal, 2017; Golz, 2013; Koenig-Lewis, 2015; Maynard, 2011; Moore, 2008; Newman & Petrosko, 2011; O'Neil, 2005; Volin, 2015). This method may result in data that is not reflective of the student population or the effectiveness of certain activities or programs. In addition, the use of NSSE survey provides data that is scalable and easily accessible. However one of the limitations of this type of data is that it provides information on broad topics of data, but may not be able to highlight specific programs and organizations that may be having an impact on future alumni engagement. With the growing popularity of co-curricular transcripts, there may be an opportunity to look with more depth into the impact of particular experiences.

In addition, most of the existing research focuses on small private institutions. Lounsbury and DeNeui (1996) studied the Psychological Sense of Community or PSC. They found substantial differences in the PSC scores of students in small colleges as opposed to those in large colleges. Individuals at small colleges have much higher PSC scores than peers at large institutions. Since much of the research that has been done thus far has been conducted at small private colleges, the differences in PSC scores may result

in different outcomes if the studies were to be reproduced at large institutions. One of the factors that many of the studies agree on is the positive impact of Supportive Campus Environments and the subsequent positive student experience, which is linked to more engaged alumni. Due to the limitations of the current research, it is unclear if Supportive Campus Environments are as effective at producing engaged alumni at large institutions as much of the existing research has been conducted at small institutions (Berger, 2016; Drew-Brach, 2011; Faisal, 2017; Golz, 2013; Koenig-Lewis, 2015; Lounsbury and DeNeui, 1996; Maynard, 2011; Moore, 2008; Newman & Petrosko, 2011; O'Neil, 2005; Volin, 2015).

Newman and Petrosko (2011), conducted their research at a large institution and found a negative correlation between positive student experience and continued engagement. As earlier discussed, this correlation may be due to competition for the students' social identity salience (Koenig-Lewis, 2015; Patton Et al, 2016). In addition, this phenomenon may also be the result of differing needs of students that seek out large institutions versus small institutions as students that seek out smaller institutions tend to have more of a desire for a stronger sense of community than those that apply to large institutions (Lounsbury and DeNeui, 1996). This contrast in the needs of student populations at small versus large institutions may explain why Supportive Campus Environments which across most of the research held a positive correlation in Newman and Petrosko (2011) (Faisal, 2017, Golz, 2013; Maynard, 2011; Moore, 2008; Volin, 2015).

Moving forward there are additional factors to keep in mind such as the changing makeup of higher education. Berger (2016) looked at the impact that academic delivery

method had on the engagement of alumni. Berger found that in a study of online and face to face students, the face to face students were much more likely to be engaged alumni. While this is not surprising as other studies such as Newman and Pertosko (2011) have discussed the challenges that come with engaging alumni at a distance. Both Astin's (1984) and Kuh's et al. (2008) theories are largely based around getting the student on campus and integrated into the campus community. Online students are already difficult to get physically involved in the campus community, which makes the job of trying to engage these students as alumni much more difficult.

With the rise in prevalence in co-curricular transcripts at institutions, there is substantial research that can be done to better understand the student experience outside of the classroom. Furthermore, there is a substantial opportunity to better understand the impact that this has on students going forward. No studies that I am aware of at this point have been able to look in-depth at the student experience at the level that this study intends to. One of the drawbacks that was found in many of the other studies (Golz, 2013; Moore, 2008; Maynard, 2011; Volin, 2015) came from the ambiguity of the student engagement information as they were not able to get the needed depth of information to differentiate the impact that individual involvements.

As the field of higher education continues to diversify in student race, age, and educational delivery methods, more detailed data about the effectiveness and value of the student co-curricular experience will be needed to be more intentional, efficient, and effective when delivering quality education and experiences at an affordable cost.

Chapter III

Methodology

Context

With the rise in prevalence in co-curricular transcripts at institutions there is substantial research that can be done to better understand the student experience outside of the classroom and the impact that this has on students going forward. No studies that I am aware of at this point have been able to look in depth at the student experience the level that this study intends to. One of the drawbacks that was found in many of the other studies (Golz, 2013; Moore, 2008; Maynard, 2011; Volin, 2015) came from the ambiguity of the student engagement information as they were not able to get the needed depth of information to differentiate the impact that individual involvements.

The purpose of this research is to better understand the potential connections between undergraduate co-curricular experiences and the development of students who will make active and engaged alumni.

Research Questions

1. What is the relationship between undergraduate co-curricular experiences and a student's engagement as alumni?
2. What types of specific student involvements have the greatest impact on alumni engagement?
3. What role do student demographics such as major, gender, race/ethnicity, and university housing status have in later engagement as alumni?
4. What is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni?

Method

This study will use a Case Study to identify the existence and strength of correlations between the available data points. This method is similar to the design of Volin's (2015) study. With the growth of co-curricular transcripts, new data that offers more in depth information about student experience has become readily available. Because of this, a correlational method would allow for better understanding of how existing datasets may impact each other (McMillan, 2016). The goal of the study is to identify how different aspects of the undergraduate co-curricular experience impact the likelihood that a student will become an engaged alumnus. To research these questions, I intend to use existing institutional data replicating a similar methodological structure as studies such as Golz (2013), Moore (2008), and Volin (2015). Existing student involvement records will be compared to alumni giving and alumni association event attendance to look for relationships between undergraduate student involvement and alumni engagement in both monetary and nonmonetary capacities.

However, due to limitations in reporting capacity and depth of information, a comparative case study format was adopted to compare the different groupings of profiles. Which includes a general group of all qualifying alumni (N = 4237), all qualifying engaged alumni (N = 805), and lastly a grouping of 10 randomly selected profiles from the engaged group from each graduating class between 2016 and 2019 (N = 40).

Data Collection and Organization

To collect the data, the primary sources will be student records acquired from Rowan University's student engagement co-curricular tracking platform, ProfLink, and

alumni giving and event attendance records acquired from the Alumni Engagement office. These records will be assessed both for general information as well and conducting a deeper dive into a group of participants involvements from each graduation class between 2016 and 2019. Data such as Demographics, Involvement, and Enrollment information will be compared across the three groups.

Selection of Participants

Participants in this study will be selected from a pool of Rowan University alumni who have graduated between 2015 to the present. These students will be required to have logged in and created a ProfLink account in their undergraduate career and additionally have attended at least one event as an alumni and/or donated to the institution. Data was reviewed after removing non-eligible participants from the ProfLink user report such as individuals that never finalized their account, graduate and doctoral students, as well as faculty/staff. This list was then compared to the report data from the Division of Advancement; disqualified profiles were removed from the report and cross referenced to ensure that the profile is represented on both lists. Once this was completed there were approximately 550 profiles that qualified.

For inclusion in the case study group the individual also needed to be represented on the involved user report combined with the above filtering methods left approximately 200 profiles that were eligible. From this group, 10 participants were selected from each graduating class that meets the above criteria. This selection was conducted randomly by assigning a place holder number to the profile and utilizing the RANDBETWEEN function in Excel to select the case study profiles. The selected profiles were reviewed for the involvement type.

Analysis

The profiles were reviewed to look for similarities in the involvement profiles of engaged alumni. In addition, the involvement of the alumni who donated was compared as a whole to the general undergraduate student involvement data to look for differences between the undergraduate involvement of alumni that do engage and those who do not. My hypothesis would be that the most engaged alumnus would be students who were highly involved or who held leadership positions in social clubs. In addition, I hypothesize Greek students and athletics organizations would also result in engaged alumni. This would fall in line with the findings of Golz (2013) and Moore (2008) who found that students that were involved in clubs and activities were more likely to be engaged alumni.

Chapter IV

Findings

The purpose of conducting a comparative study between undergraduate co-curricular involvement records and rates of alumni engagement is to determine the role that these experiences may have on a student's likelihood to continue to be engaged with the institution after graduation, specifically at Rowan University. In looking at involvement types as well as specific organization involvement this study takes look into the role that different types of student involvements have in relation to a alumni's proclivity to engage with their institution.

Data Analysis Procedure

To assess the link between student involvement and alumni engagement access to data from the Rowan University's Student Involvement tracker and alumni data base which had been deidentified to protect the identities of students. The systems used were Campus Labs Engage, also known as ProfLink (student involvement records), and Millennium (alumni records). This data was used to gain insights on the following questions.

1. What is the relationship between undergraduate co-curricular experiences and a student's engagement as alumni?
2. What types of specific student involvements have the greatest impact on alumni engagement?
3. What role do student demographics such as major, gender, race/ethnicity, and university housing status have on later engagement as alumni?

4. What is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni?

The process to extract this data involved filtering out individuals that did not qualify. The original dataset included 55,929 in the All User report, profiles from disqualified groups were extracted from the dataset. The first group removed was Graduate, Medical, Certificate program, and professional licensure students as they do not have the same experiences as the general undergraduate student and could skew the involvement report. This group totaled 10,750. The next group that was removed were individuals who had profiles in the system but had never completed setup. This group totaled 19,560. Staff and Faculty profiles were also removed from the dataset and totaled 1,153. An additional 89 certificate students were removed that were labeled as Undergraduate students. 44 were from professional development and 45 from special education certificate programs. An additional 10 profiles were removed that were duplicates in the system. Lastly the All User report was cross referenced with the available data in the Involved User report and Individuals with no involvement data were removed from the data set which removed an additional 20,130 resulting in a qualifying pool of 4,237 profiles. This resulted in the General population group. To find the engaged users the qualifying 4,237 profiles were cross referenced with the available alumni engagement data that included event attendance and number of instances of giving. This resulted in a qualifying engaged user group of 805. From this engaged user group 10 profiles from each graduating class between 2016 and 2019 were selected at random using the =RANDBETWEEN function in Microsoft Excel.

Demographic Information

The demographics of the ProfLink population including both students that did and those that did not exhibit engagement behaviors were largely in line with public facing data about the intuition. US News lists Rowan University as having a 55% male to 45% female ratio, however the ProfLink data shows a 51.98% female to 48.02% male ratio in the General population and 57.84% Female to 42.16% Male ratio in the engaged user group, indicating that there might be slightly disproportionate number of female users in the system compared to the actual representation at the university level (US News, 2020). This gap grows even larger when looking at the gender makeup of engaged alumni. Furthermore, race and ethnicity may also show signs of the user base differing from the actual population. The student demographics as listed by Datausa are 64.7% White, 10% Black, 9.8% Hispanic or Latino, 2.48% two or more races, .146% American Indian, and .09% native Hawaiian (Datausa.io, 2020) The data from ProfLink indicates that the system may be underutilized by minority students as the population of White students is 70.99% of the population amongst the general undergraduate users, 83.11% when looking at the engaged student population and represents 85% of the Case study group. See Tables 1, 2, and 3 for additional information.

Table 1

All User Race

Race: All Users	Totals	Percentage of Group Total
Did not Identify	295	6.96%
Asian	287	6.78%
Black or African American	573	13.53%
White	3007	70.99%
Native Hawaiian or Other Pacific Islander	15	0.35%
American Indian or Alaska Native	60	1.42%

Table 2

Engaged User Race

Race:	Totals	Percentage of Group Total
American Indian or Alaskan Native	8	0.99%
Asian	31	3.85%
Black or African American	63	7.83%
White	669	83.11%
Did Not Identify	32	3.98%
Native Hawaiian or Other Pacific Islander	2	0.25%

Table 3

Case Study Race

Race: Case Study	Totals	Percentage of Group Total
Black or African American	2	5.00%
Asian	4	10.00%
White	34	85.00%
Hispanic	1	5.00%
Non-Hispanic	38	95.00%
Did Not Identify	1	5.00%

The population of profiles in the case study was 85% White, 10% Asian, and 5% Black or African American with one individual identifying as Hispanic, 50% Male, 50% Female, 70% commuter to 30% Residential (see Tables 4 and 5). The college breakdown was 10% College of Education 10%, College of Humanities and Social Sciences, 30% From the College of Business , 20% from the College of Engineering, 20% from the College of Science and Math, 7.5% from the College of Communication and Creative Arts, and 2.5% from the School of Earth and the Environment (see Tables 6, 7, and 8).

Table 4

Residential Status by Group

Residential Status by Group	Residential status	Totals	Percentage of Group Total
All User	Commuter	617	76.65%
	On-Campus	187	23.23%
Engaged User	Commuter	617	76.65%
	On-Campus	187	23.23%
	Did Not Identify	1	0.12%
Case Study	Commuter	28	70.00%
	On-Campus	12	30.00%

Table 5

Sex by Group

Sex by Group	Sex	Totals	Percentage of Group Total
All User	Male	2034	48.02%
	Female	2202	51.98%
Engaged User	Male	339	42.16%
	Female	465	57.84%
Case Study	Male	20	50%
	Female	20	50%

Table 6

All Users Primary School of Enrollment .

Primary School of Enrollment	Totals	Percentage of Group Total
College of Business	811	19.15%
College of Com. & Creative Art	495	11.69%
College of Education	216	5.10%
College of Engineering	576	13.60%
College of Hum. & Soc. Sci.	688	16.24%
College of Performing Arts	122	2.88%
College of Sci & Math	1043	24.62%
School BioMed Sci & Hlth Prof	50	1.18%
School of Earth & Environment	43	1.02%
School of Health Professions	192	4.53%

Table 7

Engaged Users Primary School of Enrollment

Primary School of Enrollment	Totals	Percentage of Group Total
College of Business	196	24.35%
College of Com. & Creative Art	102	12.67%
College of Education	73	9.07%
College of Engineering	134	16.65%
College of Hum. & Soc. Sci.	111	13.79%
College of Performing Arts	19	2.36%
College of Sci & Math	134	16.65%
School BioMed Sci & Hlth Prof	6	0.75%
School of Earth & Environment	7	0.87%
School of Health Professions	22	2.73%
Did Not Identify	1	0.12%

Table 8

Case Study Primary School of Enrollment

Primary School of Enrollment	Total	Percent
College of Education	4	10.00%
College of Hum. & Soc. Sci.	4	10.00%
College of Business	12	30.00%
College of Engineering	8	20.00%
College of Sci & Math	8	20.00%
College of Com. & Creative Art	3	7.50%
School of Earth & Environment	1	2.50%

Analysis of the Data

The first research question relates to the relationship between undergraduate co-curricular experiences and a student’s engagement as alumni. The data indicates higher rates of organization membership among students who engaged with the intuition than their peers that did not. Amongst the 40 participants that were randomly selected the average number of organization memberships per profile was 4.15 whereas the average membership across users on ProfLink was just 2.98 for the general population and 3.59 for the engaged population. This falls in line with the general notion that was popularized by Astin (DATE) that increased involvement results in better student outcomes.

The second research question was what types of specific student involvements have the greatest impact on alumni engagement. Exact organization types role in engagement were not clear as the same organizations were the most common among both the engaged and nonengaged alumni. This being said the random engaged participants in the study did hold a large number of leadership positions among organizations. Of the 40 participants looked at collectively they held 40 executive board and other leadership positions and 17 were members of Greek organizations. This falls in line with the findings of O'Neil in 2005 which indicated that Greek organization students were more likely to be engaged as alumni than non-Greek students.

Additionally the inclusion of 40 collective leadership positions reinforces the notion that Astin's (1984) involvement theory holds weight as not only did the engaged alumni have more instances of engagement than their non engaged peers in the ProfLink system, they also held positions on executive boards of clubs and other positions of campus leadership. The percentage of the involvements that were executive board leadership positions amongst the case study group was 13.25%, this figure was 7.91% amongst the engaged alumni population and 7.24% in the general user population. This reinforces the notion of Astin's (1984) five assumptions one of which states that the impact of involvement is dependent on effort put in. In holding leadership roles it can be assumed that there was significant effort exerted into these roles which may explain in part why these students are more engaged as alumni than their peers.

What role do student demographics such as major, gender, race/ethnicity, and university housing status have on later engagement as alumni? Based on the data, demographics do not seem to play a substantial role in alumni engagement. For the most

part the demographics amongst the engagement group mirrored the non-engaged group. That being said the engaged group did have slightly higher representation from the college of engineering than the general user group, 16.65% vs 13.60%, and the college of business, 24.35% vs. 19.15% when looking at the engaged vs the non-engaged groups. This was also true for racial demographics with white alumni making up 83.11% of the engaged group and 70.99% of the non-engaged group.

What is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni? Due to a change in methodological process, this question is more difficult to answer. Neither the general overview of the engaged population or the deeper exploration of the 40 participants yielded any real insights on the connection between involvement and monetary and non-monetary engagement.

Limitations

Due to issues with data retrieval as well as limits in the depth and specificity of the available data, the analysis method was altered to better fit with the available data. The study had intended to use a correlational structure to analyze specifics of the role that undergraduate involvement plays on alumni engagement. Due to limitations on both available data and time, a comparative case study structure was adopted instead. Due to these limitations, suggestions for study replication have been made to allow for additional insights to be ascertained from the data. One of the limiting factors with the data was the availability of alumni data for event and monetary engagement and for this reason all engagements were combined together for the sake of this study making answering

research question four “What is the relationship between undergraduate co-curricular experiences and monetary vs non-monetary engagement as alumni?” difficult to answer.

Additionally, due to limitations on reporting type and time, the impact of individual student involvement types was not able to be researched as originally intended. This study looks at some of the differences and involvement patterns between the user groups. However, this does not yield data on specific involvement types as intended as well as the specific involvement patterns of students who are engaged with the institution as alumni.

Chapter V

Summary and Conclusion

This research explored the role that undergraduate involvements have on alumni engagement. With increasing pressure on institutions to be more efficient, better understanding the role that involvement plays with alumni engagement not only has the option to increase positive outcomes in the form of direct and indirect revenue increases but also allows for better justification of involvement spending.

What Is The Relationship Between Undergraduate Co-Curricular Experiences And A Student's Engagement As Alumni?

It appears that both the quantity as well as the quality of the involvement may play a role. When looking at the involvement of engaged alumni what was found was a higher rate of involvement than the general ProfLink user population as well as holding more leadership positions. Of the student profiles reviewed 17 of the 40 were members of Greek organizations. For an institution with Greek involvement around 3-4% of the total population, according to the US News report (2020), for 42% of the sample participants to have Greek participation is significantly more than expected. Increased engagement from Greek students is in line with O'Neil's (2005) finding on engagement patterns of Greek students.

What Types Of Specific Student Involvements Have The Greatest Impact On Alumni Engagement?

Based on the findings, programs with structured organizational formats and membership eligibility criteria such as Greek Life, EOF, and Honors appeared in many of

the profiles that were review of engaged students as well as, involvement with leadership roles within organizations.

What Role Do Student Demographics Such As Major, Gender, Race/Ethnicity, And University Housing Status Have On Later Engagement As Alumni?

Based on the findings, identifying the role that this plays would be difficult due to the small sample size of the reviewed population. An increase of the population in future studies may be able to yield a better answer. There were some slight increases among the students from the colleges of engineering and business as well as amongst white alumni in the engaged group. Due to the size of the sample it is it difficult to distinguish if this was the result of outliers in a small sample or a truly significant finding.

What is the Relationship Between Undergraduate Co-Curricular Experiences and Monetary vs Non-Monetary Engagement as Alumni?

Due to a change on the format of the study as well as limitations in the depth of the Advancement data, this was not able to be effectively answered. For this to be better answered, a larger sample would be needed as well as data relating to types of alumni events attended and monetary engagement size which were not available for this study.

Conclusions

This study was able to support some of the findings of past studies of engagement both supporting the validity of the research area as well as highlighting the need for continued research. What this study found was cohesive with that of past research including that of involvement Greek life, demographics such as residential status, and supports Astin's (1984) involvement theory. While this study demonstrated the need for continued research both into additional aspects of involvement that may impact

engagement patterns as well as better understanding the way the involvements and experiences that have been correlated with differences in engagement are impactful.

Recommendations for Practice

The results of this study were largely inconclusive and as such recommendations for practice are difficult to make. That being said, this study did have elements to support more conclusive research such as structured involvements like Greek life and honors programs which may be able to improve outcomes and yield better data.

Another area of potential improvement to practice is better supporting and studying students in positions of leadership. According to Astin (1984) there is a connection between involvement and the effort put in, as such it would make sense to support and continue to research students in leadership roles as these tend to be more demanding.

Recommendations for Research

In looking where this study falls short, it is in the depth and scope of research to be able to make effective claims of correlation and causation. Future research should attempt to take a look at student involvement in a broader depth of specific event attendance and involvement. This would allow for a clearer picture that individual involvement types and event play on engagement as well as bring a new level of understanding and practicality to the existing research.

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