A Dissertation Entitled

Factors that Influence Alumni Giving at Three Private Universities

by

Tyson L. Pinion

Submitted to the Graduate Faculty as partial fulfillment of the requirements for

the Doctor of Philosophy Degree in Higher Education

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State and federal funding for higher education is becoming more restrictive at the same time competition for donations to non-profit and educational institutions grows. As such, university development departments are challenged with identifying potential donors and with adopting more efficient practices so as to ensure successful fund-raising campaigns. This study used de-identified alumni donation information from three, private, Ohio-based universities over a 10-year period, 1995-2005. Using Astin’s Theory of Student of Involvement (1984) as its framework, the researcher sought to determine what influence, if any, alumni demographic information, undergraduate fields of study, and undergraduate experiences in on-campus academic, social, and athletic pursuits have on alumni donations. A significant finding from this study is the fact that having alumni involved in more than one on-campus academic, social, or athletic pursuit was the most significant predictor of alumnus total donations, the study’s criterion variable. This study is believed to be the first to have applied Astin’s student involvement theory to alumni donation patterns. Future researchers may identify even more opportunities to target philanthropic opportunities among alumni so as to ensure more efficient, effective higher education donor campaigns.
Dedication

I dedicate this research to my family. I will be ever grateful for my parents’ love and support. They are the true definition of great parents. My sisters are the best cheerleaders I could ever ask for. To my wife, thank you for standing by my side. I love you with all of my heart. Believe. Philippians 4:13.
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Chapter One

Introduction

In an effort to increase revenues, university administrators rely upon fund-raising, specifically fund-raising among alumni. As a result, several researchers have taken up the task of investigating why individuals make financial contributions to higher education institutions. However, there is need for more research to identify if a relationship exists between the undergraduate college experience and alumni philanthropic behavior (Taylor & Martin, 1995).

Fund-raising has always been an important aspect of the academic enterprise in the U.S., especially during periods of economic downturn. As Hauptman (2001) noted, “The size of endowments and the strength of alumni and other private giving are among the most distinctive features of American higher education” (p. 119). According to the Voluntary Support of Education (VSE) survey by the Council for Aid to Education (CAE, 2015), charitable contributions to U.S. higher education institutions increased 10.8% in 2014, the largest annual increase in donations since 2000. Higher education institutions received a total $37.45 billion in donations that year, the highest recorded since CAE’s first VSE in 1957.

A total of 718 higher education institutions participated in the CAE survey, which showed that gifts from alumni grew 9.4%, while non-alumni gifts grew by 4.8%. However, while alumni giving increased overall, alumni participation rates declined. The average gift of an alumnus increased 25.5% to $1,535. Contributions by alumni for capital purposes, including endowments, property, buildings, equipment, and loan funds, increased 13.5%, while alumni donations toward operations declined 3%. Organizational
gifts grew by double-digit percentages, with capital donations from organizations growing by 15.1%, and gifts for operations growing by 7.9%.

In 2014, alumni participation rates dropped to 8.3% percent, down from 8.7% in 2013. Yet, while participation rates declined, the number of donors increased 1.2%, chiefly because the number of alumni of record grew 7.1%. An institution’s participation percentage is calculated by dividing the number of alumni of record by the number of donors. However, alumni participation is a deceptive figure. In recent years, obtaining alumni contact information has become easier. Yet, having more alumni records does not necessarily equate with having more alumni donors. Should growth in the number of alumni records available to a university development department outpace the growth in the number of alumni donors, the alumni participation percentages decline.

Institutions use donations to introduce and fund new programs and to try new, innovative approaches to education (Leslie & Ramey, 1988). Therefore, higher education institutions need to focus on fund-raising in new and more innovative ways to assist with the advancement of their educational mission.

Researchers have attempted to discover why alumni contribute to their alma mater. Some studies suggest a student’s social and emotional ties with an alma mater affect giving (Leslie & Ramey, 1988). Others have examined undergraduate education and alumni involvement with students, faculty, and staff as a factor in alumni contributions (Fygetakis, 1992; Leslie & Ramey, 1988; Lyons, 1989; Miller, 1991; Miller & Casebeer, 1990; Volkwein, Webster-Saft, & Xu, 1989). Still others have examined: the role self-esteem and altruism play in alumni donations (Brittingham & Pezzullo, 1990; Leslie & Ramey, 1988; Palmer, 1992; Volkwein et al., 1989; Wilmoth, 1990); how
the economy and tax policies affect giving (Leslie & Ramey, 1988); and, how alumni giving reflects an alumnus’ obligation to give back to society (Volkwein et al., 1989; Wilmoth, 1990).

Research into the undergraduate experience of alumni may provide a roadmap for higher education institutions and fund-raisers to determine those alumni most likely to contribute to their alma mater, so as to attract and retain new donors. By extension, such research may educate administrators, faculty, and staff on ways to establish a sense of loyalty among students to bond them with the institution in hopes of securing future financial contributions. According to Astin's (1993) Theory of Student Involvement, students who are satisfied with their undergraduate experiences have stronger connections to an alma mater than do students who did not have satisfactory undergraduate experiences. Alumni who feel a strong bond to their alma mater may be more inclined to donate financially or to give of their time or resources, which is the main objective of an institution’s advancement office—to encourage alumni to donate time, talent, and treasure to their alma mater. By knowing those factors in the undergraduate experience that may influence alumni giving, student life personnel and advancement and alumni office personnel may collaborate on programming more of these experiences. Doing so may not only enhance the undergraduate experience, it may ensure future donations from those same students in their alumni years.

Monks (2003) concluded, “Most young alumni either do not give back to their alma mater or give less than $200 in a given year and about 10% give more than $200 in a given year” (p. 123). These statistics demonstrate low levels of both participation and donation amounts. However, Lindhal and Winship (1994) found that past-giving
behavior is a direct reflection of current- and future-giving habits, demonstrating the importance of undergraduate student engagement with the campus community and the institution’s ability to instill the importance of philanthropy prior to graduation. It is important that students graduate with a positive attitude toward their alma mater, as the undergraduate experience may well shape their giving habits later on (Henerson, Morris, & Fitz-Gibbon, 1987).

**Background of the Problem**

The global economy is growing more competitive. For the U.S. to remain a global leader, it must focus on educating its population. Yet, two obstacles stand in the way—the rising cost of a college education, and the fact that the population of potential college freshman is shrinking and the greatest population of future college students come from some of the nation’s most economically disadvantaged homes.

As for the rising cost of education, the federal student loan program plays a significant role in determining which students have the opportunity to attend college. Financial aid for higher education continues to decline across the country (Okunade & Berl, 1997), consumer debt has reached an all-time high (Mantel, 2007), and student loan programs face unforeseen challenges in a volatile credit market, which will continue to make it difficult for students and families in need to secure loans for education (Cho & Gold, 2008).

The demographics of college students are another important trend for college administrators to consider. Demographic shifts in the U.S. will have a significant impact on both higher education enrollment and the very role higher education plays in society. For example, among traditional, 18- to 24-year-old, college-aged students: fewer than
half from low-income households pursue higher education; two-thirds from middle-income households pursue a bachelor’s degree; 80% from high-income households pursue college; 40% of Black and Hispanic freshmen earn a bachelor’s degree within six years; 60% of White/Caucasian students earn a bachelor’s degree within six years; 64% of Asian-American freshmen earn a bachelor’s degree within six years; the number of adult learners (frequently single parents) continues to rise; and, there is a growing disparity between the rich and poor segments of society (Lederman, 2007). With solid research as to the demographic and involvement factors that may influence alumni donations and engagement, university development and alumni departments may be able to adopt more efficient, effective means of securing alumni donations and encouraging alumni engagement in the alma mater.

Further issues having an effect on higher education include competition from the growing number of for-profit, four-year, on-line institutions, and mergers and closures among colleges (Chabotar, 2006). Universities in the midwest and northeast have the greatest threat of closing, due to the combination of higher costs, pending declines in the number of traditional-age students in their respective regions of the country, and inadequate endowment structures to provide operational and scholarship support (Chabotar, 2006). According to Carbone (1986) and as quoted by Duronio and Loessin (1990), “no long standing tradition of research exists in higher education fund-raising; and higher education researchers have interested themselves in fund-raising only with its new importance and status within institutions overall” (p. 540).

Middle- and low-income families were the most impacted by the recession of 2007-2009, which, in turn, affected their ability to receive government-funded loans to
offset the rising cost of college. The inability to borrow money for education has a direct impact on enrollment, especially among those institutions considered private (Carver, 2008).

Higher education institutions depend on annual support from alumni and other constituents to assist with carrying out their mission. Philanthropic activity at colleges decreased considerably in 2009 (Masterson, 2010). In that year, the stock market declined substantially, reducing any earnings produced from endowments to support institutional operations and crippling the ability of alumni and constituents to provide annual support. According to CAE’s annual VSE survey, donations at the 1,027 institutions participating in the study in 2009 were down $3.75 billion, a decline of 11.9% (Masterson, 2010). An estimated $27.85 billion in gifts to colleges were reported in 2009, down from $31.6 billion in 2008, the highest total ever (Masterson, 2010). The survey also indicated that alumni participation and the size of gifts in 2009 reached an all-time low, reflecting the influence of the recessionary years of 2007-2008 on alumni donation patterns (Masterson, 2010). In previous surveys, alumni giving appeared to be on the rise, even though fewer numbers of alumni gave; however, the total amount donated by alumni dropped from $8.7 billion in 2007 to $7.1 billion in 2008, a decline of 18% and an average decline of 13.8% per gift (Masterson, 2010). This significant decrease in giving represents a serious issue for institutions and points to the need for development and advancement offices to prepare for economic downturns with more targeted, research-based approaches to alumni-giving campaigns.

Alumni donors have been called upon to assist in financing universities for more than 300 years (Williams & Henderickson, 1986), but philanthropic support of higher
education has received little scholarly interest (Pezzullo & Brittingham, 1990). Additionally, few studies exist regarding the role of the undergraduate experience in alumni fund-raising (Young & Fischer, 1996). Of the research conducted, studies link alumni-giving behavior to an emotional commitment to an alma mater (Pezzullo & Brittingham, 1990), suggesting that fund-raisers need to know how and when this emotional commitment forms and the extent to which activities after graduation can influence alumni. If it is determined that alumni bonding and cultivation activities have no influence on donations, then a student’s undergraduate experience becomes much more significant (Pezzullo & Brittingham, 1990).

**Ohio’s Current State of Affairs**

In Ohio, the rising cost of higher education is a cause for concern among a number of stakeholders, not just students and their families. Politicians have taken notice and, as in other states, Ohio politicians have adopted measures to not only ensure that students are steered into in-demand majors, but that they remain in-state, contributing their knowledge wealth to Ohio’s public and private sectors.

Ohio Governor John Kasich has put forth a plan to help pay off college debt of students pursuing in-demand jobs and who promise to stay in Ohio five years after graduation. While he requested $30M per year for the program, the state house countered with a $7.5M allocation pledge. Details of the program are still a work in progress, but it seems to be moving forward, despite criticism from both public and private institutions (www.college scholarships.org/states/ohio.htm).

Other opportunities for students pursuing an education in Ohio include the Choose Ohio First Scholarship, which provides funds for students who major in a
science, technology, engineering, or mathematics (STEM) related field. Scholarships range from $1,500 to $4,700 per student per academic year, and are designed to recruit and retain students to stay in Ohio (http://students.ohiohighered.org/paying/state-scholarship/choose-ohio-first).

Ohio College Opportunity Grants (OCOG) support high-need students (https://ohiohighered.org/ocog). To be eligible for OCOG, students must pursue a degree at a participating Ohio public or private university, must have an expected family contribution of less than $2,190, and must have annual family incomes below $75,000 (http://www.fafsa.ed.gov/help/fttoc01g.htm). OCOG provided more than $90 million to need-based students in 2015. Also that year, full-time public university students could receive $1,048 each, while private students could receive $2,568 (Siegel, 2015).

The cost of tuition at Ohio’s four-year institutions declined an average 2.4% over the past decade, the highest decrease in the nation. Ohio’s per-student state funding levels have yet to surpass pre-recession totals and are $2,200 below the national per-student average (Siegel, 2015).

For perspective, students who graduated in 2011-2012 with a bachelor’s degree borrowed, on average, $25,000, a 22% increase over the amount students borrowed a decade earlier. The total average amount of per-student debt rose 34.9% over the same decade from $10,600 in 2001-02 to $14,300 in 2011-12 (Maio, 2012).

Prior to 2010, Ohio relied on challenge grants, which provided additional funding to institutions that met enrollment and completion objectives. However, the state realized this system failed to properly incentivize colleges for three reasons: funding for the grants came from sources in addition to the base allocation; under the plan, every school
received some sort of benefit; and, the amount colleges received for performance-based funding was too low in proportion to enrollment-based funding. On this last point, while allocating funds based on enrollment enforces an institution’s commitment to accessibility and an equitable distribution of per-student spending, enrollment is not a good predictor of overall institutional performance. With ongoing budget cuts, including spending for higher education, and the demand for a better educated workforce, states have decided to emphasize degree or certificate attainment and to invest in the long-term success of the students. It is critical that state and federal governments continue to emphasize performance-based funding options.

Ohio has taken on the challenge and made changes to its funding allocation process. While recognizing differences between university missions and goals and student body compositions, Ohio began to allocate 5% of higher education funding for educational performance in 2012, an amount that is only expected to increase in coming years. The plan is primarily based on course and degree completion, while also rewarding the achievements of at-risk students, as defined by economic, demographic, and college-preparedness data. This encourages universities to enroll at-risk students, a strategy intended to foster access and opportunity for all students.

To assist with the concerns of funding for universities, the state has included a stop-loss provision that caps the amount of funding an institution can lose in the first year at one percent. Also, the state provided a one-year grace period for institutions to become acclimated to the financial impact of this new policy. Performance results are also made available for public view, ensuring a more educated higher education consumer (Siegel, 2015).
HCM Strategists, the public policy advocacy group, reported 26 states have implemented performance-based funding incentives for state-supported higher education universities. In five of these states, including Ohio, Mississippi, Nevada, North Dakota, and Tennessee, more than half of the state’s per pupil funding is incentivized through performance-based funding, amounting to an estimated $4,000 per pupil in Ohio. Ohio’s intent is to develop a funding formula that works. In 2015, that formula included 50% for degree completion, 30% for course completion, and 20% for doctoral and medical student set aside. Degree and course completion rates are based on three-year averages. Additional points were awarded for degree completion in STEM fields (HCM Strategists, 2016).

**Statement of the Problem**

The need for universities to increase fund-raising is in direct response to government funding cuts to higher education, the need for an educated workforce in the face of global economic challenges, and a shifting U.S. population that includes a rise in the number of low-income families unable to afford the cost of a higher education (Friedman, 2006). Fund-raising supports scholarships and programs that assist with enrollment and retention (Elliott, 2006). Universities need to better understand what motivates alumni donors to give annual gifts, which may, in turn, lead to larger donations to support future scholarships and programs (Marudas & Jacobs, 2004).

**Purpose of the Study**

The purpose of this research study was to identify what factors during the undergraduate experience affect alumni financial contributions—specifically, what involvement factors, if any, motivate and encourage alumni to partake in philanthropic
activities. It is believed that targeting alumni according to their undergraduate involvement creates a significant advantage for the institution in increasing its alumni giving. This study also informs and contributes to both theory and practice for advancement and student affairs departments across higher education.

**Research Questions**

This study addressed six research questions:

1. What influence, if any, do demographic characteristics have on the amount of donations alumni make to an alma mater?
2. What influence, if any, do undergraduate fields of study have on the amount of donations alumni make to an alma mater?
3. What influence, if any, does undergraduate academic involvement have on the amount of donations alumni make to an alma mater?
4. What influence, if any, does undergraduate co-curricular involvement have on the amount of donations alumni make to an alma mater?
5. What influence, if any, does undergraduate athletic involvement have on the amount of donations alumni make to an alma mater?
6. What influence, if any, does the number of undergraduate involvements have on the amount of donations alumni make to an alma mater?

**Variables to be Studied**

Several independent variables were used in this study, including age, gender, ethnicity, marital status, field of study, and involvement in undergraduate academic, athletic, and social activities.
The dependent variable for this study was alumni gift amounts from three private higher education institutions—Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University—during the 10-year period from 1995-2005. It is believed that this range of years provided enough time for alumni to have donated back to their alma mater in some capacity. Further, this 10-year period ensured the data were not skewed by the influence of 2007-2008 recession, which, as already pointed out, led to a precipitous drop in alumni donations to alma maters nation-wide. The advancement offices at these three institutions track all donations to their respective institutions, regardless of the size of the gift and whether the gift is restricted (targeted for a specific institutional department, program, or organization) or unrestricted (for use at the institution’s discretion).

**Significance of the Study**

The fluctuating economy, combined with the increased costs and demands of higher education, have raised the importance of fund-raising and the role of private funds in higher education (Altbach, 1991; Leslie & Ramey, 1988; Masterson, 2010; Mosser, 1993). Determining which alumni donor undergraduate experiences and demographics affect potential philanthropic activity is important to higher education research in the area of institutional image, viability, and renewal.

Fund-raising efforts for higher education continue to be a priority for both public and private higher education institutions. Most institutions depend on financial contributions from alumni, foundations, friends, and other constituents to assist in balancing operating budgets and in supporting innovative and expensive strategic goals. Fund-raising is now a very competitive enterprise, and new strategies and efforts are
implemented on a daily basis. With the increase in competition for philanthropic dollars, universities must focus on determining the most effective ways to connect with their alumni, and this study assists in that endeavor by determining if involvement as an undergraduate has an effect on alumni giving (Farrell, 2003; Trombley, 2003; U.S. Department of Education, 2006). This study also assists in creating policy and informing both student life and development professionals of their mutual and complementary roles.

Theoretical Framework

Astin’s (1984) Theory of Student Involvement is widely endorsed as the preeminent model in student involvement research, and it can be used to support new thinking with respect to students’ philanthropic activity as alumni. Astin (1984) defined involvement as the amount of physical and psychological energy students devote to the educational experience in college. Involvement includes academically-related activities, out-of-class activities, and interactions with faculty, staff, and peers. Examples include attending class prepared for the day’s topic of discussion, and participating in study groups or other class- and career-related organizations (Astin, 1984). This study focused on undergraduate student involvement outside of class, such as involvement in college athletics, fraternities/sororities, and student government, among other activities.

Astin (1984) developed five postulates related to involvement that were examined and utilized in this study: (a) involvement refers to the investment of physical and psychological energy in various objects, which can range from the student experience as a whole to a specific activity, such as involvement in a student organization or intramural sport; (b) regardless of the object, involvement occurs along a continuum, as some students will invest more energy than other students, and any given student will be more
involved in certain activities than others; (c) involvement has both *quantitative* (the amount of time devoted to an activity) and *qualitative* (the seriousness with which the object was approached and the attention given to it) features; (d) the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program—the more students put into an activity, the more they get out of it; and, (e) the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. Astin insisted that, for student learning and growth to occur, students need to be actively involved with their environment.

Creating a positive experience for students is beneficial for colleges. Astin (1984) stated it is imperative that colleges evaluate programs and services according to their ability to increase student involvement. The more involved students are with peers, clubs and organizations, the better the student experience and the greater the satisfaction students will feel toward their university. Alumni relations and development professionals can use involvement theory to develop policies and practices that cultivate improved alumni relations.

This study focused on the quantitative features of student involvement. The independent variables of field of study, gender, age, marital status, and an alumnus’s co-curricular involvements while a student, including involvement in athletics, social clubs, and academic achievements were used to determine what influence, if any, each variable has on the dependent variable, the gift amount of the alumnus over the 10-year period, 1995-2005.
Population

The population used in this study included alumni from three private universities located in Ohio. A total of 51 private institutions in Ohio offer a bachelor’s degree. The population examined in this study included only traditional-aged undergraduates who graduated during the 10-year span from 1995-2005. Choosing this age group provides the alumnus enough time to have contributed back to an alma mater (Lowenstein, 1997). It also is current enough that the alumni have had ample opportunity to be involved in alumni organizations and events hosted by the institution.

About the Institutions Involved in this Study

Founded in 1845, Baldwin Wallace University is a private university located in Berea, OH, a community of approximately 19,000 residents located in north central Ohio. BW hosts 4,177 students enrolled in 50 undergraduate and graduate programs. For the past 19 years, BW has received a best-value ranking among Midwest colleges by U.S. News & World Report and similar rankings by Princeton Review and Kiplinger’s (http://www.bw.edu).

Bluffton University is a private university located in Bluffton, OH, a community of approximately 4,100 residents located in northwest Ohio. Bluffton’s student enrollment approximates 1,150 students enrolled in any of 50 undergraduate or graduate programs. Bluffton has received national recognition in both the U.S. News & World Report and Barron’s college evaluation editions (http://www.bluffton.edu).

Ohio Wesleyan University is a private university located in Delaware, OH, a community of approximately 35,500 residents located in central Ohio. Founded in 1842, OWU hosts 1,850 students in any of 93 undergraduate majors, sequences, and courses of

**Data Gathering**

Each university maintains a database of alumni. These databases include alumni demographic information, information about involvement as an undergraduate, and the amount of financial contributions donated to the university. Participants in this study were alumni who received an undergraduate degree between 1995-2005 from either of three Ohio-based, private universities, Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University.

The dependent variable was the sum of alumni giving over the 10-year period. Advancement offices seek alumni who contribute annually. The more frequently an alumnus gives, the greater his or her total donation. The goal of most advancement offices is to cultivate alumni who give annually and, eventually, provide a major gift to the institution.

**Data Analysis**

The data provided by the three institutions were analyzed in Statistical Package for the Social Sciences (SPSS, version 23.0) software using a blocked form of step-wise, linear regression analysis to answer this study’s six research questions. Regression analysis allowed the researcher to identify those demographic, field of study, or involvement variables that had the greatest positive influence on the criterion variable, alumnus total donations. This analysis assisted in determining if undergraduate academic involvement or extra-curricular activities predict alumni philanthropic activity following graduation.
Assumptions

The researcher made several assumptions in this study, including assumptions that data received from the participating colleges were accurate and that the data set was large enough for the purposes of this study. The researcher also assumed that Astin’s Theory of Student Involvement was an appropriate theoretical framework for understanding the influence, if any, of involvement on alumni giving. The researcher assumed undergraduates are more likely to contribute to their alma mater than are graduate students. This was assumed because the undergraduate experience is unique in that students have a chance to make life-long friendships and to shape their futures by taking classes they are passionate about and getting involved with clubs and other co-curricular activities of their choosing. The researcher also assumed that alumni have selected to either financially support or not support their undergraduate alma mater. Additionally, the researcher assumed that financial contributions will continue to be important to higher education. According to Cook (1994), “Fund raising will typically be at least one part of the solution/response/strategy for counteracting or overcoming adverse economic conditions” (p. 23) for universities.

Cooperation from the three private institutions was assumed to be high. It also was assumed that the participating colleges would be interested in the results of the study, as the results may assist their respective development professionals to better target their fund-raising efforts.

Limitations of the Study

The data garnered for this study were a sample of convenience from three private, Ohio-based universities. The data were provided and maintained by the alumni office at
each institution. Each university provides a unique experience and education to their alumni, such that generalizing the outcomes to all private universities would be inappropriate. It is imperative to keep in mind that the data used in this study covered the 10-year period, 1995-2005. This time-frame was selected as it provided alumni ample time to have donated to their alma maters.

It is evident that this study is an unexplored research area and, as such, could be used as a pilot for new areas of research inquiry for fund-raising collaboration in higher education. The three, small, private Ohio institutions used in this study were: Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University. This also established a limitation of the database used for the research. The data used for this study included only undergraduate alumni from the class years of 1995-2005. This provided an ample amount of data for the study; however, it is a dated picture in time, and the researcher cannot be certain that all of the data provided by the development and student affairs offices of these universities were 100% accurate. Because only three institutions were used in the sample, conclusions from this study cannot be generalized to a different population or to different institutions.

Another limitation of this study is that fund-raising in “higher education is an acquired art and, like most fund raising, it is an inexact art” (Leslie, 1969, p.13). Even as this study provides increased insights into donor behavior and fund-raising, colleges and universities should not organize their fund-raising efforts based solely upon the research into these three private universities. Universities should adjust their efforts and create a unique “mix of people, setting, and the history of the institution” (Shea, 1986, p. 34). For instance, alumni from religious institutions may be more likely to give than alumni from
non-religious affiliations. These factors could further limit the generalizability of the study. Further, Duronio and Loessin (1990) stated “the most important factor in making decisions about fund raising programs may be insight into one’s own institution” (p. 13).

Finally, institutions must identify their own limitations in order to best identify collaboration and fund-raising opportunities. Each institution has a culture of undergraduate life that is carried on by alumni. It is the responsibility of the institution to maintain that engagement following a student’s graduation. Some institutions do a better job of this than others, resulting in more fund-raising dollars from alumni.

**Glossary**

Alumnus – a graduate of an educational institution. In its plural form, alumni.

Annual gift donor – a donor who contributes an annual gift, typically in the range of $25 to $1,000, to an unrestricted or restricted fund.

Blocks – used to describe similar groups of variables by type—input, environmental, or outcome—for the purpose of entering into a data analysis software application.

Campaign – a systematic, intensive, well-thought-out plan to attract private financial support (Tromble, 1998).

Development – a term interchangeable with fund-raising, commonly thought of as the act of seeking financial support from foundations, individuals, and corporations through grants and gifts so as to meet the needs of the institution (Evans, 1993; Worth, 1993; Tromble, 1998). From Stuhr (1977), the term *development* was first used in a fund-raising context by Northwestern University in the early 1920s.
Development officers – employees of a foundation or organization, whose mission includes fund-raising for organizational needs.

Donations – restricted and unrestricted funds given to an institution by students, parents, alumni, foundations, and businesses.

Donor prospect – an individual who is considered likely to make a gift, but has not yet done so.

Education – “Experiences that influence the way people perceive themselves in relation to their social, cultural, and physical environments; a complex and purposeful process for expediting learning; an engaged, interactive process of making meaning that has the potential to transform the learner” (NASPA, 2013, http://www.naspa.org/kc/hhekc/definitions.cfm).

Institutional advancement – a uniquely American component of higher education that encompasses the institutional responsibilities for external and internal communications, public relations/communications, fund-raising, alumni relations, and, in some institutions, government relations (Muller, 1986; Pray, 1981). Rowland (1986) stated that institutional advancement includes “all activities and programs undertaken by an institution to develop understanding and support from all its constituencies in order to achieve its goals in securing such resources as students, faculty, and dollars” (p. xiii).

Motivation – the ability to pursue a goal for personal achievement; the persistence to complete what one has started (Hayes, 2007).

Participation percentage – percentage of all alumni donating to an institution, calculated by dividing the number of alumni of record by the number of donors.
Philanthropy – Voluntary, organized efforts intended for socially useful purposes. Philanthropic groups existed in the ancient civilizations of the Middle East, Greece, and Rome: an endowment supported Plato's Academy (c. 387 BC) for some 900 years; the Islamic waqf (religious endowment) dates to the 7th century AD; and, the medieval Christian church administered trusts for benevolent purposes. Merchants in 17th- and 18th-century Western Europe founded organizations for worthy causes. Starting in the late 19th century, large personal fortunes led to the creation of private foundations that bequeathed gifts totaling millions and then billions in support of the arts, education, medical research, public policy, social services, environmental causes, and other special interests. (Merriam-Webster Concise Encyclopedia, 2013, http://www.merriam-webster.com/dictionary/philanthropy)

Private higher education institution – universities or colleges that do not receive state appropriations to fund operations.

Student activities – university-sponsored activities and organizations in which students participate, on and off campus, during their undergraduate years of study. Examples include Greek organizations, athletics, student government, and intramurals.

Student affairs – higher education professionals who provide services, programs, and resources to help students learn and grow outside the classroom. These may include efforts to enhance student learning, to guide academic and career decisions, to mentor students, to promote leadership skills, and to counsel students through crises (NASPA, 2013, http://www.naspa.org/career/whatis/default.cfm).

Theory of Student Involvement – proposed by Astin (1984), this theory posits that student learning in college is directly related to the student’s investment of time and energy into the collegiate environment.

Conclusion

The available literature on institutional advancement has few studies regarding the relationship between participation in extra-curricular activities and fund-raising, as well as the relationship between development and student affairs offices (Fygetakis, 1992). More research into the link between the undergraduate experience and alumni giving is needed. The significance of this study is to enhance the understanding of how the undergraduate college experience relates to alumni giving. If colleges can cultivate a life-long relationship with students during their undergraduate years, they may be more likely to financially contribute.
Chapter Two

Literature Review

This study examined the influence of undergraduate involvement on alumni donations to an alma mater. This chapter reviews the literature on higher education fund-raising and what role, if any, undergraduate involvement or student demographic characteristics play in an alumnus donating to his or her place of graduation.

The literature review is divided into three sections. First, this chapter explores the growth of college and university fund-raising and how it has evolved to become such a strategic part of an institution’s mission. With respect to fund-raising in higher education, Kelly (1998) stated, “contemporary fund raising cannot be understood without first understanding the context in which the function evolved” (p. 18). The chapter then reviews the research into undergraduate involvement as an influence on philanthropy practices by alumni offices. The third section reviews the literature as to how student affairs and development offices have collaborated, both in practice and in theory, to fulfill an institution’s fund-raising goals. Research into how the undergraduate experience might influence alumni donor patterns is only the first step; how departments within higher education utilize these data to encourage more robust donor patterns completes the process, which is what this section seeks to achieve.

History of Philanthropic Giving to Higher Education

Philanthropy has long been valued by institutions of higher education. While philanthropic giving can be traced back to colleges of America’s Colonial era, philanthropy has a tremendous impact on the survival of American higher education institutions today (Curti & Nash, 1965). Even providing for the history of philanthropic
support to higher education, Carbone (1986, pp. 22-23) stated that fund-raising strategies have been “sporadic” and “scattergun” (pp. 22-23).

The demand for increased private support to higher education institutions comes at a time of greater competition for philanthropic dollars, as well as the beginning of what is expected to be the largest generational transfer of wealth in history, from an estimated $41 trillion in 1998 to $136 trillion in 2052 (Havens & Schervish, 1999). This statistic from Boston College should create interest among institutions to provide awareness and strategies to keep alumni and their families engaged. This emphasizes the importance of understanding the history of higher education philanthropy and the development of strategies that can be implemented to assist with learning the giving cycle of each university.

**Ancient Examples of Private Support to Higher Education**

Cimon, the Athenian philanthropist, was a progenitor of educational giving when he financed the Academy of Socrates and Plato (Brittingham & Pezzullo, 1990; Cook & Lasher, 1996; Fisher, 1989). His act of benevolence inspired Plato to leave one of the first planned gifts in education when he left his entire estate to the Academy, funding it for the next 900 years (Cook & Lasher, 1996; Meyer, 1971). In the Greek language, the term *philanthropy* literally means “love of mankind” (Elliot, 2006, p. 30). The Greeks viewed philanthropy as a component of good citizenship and a humanitarian inclination to help the public at large (Elliot, 2006). Philanthropy is a long-standing practice that derives from most of the major religions of the world (Wagner, 2004). Alexander the Great provided the funds needed to build a library in Egypt during the 4th Century BC and the Lyceum of Aristotle (Cook & Lasher, 1996).
History of American Higher Education Philanthropy

Philanthropy has been a cornerstone of American higher education since the Colonial era. Loyal constituents and friends of higher education generously and innovatively supported the mission of institutions, providing access and opportunity for countless students (Rudolph, 1962; Trow, 1994). Philanthropists such as reverend John Harvard had a vision of higher education and believed in its value, becoming among the first American philanthropists to leave his entire estate to a university. His gift of his personal library and 779 pounds, estimated to be valued at $5 billion today, to the university that bears his name established a solid operational budget and set a new precedent of expectations for higher education (Curti & Nash, 1965). As Quincy (1977/1840) stated:

An instance of benevolence thus striking and timely, proceeding from who had been scarcely a year in the country, was accepted by our fathers as an omen of divine favor. With prayer and thanksgiving, they immediately commenced the seminary, and conferred upon it the name Harvard, thus acknowledging him as its founder. (p. 10)

Several of the first American universities were not as fortunate as Harvard and were unsuccessful at fund-raising or did not attempt to do so, closing their doors due to lack of funding (Wallenfeldt, 1986). Those that survived used the vision and philosophy of Harvard. Presidents of universities embraced the role of philanthropy and took on the responsibility of organizing campaign efforts to seek private support (Curti & Nash, 1965; Hall, 1993). This approach to supplementing an institution’s budget through private donations is still in use by boards and presidents today (Kelly, 1991).
The Beginning of Modern Day Fund-raising

While the art of philanthropy and fund-raising was established early in the Colonial period, it did not begin to be studied and transformed until the 20th century (Cutlip, 1965; Meyer, 1971). Higher education institutions then began to use methods to institutionalize fund-raising through both internal and external communications, including public relations, fund-raising, alumni relations, and government relations (Muller, 1986; Pray, 1981). This process was identified as the campaign method (Fisher, 1989; Worth, 1993).

Early use of the campaign method was employed by Charles Sumner Ward and Lyman Pierce, who used the fund-raising principles from their experience with the Young Men’s Christian Association (Cutlip, 1965; Worth & Asp, 1994). The idea behind the campaign method was to quickly raise funds to meet specific needs of the university or non-profit organization (Broce, 1986; Cutlip, 1965; Fisher, 1989; Worth & Asp, 1994). The approach required experts and consultants to assist organizations with fund-raising campaigns, creating a new profession for the 20th century (Worth & Asp, 1994).

Pittsburgh University was one of the first institutions to use Ward and Pierce’s campaign method as an approach to raise funds for scholarships and operations. Their campaign successfully raised $3 million in 1914 (Fisher, 1989; Worth, 1993). It was at this point that higher education institutions first recognized the alumnus as a resource for donations, and universities developed campaign plans and other techniques to bring alumni financial support to the institution. One such technique was created by William Lawrence, President of Harvard’s alumni association. He challenged the alumni of
Harvard to give $2.5 million in one year, and he succeeded. This created the idea of annual giving (Cutlip, 1965; Worth & Asp, 1994).

**Revolution of 21st Century Fund-raising**

Fund-raising strategies have been revolutionized in the 21st century as alumni and development offices were formally established to oversee university fund-raising (Hoyt, 2004). Annual gifts quickly became the most sought after donations, as such gifts could be used either for a restricted or specific purpose, such as scholarships, or unrestricted, to be used at the university’s discretion (Worth, 2002).

New fund-raising developments and strategies are often explored in an attempt to generate opportunities for the betterment of the institution. According to Essex and Ansbach (1993), relationship-building fostered by an institution’s leadership must include building trust within the community. Presidents and other leaders must be responsive to the needs of the local businesses, stakeholders, and potential constituents, as many donor prospects may have the capacity to provide sizeable gifts necessary to meet a specific institutional need. Alumni and volunteers must work hand-in-hand to provide better fund-raising efforts through relationship-building and solicitation requests. Campaigns must be strategically planned and guided by specific goals within an organized timetable (Essex & Ansbach, 1993).

Public and private institutions must establish quality relationships to ensure successful fund-raising across the generations. From 2000 to 2035, the Baby Boomer generation will transfer trillions of dollars to their children and grandchildren (Conley, 1999). Conley (1999) suggested universities develop educational programs that connect
to these inheritors, who will eventually be asked to support and provide training on tax incentives available when individuals donate to a university.

According to Conley (1999), one of the challenging tasks of a higher education fund-raising campaign is to identify what motivates potential donors to give. Typically, alumni recall special experiences that trigger their support to a specific initiative within a campaign (Conley, 1999). Once they have maintained their engagement to the college or university, it is important for the leaders of the campaign to educate constituents of the need for financial support to fulfill the goal. Conley (1999) stated the campaign message must be clear and concise, but the individual’s connection to specific issues is of equal importance. Understanding the culture of the university, the economic environment, and an individual’s motivation for giving is critical for capital campaign success (Conley, 1999).

**History of Higher Education Alumni Associations**

A study conducted by Leslie and Ramsey (1988) focused on the early history of alumni associations and found that students who participated in organizations and programs that met their specific needs felt a strong loyalty to their alma mater. Their research also found that many college graduates took on various social and civil roles in their communities, mirroring their involvement as undergraduates. As such, the experiences universities provided their students created a unique sense of belonging, and these shared feelings of social fulfillment were carried into society. This period in time corresponds with the turn of the last century, the early 1900s, and came to be known as the *alumni association movement* (Leslie & Ramey, 1988). Conley’s (1999) research suggests that students who were active in the life of a university campus through
involvement with voluntary associations in student activity and campus organizations are more likely to be philanthropic to their alma mater than are those students who were less involved or not involved at all.

**Departmental Collaboration in Fund-raising**

Higher education has faced numerous fiscal challenges since its inception. The continuous development of programs and efforts to increase enrollment and retention are costly and require collaborative efforts from several campus units. These efforts include sharing programs, activities, and personnel. Communication of the institution’s priorities from the board of trustees and president is extremely important. As leaders of institutions develop strategic plans and the institution’s brand, it is imperative that collaborative ideas and plans be included and funded appropriately. One such collaboration that seems to be a natural fit is the student affairs and alumni relations offices (McInnis, 2001).

The collaboration of alumni relations and student affairs makes strategic sense, as personnel from both offices share many of the same characteristics and the same, ultimate goal—that of providing a good experience and establishing a life-long relationship with the higher education institution. Each office must establish engagement opportunities tailored to their constituency or to the student body. Typically, these opportunities include social and educational programs, celebratory events, fund-raising dinners, and stewardship events. Many alumni who were engaged as undergraduates continue to stay engaged and interact with the students who participate in the same interests (Singer & Hughey, 2002). There are also great opportunities for alumni relations’ staff to be involved with student affairs’ initiatives, such as senior traditions programs or advising.
This provides a great opportunity for alumni staff to familiarize themselves with the soon-to-be alumni (Council for Advancement and Support of Education [CASE], 2008).

Because alumni relations personnel are aware of the influence of undergraduate experiences on alumni engagement, it is important that alumni relations’ offices work hand-in-hand with student affairs’ offices. According to Jablonski, student affairs’ professionals can be a tremendous resource and can help connect and find current contact information for alumni. Student affairs’ professionals can be effective in developing enjoyable, meaningful ways for alumni to connect with their alma mater (CASE, 2008). They can also help to identify student leaders and influential classmates from different eras. As the alumni office plans homecoming and other events, they can ask the student affairs personnel about popular hangouts, so as to strategically market to alumni. The undergraduate experience is the foundation for the life-long relationship alumni affairs’ offices hope to establish (McAlexander & Koenig, 2001; Sun, Hoffman, & Grady, 2007).

Keeping good records of student involvement is critical. Having data of student membership in organizations, leadership roles, athletic teams, and Greek life can be useful when re-engaging alumni with the campus. Yearbooks, newspapers, and records are good references of what events were memorable for a given graduating class. Typically, the alumni relations’ office maintains a database of the alumnus’ contact information, year of graduation, major, and donation history. Additional archival information from student affairs would be beneficial for developing strategies for alumni engagement. Ensuring a process for the exchange of these data could prove meaningful with respect to fund-raising. Alumni who were involved in campus activities and groups will often times be invited to serve in an official capacity as an advisor to a student
organization, living-learning community, or a university-supported board or committee (Jablonski, 1999).

University leaders who make student affairs a priority will develop undergraduate experiences that seed alumni loyalty, as well as alumni donations (Sun et al., 2007). Establishing a culture of giving and involvement throughout the undergraduate experience will instill institutional pride. Student affairs’ personnel generate this sense of pride by prioritizing a positive experience for students. These efforts pay dividends for fund-raising efforts of the future (McAlexander & Koenig, 2001).

If universities can successfully instill collaboration between units on campus, it greatly helps with the cost of events and workload. Sharing the responsibilities of freshman orientation, student programming, Greek life, career development, athletics, and graduation not only helps with budgetary savings and workload, but also assists in bridging life-long relationships with alumni. The positive experiences student affairs’ personnel create greatly benefit both the alumni office and student and alumnus pride in the institution.

Fund-raising in higher education has received little research attention. Although there has been an occasional dissertation, case study, or article of higher education organized campaigns, there is a desire to learn more. Several of the articles that have been published on the organization of higher education fund-raising programs are based on the experiences or opinions of the author (Carbone, 1986). Kelly, a philanthropy researcher, stated, “fund raising’s body of knowledge consists primarily of intuitively based, untested principles generated by practitioners” (1998, p. 105).
Theoretical Framework

In Astin’s (1984) Theory of Student Involvement, involvement is defined as the amount of physical and psychological energy that students devote to the educational experience in college. Involved students are more engaged with peers, professors, and staff, enhancing a student’s experience during their undergraduate tenure. The Input-Environment-Output (I-E-O) model embodied this theory, as Astin (1993) explained, with “input refers to the characteristics of the student at the time of initial entry to the institution; environment refers to the various programs, policies, faculty, peers, and educational experiences to which the student is exposed; and outcome refers to the student’s characteristics after exposure to the environment” (p. 7).

Young and Fischer’s study (1996) at Pepperdine University used Astin’s I-E-O model to identify undergraduate and post-graduate experiences that influenced alumni donations to an alma mater. They used a sample size of 299 alumni over a 20-year span that focused on fund-raising methods and techniques that best related to the university’s institutional characteristics. Young and Fischer suggested that undergraduate experiences were not a good measure for predicting alumni who contribute back to their alma mater.

Bristol (1990) indicated that alumni donations can be a measure of the quality of education and the undergraduate experience. Not only has the institution remained in touch with the alumni, the alumni feel a sense of loyalty to the institution and, through an annual gift, demonstrate their appreciation for the role the institution played in their education and experience.

Olsen (1989) analyzed demographic variables as a method of measuring predictability of alumni giving back. Olsen’s study looked at the characteristics of
alumni to identify potential trends of giving history. He analyzed a lifecycle hypothesis of alumni giving at a small liberal arts college. The growth rates of donations were linked to the age-income profiles of donors. Another study focusing on age-donation profile from a large public university of more than 4,000 alumni estimated that growth rates of alumni donations decline after age 52 (Wunnava & Lauze, 2001). This study also found that graduates from the business school and members of non-Greek organizations gave larger donations than did graduates from other majors and members of Greek organizations.

Taylor and Martin’s (1995) research was based on four criterion categories, including demographic information, attitudinal data, alumni involvement, and philanthropic behaviors of alumni donors and non-donors from a public university identified as R1 by the Carnegie Classification of Institutions of Higher Education. The demographic variables considered included family income, year of graduation, years in graduate school, distance of permanent residence from campus, number of years attending the university, academic major, number of children, religious affiliation, political preference, age, birth order, gender, and occupation. Attitudinal data collected related to the alumnus’ emotional attachment to the university, including overall satisfaction with the university experience, whether they would recommend the institution to others, satisfaction with career services, and the alumnus’ perception of financial support to the alma mater. The alumni involvement data consisted of details regarding the alumnus: participation in campus events; opportunities for engagement and staying in touch with faculty, coaches, and staff; reading university publications; and, involvement in extracurricular activities. The final measure involved philanthropic
behaviors, asking whether alumni volunteered in their community, whether for religious, political, or civic groups. Also included in this category were questions of spousal gifts made to the alma mater or to other nonprofits (Taylor & Martin, 1995).

There were six major findings that identified the difference between donors and non-donors. Two of these findings were demographic characteristics, family income and enrollment in graduate school. Family income was identified as an influence of donations, as families with higher incomes were more likely to donate to the university than families with lower incomes. One attitudinal factor was found, the alumni’s perception of the college’s need for financial support. Alumni were more likely to donate if an institution portrayed a need for financial support. Of the three alumni involvement factors—reading university publications, engagement with extracurricular activities, and involvement with the university—the strongest of those was reading university publications. It was also apparent that ongoing involvement with the university increased the probability of donations. Taylor and Martin stated that these factors can assist in predicting if an alumnus will donate to his/her alma mater.

Bruggink and Siddiqui (1995) based their study on characteristics of alumni at an independent, liberal arts college. Their model focused on identifying factors that influenced giving, with the dependent variable being the amount of alumni giving during the fiscal year. Independent variables included income, marriage, age, Greek-affiliation, graduation year, and current employment status. Their study found that income, Greek-affiliation, alumni activity, distance from the alma mater, years after graduation, marital status, and alumni major were all statistically significant for an alumnus’ propensity to donate.
Okunade (1996) used covariance regression and a data sample from 1975/76-1989/90 to analyze the giving of undergraduate alumni to Memphis State University who graduated in the 1926/27-1975/76 period. The study found that business school alumni, alumni who later earned a graduate degree at the same university, and alumni members of non-Greek social clubs gave more donations than other alumni. Giving was also found to vary over economic cycles.

**Demographics**

Demographic characteristics of donors has been one of the most popular areas of research into why alumni give back to their alma mater (Brittingham & Pezzulo, 1990). Age has a significant impact with alumni giving. Studies show that as alumni age, they are more likely to donate and to donate larger amounts (Bruggink & Siddiqui, 1995; Oglesby, 1991; Taylor & Martin, 1995). Conflicting findings can be found when looking at location of current residence, number and age of children, marital status, gender, and ethnicity (Mosser, 1993; Rosser, 1997; Schmidt, 2001).

Okunade and Berl’s (1997) study at the University of Memphis Business School found that gender, race, and marital status are not significant predictors of giving. However, donations declined significantly when a son or daughter entered college.

**Gender Comparisons**

Studies examining giving donations and the relationship to gender have had contradictory findings (Mesch, 2009), highlighting the importance of examining the effect it has in relation to this study.

Belfield and Beney (2000) examined the predictors of alumni giving at two public universities in the United Kingdom. Using ordinary, least-squares techniques, they
estimated two models for both the probability of giving and the total amount given. They found that females had a higher tendency to give than males, and that married alumni have a lower probability to give.

Okunade (1993) researched donations from business school alumni and found that gender, race, and marital status had no significant influence on either giving rates or levels of donations. These results are compatible with Jones and Posnett’s (1991) findings.

Oglesby (1991) examined the influence of spousal donations and concluded that spousal contributions to an alma mater was not a significant variable. Oglesby suggested that supporting other charitable causes was significant, which contradicts Zaleski and Zech’s (1992) findings.

Miser and Mathis (1993) researched gender and giving. They found that while more women than men give to their specific interests, the amount women gave tended to be lower because female salaries are typically lower than male salaries.

**Student Undergraduate Experience**

The undergraduate experience is critical for administrators seeking ways to involve alumni. Alumni have many experiences throughout their undergraduate experience and have lasting memories and relationships they carry with them for the rest of their lives. Many of these relationships can be with faculty, administrative staff, or staff from enrollment management, counseling/advising, student affairs/engagement, career services, or other departments. An alumnus’ relationship with a higher education institution may also be influenced by academic performance or participation in athletics or other social or academic activities. Students who had a great experience may be more
willing to stay engaged and involved with their alma mater. The evidence for
determining if this experience has an influence on giving back is needed. Furthermore,
these undergraduate social and academic experiences can influence alumni to give back
(Belfield & Beney, 2000).

Astin (1984) and Pascarella and Terenzini (1991) found that student involvement
is important in retention and is directly related to graduation rates. Other studies found a
significant relationship between undergraduate involvement and alumni donations (Astin
et al., 1984; Baker, 1998; Klostermann, 1995; Pearson, 1999; Rosser, 1997). On the
other hand, Miller and Casebeer (1990) found no such relationship between
undergraduate student involvement and giving back. Further, Taylor and Martin (1995)
found participation in special interest groups was related to donor giving, and that
undergraduate participation in a departmental club or organization was related to alumni
donation levels. Students involved with Greek organizations were more likely to
contribute (Bruggink & Siddiqui, 1995; Okunade, Wunnava, & Walsh, 1994).

A study by Miser and Mathis (1993) focused on how institutions evaluate the
programs and functions of the various departments that establish relationships with
students and the benefits related to fundraising. The development of student programs
and activities change and evolve to meet the needs of students and to create a lasting
relationship with an alma mater (Miser & Mathis, 1993).

Title IX legislation, which first passed in 1972 and was expanded upon in 1987,
created a surge in women collegiate athletics. Since Title IX, female student athlete
participation has increased more than 400%, while male student athlete participation
grew only 20%. This indicates that female participation in higher education athletics has
grown at a more rapid pace than males (Fulks, 2000; Fulks, 2002; Suggs, 2003; Women’s Sports Foundation, 2002). By extension, this increased engagement—undergraduate women who participate in college/university athletics—may lead to greater engagement rates among donor-alumni following graduation.

Student involvement with specific organizations, such as athletics, student affairs groups, fraternities, sororities, and political organizations, impacts donor participation, according to Mulugetta, Nash, and Murphy (1999). They also found that students who were engaged with community service and religious organizations were only moderately likely to give back as alumni.

On the other hand, Holmes, Meditz, and Sommers (2008) found that alumni were more likely to donate to an alma mater if they had experiences in athletics, performing arts, Greek life, or other leadership positions on campus. Further, students who worked in the advancement office as a phone caller or some other responsibility within the department were 23% more likely to donate, yet, students who were part of an affinity group (gay and lesbian, African-American, International, etc.) were 6% less likely to give back.

Merolla, Serpe, Stryker, and Schultz (2012) believe students can be influenced by the clubs and organizations in which they were actively involved because it instills social responsibility that carries with them after graduation. Furthermore, Schervish and Havens (1997) believe involvement with social clubs helps students to identify the needs of an organization, as they were educated on the influence they and their peers have on the institution and the community.
Many researchers have found that engagement with social clubs, such as fraternities, sororities, and athletic teams, increases rates of giving (Bruggink & Siddiqui, 1995; Marr, Mullin, & Siegfried, 2005; Monks, 2003; Schervis, 2005). Studies further suggest that involvement in campus politics, performing arts, student government, and religious clubs significantly increases the probability of alumni donating back to their alma mater (Monks, 2003; Okunade et al., 1994; Wunnava & Lauze, 2001). Harrison, Mitchell, and Peterson (1995) found in their research that students who were involved with non-academic groups—sororities, fraternities, and athletic teams—were more likely to contribute than other alumni, while Meer and Rosen (2009) found that students involved in athletics were more likely to give back only in years in which their former team did particularly well.

Hecker (1995) stated that academic majors and salaries after graduation impact an alum’s ability to give back. For example, engineers have the highest earnings in the first decade of graduation, which provides them a greater opportunity to give back.

**Alumni Motivation**

Motivation is defined as an internal state or desire that serves to activate behavior (Kleinginna, 1981). Research analyzing alumni motivation shows that alumni motivation to give was significantly related to actual giving or willingness to give (Beeler, 1982; Clotfelter, 1985; Gardner, 1975; Mosser, 1993; Oglesby, 1991). Alumni motivation is the internal pride created during a student’s experience, while an undergrad and drives them to want to give back to their alma mater. Additionally, motivation can be viewed as the willingness to invest money or time in programs (Mulugetta, Nash, & Murphy, 1999) and interest in bequests or planned gifts (Lindahl & Winship, 1994).
The Annual Report on Philanthropy consistently demonstrates that giving to education is a priority of the United States, ranking only second to religion. However, overall giving by alumni has been on the decline, while average alumni gifts have increased (White, 2015).

White (2015) identified several reasons for this trend in alumni participation rates. One reason stems from better tracking methods of alumni data and contact information. Second, there has been a rise in family foundations and donor-advised funds. These gifts are now counted as gifts from organizations and not personal gifts for reporting purposes. Third, the college experiences of the ’60s was filled with turmoil and controversy, challenging the relationship and engagement of students and alumni with their alma mater. As White posits, the challenge to authority learned during these years may influence decreased giving. Alumni from this era are now in their 60s, which is usually considered their golden years of giving, yet, they simply are not giving back. Participation rates can sometimes be skewed because universities with higher participation rates have poor alumni records, which will make their giving rates higher than those with more current records.

White goes on to suggest that the remedy for declining alumni engagement is to keep alumni motivated and engaged through communication and investment in their experiences, including their student experience. Extracurricular activities can help in student retention and in keeping alumni engaged—and giving. White recommends communicating with alumni using diverse methods of communication (mail, social media, etc.) beyond reunions, events, boards, and career mentoring.
Life-cycle of Giving

Conley (1999) examined alumni motivations and giving cycles throughout an alumnus’ lifetime. Understanding what keeps individuals connected to their alma mater and then helping those individuals reach their philanthropic goals is critical when creating case statements and strategic plans of institutional advancement. Several universities incorporate annual funds and endowment earnings in their short-term and long-term budgetary plans. Moreover, students who participate in campus-life activities and organizations are more likely to be philanthropic to their university than those who are not (Conley, 1999).

Conclusion

Conley (1999) stated that individuals who participate in student organizations as an undergraduate are more likely to donate back to their alma mater. Evaluating the true influence of undergraduate student involvement is a significant factor in obtaining alumni donations.

Higher education’s continued demand and need to generate additional funds for operations is prevalent and will remain so for the foreseeable future. It is important for universities to understand the life cycles and motivations of philanthropy. Dinkins (1991) stated that institutions should recognize this importance and create processes and plans to implement these strategies and move donors through the stages of philanthropy. Olsen, Smith, and Wunnava (1989) described the life-cycle process of giving from alumni at a small liberal arts college, and Barrett (2002) reinforced the same findings in his study at Spelman College. Lipman (1997) emphasized the nurturing of relationships within a college structure as a student progresses through the undergraduate and graduate
process. As a student matures through the choice of a major, graduation, reunions, campaign gifts, and alumni committee work, it is imperative that university representatives work to maintain the relationship throughout the process. Successful organizations have intuitive managers who understand their constituents’ life-cycle process and continually develop relationships that model and educate the individual during each phase (Lipman, 1997). Levin (1998) reinforced the behavioral life-cycle model, emphasizing self-control through financial gifts to an institution. The constituent needs to understand the importance of the gift and the overall need for the organization to receive the financial gift. If universities can instill the importance and create a mind-set of engagement and philanthropy during the undergraduate years, it will pay dividends into the alumni years.

The next chapter details the methods used to measure the influence of alumni demographic and undergraduate involvement experiences on alumni donor activities and includes a description of the research sample used in this study.
Chapter Three

Methodology

Introduction

This chapter provides a detailed description of the methodology used in this research project. It begins with a discussion of the study’s methodological approach and the purpose of this research. The chapter then highlights the research sample used for analysis and provides details of Raiser’s Edge, the customer relationship management (CRM) database from which information for this study was extracted. The chapter then describes the study design and framework—Astin’s (1991) Input-Environment-Output (I-E-O) model—and concludes with the limitations of the research and a chapter summary.

As the economy shifts, so do trends in philanthropy, including philanthropy in higher education. Researchers examining longitudinal data sets found that recessions, unemployment rates, fluctuations in the stock market, and changes in tax laws all impact private giving, with a more positive economic environment linked to higher rates of alumni participation and giving (Bruggink & Siddiqui, 1995; Coltfelter, 1985; Okunade, 1993; Olsen, Sith, & Wunnava, 1989).

Knowing the characteristics of alumni who contribute can assist a development staff’s efforts to raise funds. Higher education institutions provide numerous opportunities in which students can be engaged and involved via student groups, organizations, and athletics. Participation in these groups is important to a student’s undergraduate experience. Many times, such participation helps shape the academic lives of students, while fostering life-long friendships. Understanding the influences that engaged alumni as students can be important for student affairs and faculty (Okunade &
By learning more from these CRM databases, higher education administrators and professionals can have a better understanding of the types of activities, whether inside or outside the classroom, that impact future giving, so as to influence and assist strategic planning decisions and other efforts to direct opportunities for student engagement for the benefit of future giving campaigns.

**Research Questions**

This study addressed the following six research questions:

1. What influence, if any, do demographic characteristics have on the amount of donations alumni make to an alma mater?
2. What influence, if any, do undergraduate fields of study have on the amount of donations alumni make to an alma mater?
3. What influence, if any, does undergraduate academic involvement have on the amount of donations alumni make to an alma mater?
4. What influence, if any, does undergraduate social involvement have on the amount of donations alumni make to an alma mater?
5. What influence, if any, does undergraduate athletic involvement have on the amount of donations alumni make to an alma mater?
6. What influence, if any, does the number of undergraduate involvements have on the amount of donations alumni make to an alma mater?

**Methodological Approach**

The purpose of this study was to determine whether and if alumni demographic, undergraduate field of study, or on-campus undergraduate involvements influence alumni donations to an alma mater. Alumni who have a strong affiliation with their alma mater
may be more likely to give back to their institution. If this can be proven by using data from an alumni database, this provides a great advantage to higher education alumni, development, and advancement offices responsible for fund-raising in three ways: by profiling alumni whose experiences may lead them to most likely give back to the institution; by segmenting alumni based upon their philanthropic history; and, through use of these methods, by more effectively and efficiently targeting alumni with mailing, events, and other means so as to increase alumni giving. Literature suggests that alumni who feel satisfied with their educational experiences or who have an emotional bond with their alma mater are more likely to donate (Baker, 1998; Calvario, 1996; Klostermann, 1995; Patouillet, 2000). Additionally, alumni who give back believe their gift will have an immediate impact on the current undergraduate experience (Diamond & Kashyap, 1997; Klostermann, 1995; Prince & File, 1994).

The research design for this study was quantitative. Three universities provided data from their alumni database to measure the influence of philanthropic support. Data were collected by each institution’s alumni department and updated on a regular basis. The goal of the study was to assist universities in better understanding the influence undergraduate involvement may have on graduates contributing back to their alma mater. Using Astin’s Theory of Student Involvement as the framework, the study focused on demographic characteristics and the influence undergraduate experiences have on alumnus’s giving back to their alma mater.

The three Ohio private institutions used in the study were Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University. Each institution pulled from Raiser’s Edge, their alumni database, the details and records of their undergraduate
donations for the 10-year period, 1995-2005. The database contained details of each graduating student’s demographic characteristics, as well as undergraduate involvement and philanthropic giving history to their respective institution. To obtain the data, the researcher reached out to the directors of the alumni offices, provided the rationale behind the research, requesting the data in a confidential format, and agreed to provide the results of the research. The directors of each alumni office were eager to participate and to see the results of this research. All data were exchanged electronically via email.

The data provided by the three institutions were analyzed in Statistical Package for the Social Sciences (SPSS, version 23.0) software using a blocked form of step-wise, linear regression analysis to measure the influence, if any, of student involvement on philanthropic giving (Astin, Sax, & Avalos, 1999). The findings were used to answer this study’s six research questions.

**Data Analysis Framework**

Astin’s (1984) Theory of Student Involvement is widely endorsed as the preeminent model in student involvement research, and it can be used to support new thinking with respect to students’ philanthropic activity as alumni. Astin (1984) defined involvement as the amount of physical and psychological energy students devote to the educational experience in college. Involvement includes academically-related activities, co-curricular activities, and interactions with faculty, staff, and peers. Examples include attending class prepared for the day’s topic of discussion, and participating in study groups or other class- or career-related organizations. This study focused on involvements outside of class, such as involvement in college athletics,
fraternities/sororities, and student government, among other co-curricular activities (Astin, 1984).

Astin (1984) developed five postulates related to involvement as it applies to this study: (a) involvement refers to the investment of physical and psychological energy in various objects, which can range from the student experience as a whole to a specific activity, such as involvement in a student organization or intramural sport; (b) regardless of the object, involvement occurs along a continuum, as some students will invest more energy than other students, and any given student will be more involved in certain activities than others; (c) involvement has both quantitative (the amount of time devoted to an activity) and qualitative (the seriousness with which the object was approached and the attention given to it) features; (d) the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program—the more students put into an activity, the more they will get out of it; and, (e) the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. Astin insisted that, for student learning and growth to occur, students need to actively engage with their environment (Astin, 1984).

Creating a positive experience for students benefits higher education institutions. Astin (1984) stated it is imperative that colleges and universities evaluate programs and services according to their ability to increase student involvement. The more engaged students are with peers, clubs and organizations, the better the student experience and the greater the satisfaction students will feel toward the institution. Alumni relations and
development professionals can use involvement theory to develop policies and practices that cultivate improved alumni relations.

This study focused on the quantitative features of student involvement. The independent variables of age, gender, ethnicity, marital status, field of study, and academic, athletic, and social involvements were used to determine what influence, if any, each variable has on the dependent variable, the alumnus’ amount of giving over a 10-year period.

**Input variables.** A key to successfully using Astin’s I-E-O model is controlling for student inputs to avoid the biasing influence of these variables when interpreting the influence of the environment on the outcome. Furthermore, controlling for inputs minimizes errors in assessing the environmental effects on the outcomes being studied. “Any application of the I-E-O model to assessment data requires the inclusion of input data for two basic reasons: (a) inputs are always related to outputs; and (b) inputs are almost always related to environments (educational programs and practices)” (Astin, 1993, p. 64).

The input variables used in this research study were age, gender, ethnicity, and marital status (Figure 1). Controlling for the influence of these input variables allowed for a less biased causal inference about the influence of environmental variables on the outcome of interest. For the purpose of this study, the ethnicity field was condensed to include only White/Caucasian and non-White categories, due to the small number of alumni represented in the non-White ethnic categories.
Environmental variables. Environmental variables measure a variety of college and environmental experiences students encounter while in college. The environmental variables measured in this study were field of study, and academic, athletic, and co-curricular involvement (Figure 1). Appendix A includes a complete listing of all such co-curricular activities available to students at all three universities participating in this study.

For the purpose of this study, scholarships, awards, and special academic recognitions were included in the academic environmental variable, in addition to undergraduate participation in academic clubs and organizations. While a scholarship or academic award may not equate to the same level of participation as a student involved in an athletic program or social club, it is a part of the undergraduate experience that should be accounted for by the research. A student who excels academically and makes the dean’s list or receives special recognition by way of a scholarship or award could only
have done so as an undergraduate and, therefore, these academic recognitions are accounted for in the academic variable.

For this study, athletic involvements included any undergraduate participation in an athletic endeavor, whether as an athlete or an athlete or team trainer or manager. Because they are engaged in extramural competitions, cheerleading and dance were also included in this variable. Furthermore, this variable also includes the athletic honors categories of letterman/woman, earned only with a student’s participation in a sport. Appendix A includes a complete listing of all athletic activities available to students at the three universities participating in this study.

The co-curricular involvement variable included all available undergraduate co-curricular and social activities, including: student political or religious groups; Greek-life organizations; marching band or student musician ensembles; academically oriented groups with a social or networking purpose, such as an economic or business clubs; and, student participation in university departments through internships, among others. All such clubs, organizations, and groups are listed in Appendix A.

For the final independent environmental variable, field of study, five fields were used – humanities, business, education, science, and other. The researcher grouped undergraduate majors into these fields using the data sets provided by the universities involved in this study.

An advantage of an environmental assessment is being able to measure the continuum of experiences to which students are exposed. “In its broadest sense, the environment encompasses everything that happens to a student during the course of an educational program that might conceivably influence the outcomes under consideration”
Environmental factors may include a student’s involvement with a specific club, organization, athletic team, etc., for as briefly as one day, to as lengthy as the entire undergraduate career. This focus can be looked at by experience, day, semester, or even the typical, four-year experience. According to Astin, environmental experiences can range from the entire institution to more specific or “proximate” experiences for the student, making environmental assessment the most difficult, neglected, and complex challenge in the field of assessment. This range of experiences presents two challenges researchers must address when assessing any student’s environmental experiences. The first challenge is “to define the person or thing on which we focus our attention” (Astin, 1993, p. 81), otherwise known as the unit of observation. In this instance, the research focused on undergraduate’s experiences captured and documented in the alumni database. The second challenge in assessing the student’s environment is to account for the fact “that any student’s environment is, to a certain extent, self-produced” (Astin, 1993, p. 83). In other words, students make decisions and create their own experiences within their chosen educational environment. As a result, Astin suggested it is “unrealistic to enumerate, much less measure, all or even most of the important self-produced environmental experiences that a typical college or university student might encounter” (p. 83). Astin noted that these two challenges are related. “The source of environmental data is related to the unit of observation and the problem of self-produced environmental variables” (p. 85). This study focused on experiences and their influence on a graduate’s behavior to philanthropically give back later, often much later.

**Outcome variable.** The I-E-O model is specifically designed to determine how the educational environment influences the outcome under investigation. “Outcomes
refer to those aspects of the student’s development that the institution either does
influence or attempts to influence through its educational programs and practices” (Astin,
1993, p. 38). As for assessing outcomes, Astin noted that outcome measures are value
based, and it is important to determine from whose perspective the outcome is being
assessed. The term outcome refers to a student’s performance on an outcome measure at
a particular point in time and does not delineate any pre-causal factors that may account
for that performance (Astin, 1993). In this case, this study considered the student’s
performance as an undergraduate involved in a variety of experiences and a student’s
inclination to give back to an alma mater a result of these experiences (Figure 1). The
outcome variable, alumni donations, included the total amount each alumni donor gave
back to the alma mater during the 10-year period, 1995-2005. Universities, and fund-
raisers in particular, hope alumni give back as a result of quality experiences with their
alma mater.

**Research Sample**

Data for this research study were collected from three private universities in
Ohio— Baldwin Wallace University, Bluffton University, and Ohio Wesleyan
University.

Founded in 1845, Baldwin Wallace University is a private university located in
Berea, OH, a community of approximately 19,000 residents located in north central Ohio.
BW hosts 4,177 students enrolled in 50 undergraduate and graduate programs. For the
past 19 years, BW has received a best-value ranking among Midwest colleges by U.S.
News & World Report, and similar rankings by Princeton Review and Kiplinger’s
(http://www.bw.edu).
Bluffton University is a private university located in Bluffton, OH, a community of approximately 4,100 residents located in northwest Ohio. Bluffton’s student enrollment approximates 1,150 students enrolled in 50 undergraduate or graduate programs. Bluffton has received national recognition in both the U.S. News & World Report and Barron’s college evaluation editions (http://www.bluffton.edu).

Ohio Wesleyan University is a private university located in Delaware, OH, a community of approximately 35,500 residents located in central Ohio. Founded in 1842, OWU hosts 1,850 students in any of 93 undergraduate majors, sequences, and courses of study. The university is listed among 40 institutions in the book, Colleges That Change Lives (http://www.owu.edu).

Each university uses Raiser’s Edge, a fund-raising and CRM database program. This database is manually updated by alumni and development/advancement staff on a regular basis. Each year, new graduates are uploaded into the database with details of their undergraduate experience captured through the student affairs office. These details include student demographic data and participation in athletics, fraternities/sororities, academic clubs and awards, etc. Each university also attempts to capture contact information for graduates and from responses to mailings, details of alumni donations to the university. Student demographics, undergraduate experiences, and philanthropic giving for each of the three universities identified were provided to the researcher for the 10-year period, 1995-2005.

**Data Collection and Procedures**

Since 1981, Blackbaud has been a company that has worked in the nonprofit sector with a sole focus and expertise in providing solutions for nonprofits to make a
difference in their local communities. The company is a publicly-traded organization (NASDAQ: BLKB). Considered to be the best technology and database service provider for data gathering and storing, Blackbaud has over 30,000 customers in more than 60 countries. The company’s main area of business is higher education, but it also serves clients in healthcare, human services, arts and culture, faith, the environment, independent K-12 education, animal welfare, and other charitable causes. The company also offers cloud-based and on-premise software solutions and related services for organizations of all sizes, including fund-raising, eMarketing, advocacy, constituent relationship management, financial management, payment services, analytics, and vertical-specific solutions. Using their services, Blackbaud partners now raise more than $100 billion annually. Because of its success, Blackbaud is rated as a top company by Forbes, InformationWeek, and Software Magazine, and has been honored by Best Places to Work. Blackbaud is headquartered in Charleston, SC, with operations in Canada, Australia, the Netherlands, and the United Kingdom (https://www.blackbaud.com/).

Blackbaud’s Raiser’s Edge software is considered the preeminent CRM tool for nonprofits to organize, maintain, and report all aspects of constituent data, including donor names, contact information, engagement opportunities, involvement, and donations. A database is a critical element to any fund-raising operation and can be described as a library of information used to store relevant information for developing, maintaining, and enriching relationships with constituents of the institution (https://www.blackbaud.com/files/support/guides/re7/re7begin.pdf). The universities in this study use the Raiser’s Edge database to keep alumni records up-to-date and accurate, so as to better plan and manage campaigns and events and measure trends in giving.
Database operators can use the library of data to run queries and reports to assist with analyzing and extracting information for strategic planning of campaigns and donor relation events. Many times, this information is relied upon for solicitation mailings, geographically pinpointed events, and invitee lists for campus events.

Before databases were used to keep track of alumni information, many development/advancement offices used Rolodex files and relied upon gift officers to remember and keep notes of these details. This tactic was useful and successful in many cases, but technology has allowed the opportunity to expand fund-raising efforts and abilities, resulting in more money being raised. Use of a database assists fund-raisers with organization, maintaining correct information, and developing goals for strategic planning purposes.

The Blackbaud Index for Higher Education was created to assist institutions and other non-profits with strategic planning and is administered by Chuck Longfield, Blackbaud’s Chief Scientist. The Index is used to assist with the data analytics of higher education giving across the nation. Each month, the Index reports the fund-raising activity through Giving USA. This information provides higher education institutions with benchmarks for their own data analysis and strategic planning (https://www.blackbaud.com/).

Using a CRM database can assist with daily procedures and tasks and generate better communication across the organization and to outside constituents. Documenting interactions with an alumnus or constituent is advantageous for the future of the institution. These details are readily available and useful in understanding the relationship the alum, friend, or company has with the university.
Raiser’s Edge allows users convenient access either in the office or remotely. Using a quality database such as Raiser’s Edge reduces redundancy and saves the higher education institution time and money. Employee turnover is always a challenge, and planning for turnover through the practice of entering details into the database is imperative to understanding alumnus’s relationships. Storing information from one person or generation to the next allows for better effectiveness of strategic planning, stronger relationships, and better results.

Raiser’s Edge has several CRM competitors, and it is important to mention them, as institutions outside of the three in this study may use one or a combination of the following databases to warehouse their undergraduate, alumni, and CRM details.

Donor Perfect was founded in 1981 and is headquartered in Horsham, PA. Donor Perfect has the capability of tracking donor information, fund-raising efforts, processes for donations and management, reporting and data analysis, as well as wealth management. It now has more than 10,000 non-profit clients with revenues of more than $30M. Clients include small community organizations, such as libraries or animal welfare groups, and higher education institutions. Donor Perfect partners with other businesses to assist with fund-raising efforts and to provide information to customers. WealthEngine is one of these partners. WealthEngine provides specific information on constituents, including home/property values, past giving to other organizations, and salary data. WealthEngine is compatible with many CRM databases, including Raiser’s Edge (http://www.donorperfect.com/).

Established in 2004 with a headquarters located in Chicago, IL, Neon is a web-based fund-raising system used to track constituent data. Using cloud technology, Neon
can provide unlimited access and storage for non-profit clients. A few of its clients include the Boys and Girls Club of America, Habitat for Humanity, and the Kidney Cancer Association. This database is a 360-degree system built to filter data from other websites, webpages, and databases across an organization, storing the data in one accessible database. This system can also integrate with social media sites, including Facebook, Twitter, and LinkedIn, and can be used for tracking, reporting, and cultivating efforts (http://www.z2systems.com/).

Founded in 2005 and headquartered in Cedar Rapids, IA, Agilon is an established competitor of Blackbaud’s Raiser’s Edge. Agilon is well known in higher education with 76% of its clients representing public institutions of higher education with an average endowment size exceeding $193M. Agilon’s CRM features include donor outreach, data enrichment services, and data conversion technical services. Agilon provides customer service and consulting to assist with the management and upkeep of the database. A few of Agilon’s clients include Xavier University, Bowling Green State University, and Illinois State University (http://www.myagilon.com/ccon/).

With its headquarters in Fairfax, VA, Ellucian has been in existence for more than 40 years. The company offers a wide range of technology to higher education and nonprofits and currently serves more than 2,400 institutions in 40 countries. Ellucian’s Banner Advancement software provides the tools to establish a relationship with a student or parent and continue to cultivate and engage the relationship for years to follow. Banner has the capacity and capability to interact with the admission and student life databases, to share information, and to keep the exchange of information clean and records current. This is important because it enables the institution to capture
involvement and engagement information while students are undergraduates. This information is critical in the cultivation process and is evident in this study. Among the institutions that currently use Banner are two private, Ohio-based universities, Heidelberg University and Ohio Northern University (http://www.ellucian.com/).

Other noteworthy CRM database companies used by higher education institutions include Hobsons (http://www.hobsons.com/crm-for-higher-education) and Ruffalocody (http://www.ruffalocody.com/). These databases are used with the admission and enrollment offices and can be synced with many student life and alumni databases. Capturing data from the time a student enrolls through graduation and beyond is essential in assisting with retention of an undergraduate and maintaining relations with an alumnus who stays engaged and donates.

**Data Analysis Procedures**

This quantitative study was framed around Astin’s (1984) Theory of Student Involvement. This framework is recognized as the preeminent model for student outcomes research. Including it with the fund-raising side of higher education will bring a theoretical framework that has not been used in determining influences of donor participation. The Input-Environment-Output (I-E-O) model was the foundation for this research, and provided a proven method to categorize factors that may influence alumni to give back. The I-E-O model “provides a powerful framework for the design of assessment activities and for dealing with even the most complex and sophisticated issues in assessment and evaluation” (Astin, 1993, p. 16).

This study used the I-E-O model with alumnus’s demographic characteristics being the input variables, undergraduate involvement representing the environment
variables, and amount of philanthropic giving as the output. The goal was to measure whether or not undergraduate experiences influence alumni giving to the university. The I-E-O model has been used in countless studies of undergraduate experiences and is ideal for use in this proposed study. This model also extends its reach to personnel in alumni, development, and advancement offices who can assist in measuring the influence of the undergraduate experience on an alumnus’s giving history.

To answer this study’s research questions, data provided by the three universities were analyzed using the Statistical Package for the Social Sciences (SPSS, version 23.0) software using a blocked form of step-wise, linear regression analysis. This analysis assisted in determining which, if any, student demographic characteristics, undergraduate academic involvements, or extra-curricular activities influence philanthropic giving following graduation.

**Limitations**

Most research studies have limitations, and this study is no different. These limitations included the lack of prior research into alumni philanthropy, the period of time being researched, the research sample itself, how alumni data are typically collected by higher education institutions, and the applicability of research findings to all higher education institutions.

An extensive literature review yielded very few studies into the roles demographic characteristics or academic or student involvement experiences play in the philanthropic profiles of alumni. This creates the limitation of other resources and research from which to assist in confirming this study’s findings.
That this study used only one, 10-year data set of undergraduates ranging from 1995-2005 is another limitation. Findings do not fully reflect the philanthropic propensities of all alumni from the three universities used in this study.

It is important to note that the data provided for this research were based on the precise and organized work of staff at each institution. However, much of the information contained in an alumni database is self-reported and, for this reason, is subject to errors of omission. Among the limitations of this study, there can be human errors involved in data collection on the part of either the alumni or by staff in the alumni or development offices. The researcher trusted that the data provided from the alumni offices were as accurate as possible. To ensure anonymity of the donor, the data provided were redacted such that only student ID numbers, issued in advance of freshman enrollment, were used, and not the names of actual alumni.

The alumni and advancement database is a collaboration of details, contact information, records, notes, and memories of one’s entire duration of college, beginning with the freshmen year and is continuously updated. The details of an individual’s record can vary. The challenge for the alumni office is to be certain this information is recorded, transferred, and shared. The details and information are the story of the individual alumnus and, in some cases, the story of many alumni, organizations, teams, and generations. Maintaining these records is tedious and may be subject to human error.

Many university databases are not collaborative with other offices on campus. This means the admissions office, the student life office, the student financial aid office, and the business office may all use a different database to store student information. This presents a major challenge to the alumni office. The alumni office relies on these offices
to transfer the information to the alumni office after each semester to create new or update existing records in their database. This can sometimes generate human error. Not having proper procedures in place to transfer the data can certainly be a limitation and impact the integrity of the data. It is imperative that these offices work together and create appropriate procedures to share these details and maintain a database that is as accurate as possible. Alumni offices also depend on the various offices, such as the athletic department and the business office, to share with them information when an alumnus forwards a donation to a specific program, coach, team, etc. This provides the opportunity to properly recognize the gift in the system, send the appropriate stewardship thank you notes, as well as the proper tax information for deductions.

Closely related to this limitation is the fact that the population used in this study included only alumni from three private universities in Ohio, as this information was readily available to the researcher. A total of 51-private institutions in Ohio offer a bachelor’s degree. The population examined in this included only traditional-aged undergraduates who graduated during a 10-year span, 1995-2005. Choosing this age group provides the alumnus enough time to have contributed back to his or her alma mater (Lowenstein, 1997). It also is current enough that the alumni have had ample opportunity to be involved in alumni organizations offered by the institution.

Finally, the database used in this study was one of convenience from three private, higher education institutions in Ohio. It is not the researcher’s intent to suggest that the study’s findings apply to all higher education institutions.
Summary

After extensive research, it is evident that there is not an abundant amount of research on the topic of influences on alumni philanthropy. The research highlighted in the study indicates a vast array of influences in both the undergraduate experience, as well as an individual giving throughout the alumni years. In an effort to answer this study’s six research questions and with the data provided, it is uncertain exactly which demographic characteristics or undergraduate experiences, if any, influence one’s giving back to an alma mater. Universities hope and trust that the pride, experiences, and memories made throughout the undergraduate experience influence the philanthropic tendencies and pull on the heart-strings of alumni. Finding opportunities for alumni to re-engage, stay engaged, and, ultimately, to give back can be best identified through those past experiences that have the most influence on an alum’s philanthropic giving, and determining which experiences, if any, have such influence was the goal of this study.
Chapter 4

Results

Introduction

This chapter provides the results of the statistical analyses used to answer this study’s six research questions. As mentioned in previous chapters, the purpose of this study was to provide information that contributes both to the theory and practice of fundraising within the advancement, alumni relations, and student affairs departments across higher education institutions. In addition, the purpose of this research study was to identify which involvement factors, if any, during the undergraduate experience influence alumni philanthropic activities. This information may not only help higher education institutions to raise more money, it may also provide empirical support for providing more opportunities for student involvement during their undergraduate tenure and for keeping alumni more engaged with their alma mater.

Before describing the results of the data analysis, this chapter presents a summary of the descriptive statistics that characterize attributes of the sample used in this study. After restating the research questions, the chapter then presents information on the statistical procedures used in this study, then presents results of the regression analysis by research question, identifying the degree to which the predictor variables influenced the dependent variable, total alumni donations to an alma mater.

Characteristics of the Sample

Participants in this study consisted of alumni from three, private, Ohio-based, higher education institutions—Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University. Because this study involved the secondary analysis of pre-
existing data, the researcher was not required to make contact with the participants. Rather, the researcher gathered existing information about participants from the alumni databases of these three private universities. The researcher worked with the Alumni and Advancement offices at each of the three institutions to follow proper procedures for obtaining the requested data sets.

Each university in this study uses Raiser’s Edge software to store and maintain alumni records. Available from software publisher Blackbaud, Raiser’s Edge is considered the preeminent customer relations management (CRM) tool for nonprofits to organize, maintain, and report all aspects of constituent data, including donor names, contact information, engagement opportunities, involvement, and donations. An alumni database is a critical element to any university fundraising effort, and is considered a library of information used to store relevant information for developing, maintaining, and enriching relationships with the institution’s alumni and constituents (https://www.blackbaud.com/files/support/guides/re7/re7begin.pdf). Database operators at each university may use Raiser’s Edge to run queries and reports to assist with analyzing and extracting information for strategic planning.

One of many features of Raiser’s Edge is the ability of the database operator to store undergraduate involvement activities, including a student’s participation in athletics, social clubs, academic clubs, and other co-curricular activities. In addition to requesting the demographic data for each alumni donor at these three institutions, the researcher requested information pertaining to each donor’s undergraduate co-curricular involvement. A listing of the combined co-curricular activities in which donors participated as undergraduates appears in Appendix A.
For this study, the population examined included only traditional-aged undergraduates who graduated during the 10-year period 1995 through 2005 from the three universities identified, a sample size of 10,642 records. There are a number of reasons as to why this sample size from this time period was chosen. First, as Lowenstein (1997) pointed out, use of data from this time period provides an alumnus ample time to have contributed back to his or her alma mater. It also is current enough that the alumni have had ample opportunity to be involved in alumni organizations or events hosted by the alma mater. Another reason lies in the fact that the data set is not skewed by the economic downturn that came with the 2007-2008 recession, a period that challenged almost all university development departments. The 1995-2005 timeframe, in fact, was a window in time that provided some of the greatest giving to non-profits and higher education institutions in history (CAE, 2015). Furthermore, by 1995, most alumni department databases were well established, capturing the alumni demographic and donor patterns that made this study possible. Also by 1995, most alumni departments had established means and methods by which alumni could give back to their alma mater, including on-line giving methods. This study focused on undergraduates only because they are more likely to have lived on campus and to have been involved with academic and co-curricular opportunities.

Table 1 presents the demographic information of alumni donors to Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University from 1995 through 2005. The information was obtained by running the frequencies of the data from each institution’s alumni database. Demographic information is captured and maintained by alumni office personnel at each institution upon graduation. The transfer of data is an
electronic exchange from the student affairs and business offices to alumni office database managers. Because the information is transferred from other campus departments, some information may be missing. Following graduation, the demographic information in the alumni database is self-reported and updated by alumni communicating with the alumni office.

The demographic characteristics in the alumni data set were helpful in determining each variable’s effect, if any, on the dependent variable, total giving to the alma mater. Two sets of variables—fields of study (business, education, humanities, and science) and ethnicity (White/Caucasian and non-White)—were dummied so that they could be included as input variables in the regression analysis. As Table 1 shows, the typical alumnus in the data set was between the age of 30 and 39 (84%), female (59.1%), White/Caucasian (73%), and not married (57.5%).

For the purpose of this study, the ethnicity field was coded into White/Caucasian versus non-White, due to the small number of alumni represented in the non-White ethnic categories. Fields of study were also used as environmental variables to determine the impact each had on the dependent variable, total donations. As depicted in Table 1, Humanities (30%) was the most represented field of study.

**Statistical Procedures**

This section provides an overview of these procedures used to execute this study and concludes with the results.

**Testing assumptions.** To make assumptions about the population based on the results of a regression analysis, certain assumptions must be tested and determined to be true (Field, 2009). Results of the one-tailed Pearson correlation that was run to test the
multiple linear regression relationships indicated that 7 of 12 independent variables were either positively or negatively related to the dependent variable, and were significant (p < .001 or .01). Humanities, science, other fields of study, and academic and co-curricular involvement were the five variables not significantly related to the dependent variable.

Table 1

Demographics of Alumni Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>1,285</td>
<td>12.0%</td>
</tr>
<tr>
<td>30-39</td>
<td>8,957</td>
<td>84.0%</td>
</tr>
<tr>
<td>40-49</td>
<td>153</td>
<td>1.3%</td>
</tr>
<tr>
<td>50-59</td>
<td>61</td>
<td>.05%</td>
</tr>
<tr>
<td>60-69</td>
<td>15</td>
<td>.01%</td>
</tr>
<tr>
<td>70-79</td>
<td>4</td>
<td>.01%</td>
</tr>
<tr>
<td>Missing</td>
<td>167</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,642</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4,351</td>
<td>40.9%</td>
</tr>
<tr>
<td>Female</td>
<td>6,291</td>
<td>59.1%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>19</td>
<td>0.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>149</td>
<td>1.4%</td>
</tr>
<tr>
<td>African American</td>
<td>285</td>
<td>2.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>105</td>
<td>1.0%</td>
</tr>
<tr>
<td>White</td>
<td>7,769</td>
<td>73.0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2,315</td>
<td>21.8%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>4,521</td>
<td>42.5%</td>
</tr>
<tr>
<td>Not Married</td>
<td>6,121</td>
<td>57.5%</td>
</tr>
<tr>
<td><strong>Field of Study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>1,997</td>
<td>18.8%</td>
</tr>
<tr>
<td>Education</td>
<td>1,293</td>
<td>12.1%</td>
</tr>
<tr>
<td>Humanities</td>
<td>3,196</td>
<td>30.0%</td>
</tr>
<tr>
<td>Science</td>
<td>1,508</td>
<td>14.2%</td>
</tr>
<tr>
<td>Other</td>
<td>2,648</td>
<td>24.9%</td>
</tr>
</tbody>
</table>
A second assumption of the regression analysis is that a relationship exists between the number of involvements alumni participated in during their undergraduate experience and the total amount of their giving. There was a significant relationship between these two variables \((r = .09, p < .01)\). This demonstrated the more academic, social, and athletic involvements alumni were involved in, the more in total donations they gave to their alma mater.

**Regression analysis.** The researcher used the SPSS software (version 23.0) to perform this study’s blocked form of step-wise regression data analysis to determine the significance of the relationships between an alumni donor’s demographic information and undergraduate experiences on his or her contributions to an alma mater. Examining the influence, if any, of these types of involvements in relation to giving had not been explored previously, and presented an opportunity to generate unique insights for the institutions. Once the major assumptions were tested, a blocked form of stepwise regression analysis was run to determine if any of the predictor variables influenced total donations. A total of 12 variables were used in 2 blocks, beginning with the demographics of the alumni database, followed by the involvement variables. Significant results from the analysis appear in Table 2.

In Table 2, the first column indicates the variable, while the second column represents the block in which the variable was used in the stepwise regression. The third column indicates the Zero \(r\), which represents the correlation between the independent variable and the total donation. The fourth column provides the step beta (\(\beta\)) weight, the point at which that variable was entered in the model. Then, for each model of the stepwise regression analysis, the most significant predictor variable was added to the
model. The step beta (\(\beta\)) is the beta (\(\beta\)) weight that variable had at point-of-entry into the model. The fifth and final column represents the beta (\(\beta\)) weight for each independent variable as it is represented in the final model.

**Table 2**

*Predictors of Significance for Contribution*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Block</th>
<th>Zero r</th>
<th>Step (\beta)</th>
<th>Final Step B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>0.035</td>
<td>.06***</td>
<td>17.382</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>1</td>
<td>0.057</td>
<td>.06***</td>
<td>95.196</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>0.039</td>
<td>.04***</td>
<td>73.713</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>0.039</td>
<td>.05***</td>
<td>71.773</td>
</tr>
<tr>
<td>Number of Involvements</td>
<td>2</td>
<td>0.055</td>
<td>.09***</td>
<td>89.986</td>
</tr>
<tr>
<td>Athletic Involvement</td>
<td>2</td>
<td>-0.012</td>
<td>-.03**</td>
<td>-62.324</td>
</tr>
<tr>
<td>Education Major</td>
<td>2</td>
<td>-0.033</td>
<td>-.03**</td>
<td>-67.466</td>
</tr>
</tbody>
</table>

*Note.* Sample size is 10,475, \(R^2 = .017\) Adjusted \(R^2 = .017\); *p < .05, **p < .01, ***p < .001

The stepwise regression analysis produced seven models where a new significant model was determined. To make sure the data were as accurate as possible, the researcher first used listwise deletion to determine if there were any missing data in the data set. From the available sample size of 10,642 records, 167 records were determined incomplete, leaving 10,475 records for use in the data analysis. The variables that had significant beta (\(\beta\)) weights are displayed in Table 3 by level of significance. For a complete listing of variable correlations, see Appendix B.
Table 3

*Significant Predictors of Donations to Private Universities*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Predictor Variable</th>
<th>Final Step B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Types of Involvements</td>
<td>.09***</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>.08***</td>
</tr>
<tr>
<td>3</td>
<td>Ethnicity</td>
<td>.05***</td>
</tr>
<tr>
<td>4</td>
<td>Married</td>
<td>.04***</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>.04***</td>
</tr>
<tr>
<td>6</td>
<td>Athletics</td>
<td>-.03**</td>
</tr>
<tr>
<td>7</td>
<td>Education</td>
<td>-.03**</td>
</tr>
</tbody>
</table>

*Note.* Sample size is 10,475, $R^2 = .017$ Adjusted $R^2 = .017$; *p < .05, **p < .01, ***p < .001

Table 4 shows the percent of variance explained by the input and environmental blocks. In Table 4, the first column shows the blocks used for the step-wise regression. The second column reveals the percentage of variance regarding the dependent variable (total giving) explained by the variables in the two blocks. The first independent variable, input block, shows how the variance concerning the dependent variable (amount of gifts) can be explained by the input block (demographics) equaling a 1% variance. The second independent variable, environment block, helps to explain an additional .70% in the variance concerning the dependent variable (amount of gifts). When combining the two, the total percentage of variance explained by the model is 1.70%.
Table 4

*The Percent of Variance Explained by the Input and Environmental Blocks*

<table>
<thead>
<tr>
<th>Block</th>
<th>Percent of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Block</td>
<td>1.00%</td>
</tr>
<tr>
<td>Environmental Block</td>
<td>0.70%</td>
</tr>
<tr>
<td>Total</td>
<td>1.70%</td>
</tr>
</tbody>
</table>

Results of the Analysis by Question

In this section, the results of the regression analysis will be examined for each of the study’s six research questions.

**Results for research question 1:** This study’s first research question examined what influence, if any, demographic characteristics have on the amount of donations alumni make to their alma mater.

To determine whether the amount of financial contributions alumni make to their alma mater can be predicted by undergraduate student demographic characteristics, the researcher conducted a multiple regression analysis. The dependent variable consisted of alumni gift amounts from participants at three private, higher education institutions—Baldwin Wallace University, Bluffton University, and Ohio Wesleyan University—during the 10-year period between 1995 and 2005. The regression analysis for RQ1 was conducted using four input variables: (a) age, (b) gender, (c) marital status, and (d) ethnicity.

All four independent variables were statistically significant predictors of the amount of financial contributions of alumni to their alma mater: (a) age ($\beta = .09$, $p <$
.001); (b) gender (male) ($\beta = .05, p < .001$); marital status (married) ($\beta = .039, p < .001$); and, ethnicity (White/Caucasian) ($\beta = .057, p < .001$). The variable age indicated that as alumni get older, they give more. The gender variable indicated that male alumni tend to give more than do female alumni. The variable marriage indicates that alumni who are married tend to give more than do alumni who are not married. The ethnicity variable indicated that White/Caucasian alumni tend to give more than do non-White alumni.

**Results for research question 2:** This study’s second research question examined what influence, if any, undergraduate fields of study have on the amount of donations alumni make to an alma mater.

To determine whether the amount of financial contributions of alumni to their alma mater can be predicted by their undergraduate field of study, the researcher conducted a multiple regression analysis. For this study, five fields of study were used, humanities, business, education, science, and other. The variable education major is a negative statistically significant predictor of the total amount of financial contributions of alumni to their alma mater ($\beta = -.03, p < .01$), suggesting that students who are education majors tend to give less in donations to their alma mater than do alumni from the other fields of study reviewed by this research – business, humanities, science, and other.

**Results for research question 3:** The third research question examined what influence, if any, undergraduate academic involvement has on the amount of donations alumni make to an alma mater. For the purpose of this study, scholarships, awards, and special academic recognitions were included in the academic environmental variable, in addition to undergraduate participation in academic clubs and organizations. A student who excels academically and makes the dean’s list or receives special recognition by way
of a scholarship or award could only have done so as an undergraduate and, therefore, these academic recognitions are accounted for in the academic variable. This variable was coded by collapsing all of the identified academic involvements into one field, academic involvement. All of the academic involvement variables used in this study can be found in Appendix A.

To determine whether the amount of financial contributions of alumni to their alma mater can be predicted by their undergraduate academic involvement, the researcher conducted a multiple regression analysis. Regression analysis for RQ3 was conducted using the independent variable of academic involvement. There were no significant findings using academic involvement in the blocked stepwise regression analysis.

**Results for research question 4:** The next research question examined what influence, if any, undergraduate co-curricular involvement has on the amount of donations alumni make to an alma mater. The co-curricular involvement variable included all available undergraduate social activities, including: student political or religious groups; Greek-life organizations; marching band or student musician ensembles; academically-oriented groups with a social or networking purpose, such as an economic or business clubs; and, student participation in university departments through internships, among others. This variable was coded by collapsing all of the identified co-curricular involvements into one field – co-curricular involvement. All co-curricular involvement variables used in this study can be found in Appendix A.

To determine whether the amount of financial contributions of alumni to an alma mater can be predicted by their undergraduate co-curricular involvement, the researcher conducted a multiple regression analysis. The regression analysis for RQ4 was
conducted using the independent variable of undergraduate co-curricular involvement. There were no significant findings using co-curricular involvement in the stepwise regression analysis.

**Results for research question 5:** The final research question examined what influence, if any, undergraduate athletic involvement has on the amount of donations alumni make to their alma mater. Athletic involvements included any undergraduate participation in an athletic endeavor, whether as an athlete or an athlete or team trainer or manager. Because they are engaged in extramural competitions, cheerleading and dance were also included in this variable. Furthermore, this variable also includes the athletic honors categories of letterman/woman, earned only with a student’s participation in a sport. This variable was coded by collapsing all of the identified athletic involvements into one variable, athletic involvement. All athletic involvement variables used in this study can be found in Appendix A.

To determine whether the amount of financial contributions of alumni to their alma mater can be predicted by their athletic involvement, the researcher conducted a blocked form of stepwise regression analysis. Stepwise regression analysis for RQ5 suggest that students who are engaged with athletics tend to give less total donations to their alma mater than do non-athlete alumni ($\beta = -.03, p < .01$).

**Results for research question 6:** The final research question examined what influence, if any, the number of undergraduate involvements have on the amount of donations alumni make to their alma mater. To answer this question, the researcher conducted a multiple regression analysis. Stepwise regression analysis for RQ6 suggests that students engaged with all three involvement fields—academic, social, and athletic—
in their undergraduate years give more total donations to their alma mater ($\beta = -0.09$, $p < 0.01$). To arrive at this, the researcher matched donation levels of alumni with experience in all three involvement fields against all other alumni records. Alumni who engaged in all three involvement fields while an undergrad—academic, athletic, and social—gave more to their alma mater than alumni who engaged in two or fewer involvement fields.

Involvement in all three fields while an undergrad proved to be the strongest positive predictor of the amount of financial contributions alumni make to their alma mater. This demonstrates that alumni who were engaged with all three involvements—academic, social, and athletic—while an undergrad gave more to their alma mater than alumni who participated in two or fewer involvements.

**Summary**

Based on a review of the literature and guided by its theoretical framework, this chapter provided an overview of the quantitative analyses conducted in order to attempt to answer the six research questions proposed in this study. The results of the blocked stepwise regression analysis, based on the data provided by the three private universities, were addressed by research question. The strongest predictors of influence for alumni to give back to their alma mater was the number of different types of involvement; that is, the more types of involvements in which students are engaged throughout their undergraduate experience, the more likely they are to donate at a greater level.

These findings have implications for research, policy, and practice that merit further discussion. These implications are discussed in Chapter Five.
Chapter Five

Discussion, Recommendations, and Conclusions

Introduction

Chapter Four presented the results of the study’s regression analysis to provide answers to this study’s six research questions. Chapter Five, the concluding chapter of this study, goes on to discuss these findings and their implications. The chapter begins with a brief summary of the study, leading into a detailed discussion of results organized by the study’s six research questions and block variable structure. Implications for policy and best practices will be reviewed, with recommendations and insight for future research. A final summary of the study will complete Chapter Five.

Overview of the Study

The purpose of this multi-institutional study was to determine what influence, if any, involvements in the undergraduate experience have on the amount a donor will give back to his/her alma mater. This study utilized a causal analytic methodology, with Astin’s (1991) college impact (Input-Environment-Outcome) model as its data analysis framework. Astin’s Theory of Student Involvement, which posits that students’ college outcomes are influenced by their active involvement in academic and other activities, informed the study’s use of measures of different types of student involvement as predictors of students’ donations as alumni.

A review of literature suggests that alumni who feel satisfied with their educational experiences or who have an emotional bond with their alma mater are more likely to donate (Baker, 1998; Calvario, 1996; Klostermann, 1995; Patouillet, 2000). Additionally, alumni who give back believe their gift will have an immediate impact on
the current undergraduate experience (Diamond & Kashyap, 1997; Klostermann, 1995; Prince & File, 1994).

The study involved 10 years of alumni donations, from 1995 through 2005, to each of three private, Ohio-based, higher education institutions: Baldwin Wallace University, Berea; Bluffton University, Bluffton; and, Ohio Wesleyan University, Delaware. The researcher secured donor data from each university’s vice president of advancement and alumni relations. To ensure the privacy of donors, data provided to the researcher were de-identified so as to ensure no confidential information was shared, either directly or indirectly through triangulation. As this study involved the secondary analysis of pre-existing data, the researcher was not required to make contact with participants. Further, the researcher received approval for use of these donor data sets in this way from the University of Toledo’s institutional review board.

The sample size included a total cohort of 10,642 donors. A breakdown of donors to each college included: 5,488 records from Baldwin Wallace University; 1,575 from Bluffton University; and, 3,580 donor records from Ohio Wesleyan University. Records were first reviewed for completeness. Twelve variables were used in this study’s regression analysis. Records that lacked one or more of these variables were considered incomplete and were excluded from the study, yielding a total 10,475 records for use in this study. In all, 167 records were identified as incomplete.

A stepwise regression analysis was conducted with blocks of variables entered based on the I-E-O model. Astin’s (1984) Theory of Student Involvement is widely endorsed as the preeminent model in student involvement research, and it can be used to support new thinking with respect to students’ philanthropic activity as alumni. The I-E-
O model is specifically designed to determine how the educational environment influences the student outcome under investigation. “Outcomes refer to those aspects of the student’s development that the institution either does influence or attempts to influence through its educational programs and practices” (Astin, 1993, p. 38). As for assessing outcomes, Astin noted that outcome measures are value based, and it is important to determine from whose perspective the outcome is being assessed. The term outcome refers to a student’s performance on an outcome measure at a particular point in time, and does not delineate any pre-causal factors that may account for that performance (Astin, 1993). In this case, this study considered the student’s performance as an undergraduate involved in a variety of experiences, and a predictor for giving back to an alma mater as a result of these experiences (Figure 1). Universities, and fund-raisers in particular, hope alumni give back as a result of quality experiences with their alma mater.

Regression analysis found that seven variables were significant predictors of alumni donor amounts, the criterion variable, with five variables having a positive influence on the criterion variable, and two variables having a negative effect. Findings are discussed in detail in the following section.

**Discussion of the Findings**

Among the seven significant predictors to emerge from this research, number of involvements—the more athletic, social, and/or academic co-curricular activities that a student was involved in, the more they are likely to give in donations to their alma mater—was the strongest predictor of the dependent variable.

This finding supports previous research that demonstrates a positive relationship between undergraduate involvement and alumni donations (Astin et al., 1984; Baker,
and research that suggests undergraduate involvement in clubs and organizations instills within students a social responsibility and influences students long after graduation (Merolla et al., 2012; Schervish & Havens, 1997).

This is a significant finding for both development, alumni, and student affairs’ personnel. For development staff, they may want to target those students engaged in numerous academic and co-curricular activities while an undergrad in their fund-raising campaigns. Alumni office personnel may be able to engage this subset of graduates for special committees or mentorship-work with current students, further ensuring their engagement with the alma mater. For student affairs’ personnel, this finding validates one of their key roles—to generate multiple opportunities for students to engage with the campus environment through co-curricular, athletic, and academic activities.

Age was the second strongest predictor of the criterion variable, indicating that, as alumni grow older, their capacity to give back to their alma mater grows. Studies show that as alumni age, they are more likely to donate and to donate larger amounts (Bruggink & Siddiqui, 1995; Oglesby, 1991; Taylor & Martin, 1995). Yet, other researchers found age was not a good indicator of an alumnus’s giving amount, after factoring in current residence, number and age of children, marital status, gender, ethnicity (Mosser, 1993; Rosser, 1997; Schmidt, 2001) or when an alumnus’s son or daughter enters college (Okunade & Berl, 1997).

Ethnicity White/Caucasian was the third most significant variable impacting the criterion variable; however, this finding may have little applicability given the profile of the survey sample. Fully 73% of this study’s research sample were classified as
White/Caucasian, slightly more than 5% included other ethnicities, with the remaining 21.8% unknown. Given the sample size, the researcher chose to introduce the ethnicity variable block into the analysis as either White/Caucasian or non-White/Caucasian. As higher education institutions continue to champion efforts to diversify the student population, any additional research to determine the predictive value of ethnicity on alumni donations is warranted.

Being married and male were the fourth and fifth most significant variables influencing the criterion variable respectively. Both variables had equal weight on the criterion variable (see Table 3). This finding is of interest, given that previous researchers determined that neither being married nor male were significant predictors of alumni giving (Okunade, 1993; Jones & Posnett, 1991; Okunade & Berl, 1997). Further, this study’s findings contradict Belfield and Beney (2000), whose research found that females had a higher tendency to give than males, and that married alumni have a lower probability to give, and Miser and Mathis (1993), who found that women are more likely than men to give to their specific interests.

This study’s findings have implications for fundraisers who can target higher income or married alumni with useful information on the tax benefits of donations, given that many alumni may come from two-earner households. Advancement and alumni offices can better plan for on- and off-campus events that may attract greater participation among males and, thus, present additional opportunities for giving back to the alma mater.

Two environmental variables shared an equal, negative impact on the criterion variable – undergraduates who participated in athletics and field of study, education.
As for athletics, student athletes give a tremendous amount of time and effort to their institution. The result of this dedication may indicate student athletes believe they have already given back to their alma mater during their undergraduate tenure, which may explain this variable’s negative impact on the criterion variable. Although this finding indicates student athletes are less likely to give back to their alma mater, this study did not consider participation rates, and student athletes may give at comparable or higher participation rates than their non-athlete peers.

As for field of study, education graduates may believe their social responsibility is giving back through their time and talent in the classroom, which may explain this variable’s negative impact on the criterion variable. Although this finding indicated that education majors give less in total donations to their alma mater, the study did not consider participation rates of giving. Education majors may actually give at rates comparable or higher than other majors. It may also be the case that education majors give less because their relative earnings are not as great, when compared with the earning rates of other majors.

Alumni who have a strong affiliation with their alma mater may be more likely to give back to their institution. If this can be proven by using data from an alumni database, this will provide a great advantage to higher education alumni, development, and advancement offices responsible for fund-raising in three ways: by profiling those alumni whose experiences may lead them to most likely give back to their alumni institutions; by segmenting alumni based upon their philanthropic history; and, through use of these methods, by more effectively and efficiently targeting alumni with mailings, events, and other means of increasing alumni giving.
Determining ways to increase fund-raising is important because, with the ever-changing U.S. economy, fund-raising has become an important means of providing funds for the academic enterprise, especially during periods of economic downturn. As Hauptman (2001) noted, “The size of endowments and the strength of alumni and other private giving are among the most distinctive features of American higher education” (p. 119). Alumni donations yield approximately 29% of the total sum of all private giving to colleges and universities (Council for Aid to Education [CAE], 2001). University leadership uses fundraising as seed money to introduce and fund new programs and to try new, innovative approaches to education (Leslie & Ramey, 1988).

Universities have been asking their alumni to support their mission with donations to their alma mater for more than 300 years (Williams & Henderickson, 1986), but philanthropic support of higher education has received little scholarly interest (Pezzullo & Brittingham, 1990). Additionally, few studies exist regarding the role of the undergraduate experience in alumni fund-raising (Young & Fischer, 1996). Of the research conducted, studies link alumni-giving behavior to an emotional commitment to an alma mater (Pezzullo & Brittingham, 1990), suggesting that fund-raisers need to know how and when this emotional commitment forms and the extent to which activities after graduation can influence alumni to remain engaged with their university and give of their time, talent and treasure.

The purpose of conducting research is to influence both theory and practice in higher education. The following section addresses some of the implications revealed by this study.
Implications for Theory

The theoretical framework that informed this study was Astin’s (1984) Theory of Student Involvement. This study proved that Astin’s theory was indeed useful when determining if undergraduate involvement can predict alumni giving back to an alma mater. Astin defined involvement as the amount of physical and psychological energy students devote to the educational experience in college, and includes academically related activities, out-of-class activities, and interactions with faculty, staff, and peers. The more involved students are with their college experience, the better the expected outcome, which, in the case of this study, was alumnus donations to the alma mater. This is the same thought process alumni and development offices use with alumni – the more engaged students are during their undergraduate years, the more engaged they will be as alumni. Astin’s Theory of Student Involvement was the best theoretical framework for use in this study, evidenced by the most significant finding, that alumni engaged in all three involvement fields as undergrads—academic, athletic, and social—gave the largest sum of donations during the 10-year period, 1995-2005.

As mentioned previously, Astin’s theory originated as a framework for understanding student retention through graduation. This study took Astin’s Theory of Student Involvement one step further by focusing on how the undergraduate experience impacts involvement during the alumni years, specifically as it relates to alumni donations. While most engagement literature focuses on the undergraduate experience as it affects student retention, this study breaks ground by linking these experiences to alumni donor patterns, as yet another measure of the benefits of student engagement. No
other alumni donor studies researched fund-raising using the framework of Astin’s Theory of Student Involvement.

The undergraduate experience is the foundation for the life-long relationship alumni affairs’ offices hope to establish (McAlexander & Koenig, 2001; Sun, Hoffman, & Grady, 2007). Typically, students are only on campus four years; yet, as this study shows, that experience creates a foundation of engagement that may affect their donor relationship with their alma mater for the rest of their lives. Having the capacity and the data to continue measuring that experience and involvement is a powerful tool for these offices and for the higher education institutions overall.

**Implications for Policy and Practice**

The research in this study introduces the predictability of student engagement as it relates to philanthropic giving during the alumni years. As this study showed, alumni involved in all three involvement variables—academic, athletic, and social—during their undergraduate careers gave larger sums of donations than alumni involved in two or fewer involvement variable types. This finding informs campus administration of the importance of providing—and encouraging—students to become involved in undergraduate academic, athletic, and social activities.

This study also informs alumni and advancement offices of specific profiles of alumni from which to focus their fundraising efforts. With increased competition for philanthropic dollars, higher education institutions must focus on determining the most effective ways in which to connect with alumni for the purpose of eliciting donations (Farrell, 2003; Trombley, 2003; U.S. Department of Education, 2006). As university
leadership prepares for fund-raising campaign initiatives, they can use data, such as the findings from this study, to inform decisions as to which alumni to approach.

As important as this study’s findings was the methodology used—linking alumni donations to undergraduate engagement. Development offices may have a number of ways in which they solicit donations from alumni, from mass mailings to all alumni to specific, targeted approaches to alumni based upon their philanthropic history with the alma mater. What is needed is a methodology from which development offices can set realistic fund-raising goals and make better use of departmental resources.

This study assists in that endeavor by suggesting higher education institutions make it a policy of their advancement and alumni relations offices to track the demographic profiles of their students and link these students with undergraduate experiences that presumably are related to alumni engagement. In so doing, institutions have yet another data silo from which to inform key decisions, from which co-curricular activities to support and which methods to recruit alumni (i.e., homecomings, socials, reunions), to which campaign initiatives to embark upon, among others.

Findings from this study that suggested a negative influence on the outcome variable—alumni with education majors and those involved in athletics—pose unique challenges to higher education administrators. Faculty, staff, and coaches should be made aware of the value of philanthropic giving to the institution’s bottom-line and strategic aims. Faculty could be encouraged to invite alumni to class to share their experiences with students and the intrinsic value of philanthropy, while coaches may find creative ways in which to involve alumni in the athletic program. In this way, alumni
could serve as role models for students, encouraging alumni engagement following graduation.

**Recommendation for Future Research**

Much more research is needed in the area of influences on alumni donor activity in higher education, much more. Unfortunately, this researcher can conjecture as to why such research will not be forthcoming soon, none of which has yet to be addressed in this study. The most obvious reason is that alumni relations, fund development, and philanthropy are simply not fields of study in most higher education institutions. Science, technology, engineering, math, and the liberal arts draw students to their higher education careers, not grant-writing and building campaigns. The absence of research, then, follows from an absence of researchers, leading to a lack of understanding. By extension, the traditional laboratory-based, research-grant-supported, publish-or-perish positions in higher education may look upon the fund development and alumni relations roles with a sense of awe or mystery.

But the facts speak to the critical need for more research into this area. A sea-change is taking place in higher education across the country. Institutions that offer online degrees only are competing with stately, bricks-and-mortar institutions, and winning. Student loan defaults place in question the largest bank of support for higher education, the federal government. Retention rates are stagnant. States are intervening in higher education classrooms through conditional or restricted legislation that rewards fiscal conservatism and best-practice teaching techniques. All such factors point to the need for scientific inquiry into higher education philanthropy. If just one recommendation from
this researcher from this study leads to a five percent increase in donor activity, countless thousands of dollars could be added to a typical institution’s coffer.

This study has laid the ground work by using resources available to most all advancement and alumni offices—alumni-donor histories and profiles. Unfortunately, not all institutions have adequately captured this information, and replicating the analysis from this study will not be possible. For institutions that have this information, the first recommendation for future research is that they endeavor to analyze and apply it to their strategic decisions, so as to improve their donor development activities. Other recommendations for future research into higher education philanthropy follow.

**The criterion variable.** The criterion variable for this study—total giving by alumnus—was limited in that monetary donations was the only data set requested by this researcher. However, alumni gifting can take other forms. Future researchers might explore gifts of in-kind goods and services, land or buildings, bequests or scholarships, even alumni volunteerism. Knowing the influences behind alumni donations of time and talent, in addition to treasure, could yield valuable insights for both alumni relations and advancement offices and lead to more such gifts.

**Qualitative analysis.** Quantitative analysis of the type used in this study reveal patterns and linkages. But qualitative analyses—in the form of one-on-one interviews, focus groups, or surveys—may reveal the beliefs and thought processes behind those patterns and linkages. Qualitative interviews could address different alumni types, such as alumni who never give, those who stopped giving, and those who routinely give to an alma mater. Analysis of this type could benefit advancement offices globally by developing an understanding of the motivations to give philanthropically to an alma
mater, yield insights into alumni perceptions of giving to higher education, and may lead to the development of more targeted campaigns to grow an alumni donor database.

**Expanding the time frame.** The data set for this research study came from three institutions for the 10 years, 1995-2005. Future research might expand the longitudinal time frame to account for fluctuations in the economy and factors such as the success of a particular athletic program. Using an expanded time frame, researchers might compare alumni donor patterns with a fixed economic marker such as the nation’s unemployment rate. Alumni donor patterns likely changed from the late 1990s, when unemployment rates were low, to shortly after the 9/11/2001 terrorist attacks, when the unemployment rate began to rise, to the 2008-2011 recession, when unemployment rates reached the highest level in the modern era. Knowing how and whether alumni donor patterns shift during each of these time frames could help advancement offices shift fund-raising strategies when future economic downturns loom.

**Fields of study.** While Hecker (1995) found that academic majors and salaries after graduation impact an alum’s ability to give back, no major contributed positively to the criterion variable, total amounts from alumni donors. Further, only one major—education—contributed negatively. Research that links alumni majors on donations is lacking in the literature. Future studies may consider isolating all majors from one or more institutions to identify what influence, if any, undergraduate majors have on alumni donations. A qualitative survey method may yield further insight, such as the ability to give based upon starting salaries or the likelihood of giving back by major.

**Other student types.** The data set used in this study included only undergraduate students. Future research could include other alumni types, such as graduate-degreed
alumni or alumni who engaged in on-line classes. By their very nature, on-line only students have very different undergraduate experiences than students who live and attend classes on campus. How these on-line-only undergrad experiences influence donor patterns upon graduation would be of interest to advancement and student services personnel alike and may yield new, creative approaches to developing co-curricular activities for on-line students or other means to promote the engagement of these students to college life.

**Ethnicity.** The data set used in this study contained relatively few non-White students. As such, all data shells were assigned one of two ethnicity types, White/Caucasian and non-White. Future researchers might focus on institutions with larger, more diverse alumni data sets so that alumni donor patterns by ethnicity might be revealed. Such research might also include information on donor patterns among international alumni, a donor group of growing interest among advancement and alumni relations’ personnel.

**The institution’s mission.** Some institutions boast of their research mission, while others have their orientation in the liberal arts and may be affiliated with certain religious institutions. How these missions influence alumni donor patterns would be of great interest to advancement personnel. A multi-institution, quantitative study could compare and contrast alumni donor patterns by mission and yield significant between-institution variables not addressed by this study. Multi-institution qualitative research could reveal underlying influences in alumni donor patterns by institution type.

**Private versus public institutions.** This study included data sets from three private, four-year institutions only. Alumni may feel differently about giving to a private
institution versus a public institution that is already partially supported by tax dollars. Furthermore, two-year community colleges may have very different alumni donor patterns due to the large number of transfer students. Future research involving alumni donor patterns may identify significant between-institution variables in alumni donor patterns based upon institution type that, by extension, may aid advancement personnel from either two-year, four-year, public, or private institutions.

**Awarded alumni.** The input and environmental variables used in this study were limited by the data set and included only alumni demographics, fields of study, and co-curricular involvements. The academic co-curricular activity variable used in this study included alumni who had received a scholarship, academic award, or who participated in an on-campus academic club. It is important that students graduate with a positive attitude toward their alma mater, as the undergraduate experience may well shape their giving habits later on (Henerson et al., 1987). Future research may consider isolating this alumni group to consider rates of participation, which was beyond the scope of this study.

**Individual involvements.** Future research may look into the individual involvements alumni had during their undergraduate tenure. This research grouped dozens of possible academic, social, and athletic involvements available at each of the three universities studies (see Appendix A) and compared involvement in each with the criterion variable. However, there is tremendous opportunity for future researchers to investigate alumni donor patterns with each type of involvement and, by extension, each possible involvement activity. This may include involvements such as Greek life, student government, language clubs, investment club, and intramurals. As athletic involvement had a negative impact on the criterion variable, future researchers may investigate the
relationship between giving amounts and earnings after graduation. Diving further into the academic and co-curricular involvements more thoroughly may identify specific groups that give back more donations. This will provide even more data for the university leadership to use when creating strategic plans or preparing for a campaign. The more thorough and developed the list of prospects, the better the opportunity for fundraising.

**The impact of eras and special recognitions.** Institutions wax and wane, change and fluctuate with time. Successful athletic recruitment in one year could lead to a national championship run the next. A research breakthrough could lead to faculty accolades that make national headlines, drawing attention to the institution. How and whether these and other events impact alumni donor patterns could lead to insights that benefit all levels of the institution. A much larger, multi-institution study could isolate these events by institution, perhaps yielding a secondary benefit to such institution successes—increased alumni donor activity.

**Limitations of the Study**

This study included alumni donor patterns from three private, Ohio-based institutions over a 10-year period, 1995-2005. As such, this study has several limitations and its results cannot be generalized to all institutions and its applicability cannot be practically applied to every institution’s policies or practices. First, this study focused only on the 10-year period, 1995-2005. This is a limitation because it only involved donations received during a relatively small window of time. Donations in different years, such as the recent 2008 recession, may yield different alumni donor patterns. Second, this study included only data sets from three private institutions. Private
institutions offer liberal arts education and many have a religious affiliation that can affect a student’s perception of social responsibility following graduation. Third, this study focused only on undergraduates. Graduate and doctoral students may have very different patterns of giving upon graduation. Finally, this study did not differentiate between alumni who spent the majority of their undergraduate years on campus versus those who received their degrees on-line. On-line-only alumni may have very different undergraduate experiences that may influence their inclination to give back to the institution upon graduation. This study had a variance level of 1.70. This is considered to be a low level of variance and limits the practical significance of this research. The vast majority of the variance in the criterion variable was not explained by this study, suggesting that there are many other variables not included in this study that have an influence on alumni giving. Utilizing this study alone to inform decision making about undergraduate involvement and the amount of donations given back to an alma mater should not be done without further research on these topics.

**Contributions to the Literature**

This study of the influences of undergraduate demographics and involvement variables on the amount of donations alumni give to an alma mater contributes to the literature by introducing science to the role of fund-raising, by offering additional support to the theory of student involvement, and by offering higher education leadership a new way in which to view undergraduate experiences. Each will be addressed in turn.

**Science of fund-raising.** There is a major need to expand on the science of fundraising, and this study offers a successful approach. The simple regression analysis used in this study provides a roadmap for university advancement offices to implement a
predictor model to guide their fundraising efforts, provided the institution has a robust, accurate alumni database. This study contributed to the literature by providing institutional leadership a method to better plan for campaigns and strategic planning initiatives by identifying alumni most influenced by their past involvements and, by extension, most likely to donate to their alma mater. As advancement, alumni, and other vested departments on campus continue to educate students, faculty, staff, and alumni about philanthropy and the relationship involvement opportunities have on fund-raising, the more access and opportunity will be provided to students.

**Student involvement.** Astin’s Student Involvement Theory is the preeminent model for student involvement and retention throughout the undergraduate experience. This study went one step further by examining how and whether undergraduate involvement impacts alumni philanthropic giving and is believed to be the first study to have applied Astin’s theory in this way. This researcher found that if undergraduate students were involved with all three involvements from this study—academic, athletic, and social— the more they will give back. Future researchers will be able to apply Astin’s theory as it applies to alumni involvement, exploring the influence of alumni engagement to alumni giving.

**Return on investment.** Finally, this study contributed to the literature by offering institutional leadership a new way in which to view undergraduate experiences – as opportunities for fund-raising in the undergraduate’s alumni years. Knowing and strategically planning fund-raising efforts through use of alumni demographics can be a useful approach when targeting specific fund-raising needs for the institution. Having a better understanding of which alumni are more likely to support the institution is a
powerful tool when developing fund-raising efforts and can help the institution design and direct fund-raising campaigns. Combining the demographic knowledge with what the alumnus was passionate about and involved with during his or her time on campus is a great way to create a best approach or strategy when attempting to reach out to individuals or groups to seek their support. Implementing these predictive models with annual and capital campaigns will save time and money for institutions as well as potentially increasing giving.

Conclusion

Many Boards of Trustees and university leadership should be using data analysis in decision-making to better provide guidance and direction for the university’s mission. Utilizing the data of alumni should provide a clear understanding of what has worked to retain students and keep them engaged throughout their lifetimes. This type of research can be used in coordination with alumni surveys to best identify overall experiences and satisfaction of alumni. Typically, surveys are only filled out by true believers and not so true believers. The “average” or “common” alumni’s thoughts and true feelings are not necessarily brought forth in a true fashion. Combining a survey with the alumni data base analysis will give a more in depth look at what the numbers are truly indicating and provide some insight and guidance as to the direction of the strategies for engagement and fundraising. This type of research can also be complemented with a feasibility study. Feasibility studies typically only focus on the top donors, and true believers and can be a bit skewed with only their thoughts. Using this type of additional research and analysis can better prepare the interviewer for conversations around trends of the alumni data base. To conclude, the undergraduate experience is the gateway to a lifetime of
engagement. Recording and maintaining accurate records of the life of an alumnus is important because that data present a wonderful opportunity for research. This research can be used to assist alumni in reaching their philanthropic goals in life and universities to continue fulfilling their mission.
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Appendix A

Study Variables

Input Variables

- Age
- Gender
- Marital Status
- Ethnicity
  - African American
  - American Indian/Native Alaskan
  - Asian
  - Hispanic/Latino
  - Non-Resident Alien
  - White/Caucasian
  - Unknown/Other

Environmental Variables

- **Field of Study**
  - Humanities
  - Business
  - Education
  - Science
  - Other

- **Academic Involvement**
  - A.C. Burcky Award
  - Alice E. Batchelor Graduate School Scholar
  - Alpha Kappa Delta – Sociology
  - Alpha Kappa Delta Soc Honorary
  - Alpha Lambda Honor Society - Freshman Honor Society
  - Alpha Sigma Lambda - Continuing Education
  - American Bible Society Award
  - AMRS Hallenbeck Prize
  - Anna H. Rusoff History Prize
  - Annie Rogers Rusk Prize in Art
  - Art Merit Award
  - Art Show Juror's Award of Distinction
  - Athlete with highest scholastic record
  - Award of distinction
  - Barbara Van Sittert Scholarship
  - Battelle Scholar
  - Biology Merit Award
  - Bishop's Grant – Methodist
- Boehr Award/Best of Show
- Burns/Shirling Award
- C. Henry Smith Oratorical Award
- Carapenter Award for Academics
- Carpenter Award for Research
- Carpenter/Chase Scholarship/Zool
- Charlotte Wolf Academic Achievement Award
- Chemical Rubber Co/Distinguished Freshman Chemist
- Chemistry
- Chemistry Dept Outstanding Senior Award
- Chi Gamma Nu Chemistry Honorary
- Christian Kamm Scholarship Award
- Class of 1870 Memorial Prize
- Clerihew Scholarship/English
- Clinton R. Stevenson Leadership Award
- Community Service Scholar
- Corns Scholar
- Cum Laude
- Dan E. Anderson Memorial Prize
- Davies Prizes
- Dayton C. Miller
- Dean's List
- Dean's Scholar
- Delta Mu Delta - Business Administration
- Delta Phi Alpha
- Delta Phi Alpha – German
- Delta Sigma Theta
- Departmental Honors
- Distinguished Scholar Award
- Dorothy Getz Fellowship
- Dorothy Herbst Travel/Study
- Eagle Scout
- Edward J. Wheeler Prize
- Edward L. Rice Zoology Award
- Eloise King Shaw Award
- Emma Sparks Memorial Prize
- Excellence in Dance Award
- Excellence in Performance Award
- Excellence in Production Award
- Excellence in Romance Languages
- Faculty Scholar
- Fairhurst Memorial Scholarship
- Financial Executives Institute Award
- Fine Arts Scholarship
- Founders Award for Writing
- Frederick L. Hunt Prize
- Gilson Wright Award
- Godman Grant
- Grace Shoemaker Award
- Groethe Award
- Harriet Stewart Award
- Hastings Eells Prize in History
- Helen Beal Woodward Journalism Award
- Historian Book Award
- Historian Scholar Award
- Honor Roll
- Honors Program Graduate
- Humanities-Classics Senior Book Prize
- Instrumental Music Award
- Intern of the Year Award
- Int'l student/highest scholastic record
- James J. Hearn Award
- Janet King Award
- Jill Herrick Grad. Ed. Scholarship
- Julian Higley Memorial Prize
- Kappa Delta Pi – Education
- Kappa Mu Epsilon – Mathematics
- Kathryn E. Little Award
- L. Dana Latham Prize
- Laurels - Soph. & Jr. Leadership Honor Society
- Leadership Award in French
- Leadership Award in Spanish
- Legacy Grant
- Loyd D. Easton Prize
- Magna Cum Laude
- Marie Drennan Prize
- Mathematical Science Scholarship
- Meek Leadership Award
- Motto Award-awarded by President
- Mu Phi Epsilon - Music Fraternity
- Mu Phi Epsilon Music Honorary
- Multicultural Honors Scholar
- Multicultural Merit Award
- Multicultural Scholar
- Music Merit Award
- Music Teachers Nat'l Assoc Award
- Naomi Brenneman Prize
- NAS Commended African American
- NAS Finalist African American
- National Art Honor Society
- National Honor Society
- National Merit Commended Scholar
- National Merit Finalist
- National Merit Scholar
- National Merit Semi-Finalist
- Noffsinger
- Non-Honors Merit 1 Scholar-Full
- Non-Honors Merit 2 Scholar-3/4
- Non-Honors Merit 3 Scholar-1/2
- OAC Clyde Lamb Award
- OFIC Scholarship
- Ohio Academic Scholar
- Ohio Society of CPAs Scholarship
- Omicron Delta Epsilon – Economics
- Omicron Delta Epsilon Econ Honor
- Omicron Delta Kappa
- Operation Enterprise Scholarship
- Order of Omega - Greek Honor Society
- Outstanding Female Athlete
- Outstanding Scholastic Achievement
- Outstanding Senior
- Outstanding Senior Athlete
- OWU Honor Society in Nursing
- Paul & Cleo Schimmel Scholarship
- Paul W. Hawks Award
- Phi Alpha Theta – History
- Phi Alpha Theta History Honorary
- Phi Beta Kappa
- Phi Sigma Alpha
- Phi Sigma Biological Science Honorary
- Phi Sigma Iota MFL Honorary
- Phi Sigma Tau Philosophy Honorary
- Pi Delta Society
- Pi Gamma Mu - Social Science
- Pi Lambda Theta Nat'l Honor Society
- Pi Mu Epsilon Math Honorary
- Pi Sigma Alpha - Political Science
- Pi Sigma Alpha P & G Honorary
- Presidential Scholar
o Promising Educator Award
o Psi Chi – Psychology
o Psi Chi Nat'l Honor Society/Psychology
o Psi Chi Psychology Honorary
o Ralph A. Bowdle Award
o Ralph E. Hall Fellowship
o Regional Grant
o Richard B. Alexander Award
o Robert E. Shanklin Prize
o Robert R. Crosby Service Award
o Rowland/Hall Scholarship/Chemistry Department
o Russell A Lantz Choral Award
o Ruth J. Wilson Music Award
o Sallie Thomson Humphreys Prize
o Salutatorian
o Scott Sommer Fiction Prize
o Senior Performance Award Music
o Shanklin Scholar in Geography
o Sigma Delta Pi – Spanish
o Sigma Gamma Epsilon ES/GL Honora
o Sigma Iota Rho - International Studies
o Sigma Lambda Alpha – French
o Sigma Pi Sigma Physics Honorary
o Sigma Tau Delta English Honorary
o Sigma Xi Research Award
o Sigma Xi Scientific Research Soc
o Slocum Prize in Classics
o Slocum Prize in Music
o Slocum Prize in Science
o Special Recognition
o Summa Cum Laude
o Supporting Achieve in Theater
o Theatre Merit Award
o Theis Scholarship Award
o Theta Alpha Kappa Religion Honor
o Theta Alpha Phi - Theatre Arts
o Theta Alpha Phi Theater Honorary
o Trustee Scholar
o University Honors
o Valedictorian
o Wall Street Journal Award
o Wesleyan Players Award
o Wesleyan Scholar
• **Athletic Involvement**
  - Archery
  - Athletic Trainer
  - Baseball
  - Cheerleading
  - Club Co-ed Soccer
  - Dance Team
  - Field Hockey
  - Football
  - Football – trainer
  - Football – manager
  - Intramurals
  - Lacrosse
  - Letterman
  - Letterwoman
  - Men's Basketball
  - Men's Cross Country
  - Men's Golf
  - Men's Soccer
  - Men's Tennis
  - Men's Track
  - Sailing
  - Softball
  - Swimming
  - Volleyball
  - Women's Basketball
  - Women's Cross Country
  - Women's Golf
  - Women's Recreation Association
  - Women's Soccer
  - Women's Tennis
  - Women's Track
  - Wrestling

• **Co-curricular involvement**
  - Admission Office Assistant
  - African-American Student Organization-AASO
  - Allies
  - Alpha Kappa Alpha Sorority
  - Alpha Phi Alpha Fraternity
- Alpha Sigma Phi Fraternity
- Alpha Tau Omega Fraternity
- Alumni Office Assistant
- Alumni Weekend Student Ambassador
- American Chemical Society
- Annual Fund by Phone Caller
- Band
- BC Democrats
- BC Education Organization-BCEO
- BC Family and Consumer Sciences Association-FCSA
- BC Republicans
- Beta Theta Pi Fraternity
- Black Cultural Center
- Black Student Alliance
- Bluffton Friends
- BsCene
- Buddy System
- Business Club
- Campus Court
- Campus Crusade for Christ
- Campus Entertainment Production
- Career Education & Outreach - Peer Mentor
- Cheerleading
- Chi Phi Fraternity
- Circle K International
- Class Officer
- College Democrats
- College Republicans
- Community Outreach
- Commuter Activity Board (CAB)
- Continuing Education Student Association (CENTS)
- Course Assistant
- Dance Team
- Delta Delta Delta Sorority
- Delta Gamma Sorority
- Delta Sigma Theta Sorority
- Delta Tau Delta Fraternity
- Delta Zeta Sorority
- Distinguished Leaders Conference Participant
- Economics
- English Club
- Exponent
- Family and Consumer Sciences Association
- Fellowship of Christian Athletes
- Fitness Club
- Fraternity/Sorority Leader
- French Club
- German Club
- Gospel Choir - Voices of Praise
- Greek Council
- Grindstone
- Habitat for Humanity
- Hall Association
- Hall Council
- Hearts on Pilgrimage
- Hispanic American Student Association
- Indoor Soccer Club
- Intercollegiate Sport Association
- Interfraternity Council
- International Student Club
- Inter-Residence Hall Council (IRHC)
- Investment Club
- ISTA
- Kappa Alpha Theta Sorority
- Kappa Kappa Gamma Sorority
- Kappa Phi Service Sorority
- Kappa Sigma Fraternity
- Mill
- Model UN Team
- Newman Campus Ministry
- Ohio Collegiate Music Education Association-OCMEA
- Omega Psi Phi Fraternity
- Orchestra
- Orientation Leader
- P.E.A.C.E. Club
- PALS
- Panhellenic Council
- Phi Delta Theta Fraternity
- Phi Gamma Delta Fraternity
- Phi Kappa Psi Fraternity
- Pi Beta Phi Sorority
- Program Board
- Psychology Club
- Recreation Club
- Resident Assistant
- Science Club
- Senior Class Gift Committee
- Sigma Alpha Epsilon Fraternity
- Sigma Epsilon Epsilon Fraternity
- Sigma Chi Fraternity
- Sigma Phi Epsilon Fraternity
- Ski Club
- Social Work Club
- Society for Human Resource Management (SHRM)
- Sociology Club
- Spanish Club
- Sport Management Club
- Student Body Representative
- Student Council
- Student Senate
- Student-Athlete Advisory Committee (SAAC)
- Students for Environmental Awareness
- Swarm/Pep Band/Club
- Tau Kappa Epsilon Fraternity
- Teaching Together
- Theatre
- Theta Alpha Phi
- Thurgood Marshall Society
- WBCR
- WBWC Radio Station
- Witmarsum
- Women's Issue Circle
- World Student Association

- **Outcome Variable**
  - Alumnus donations
## Appendix B

### Variable Correlations

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120
### Significance

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*Note.* N = 10,475. Key to abbreviations: *DON*, donations; *GEN*, gender; *ETH*, ethnicity; *MAR*, marriage; *BUS*, business; *EDU*, education; *HUM*, humanities; *SCI*, science; *NUMBER*, number of involvement; *ACA*, academic involvement; *CUR*, co-curricular involvement; *ATH*, athletic involvement.