

Factors in the Undergraduate Experience that Influence Young Alumni Giving

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### ABSTRACT

Public funding of higher education has declined substantially in recent years (Alexander, 2000; Esposito, 2010; Mortenson, 2012; NACUBO, 2011; Redd, 2014; Serna & Harris, 2014), while operating costs and demand have increased (Desrochers & Kirshstein, 2012; Mortenson, 2012; Mumper & Freeman, 2011; NCSES, 2014; Serna & Harris, 2014; St. John & Parsons, 2004), forcing institutions to look for alternative sources of revenue (NCSL, 2010). One such alternative source of revenue is alumni giving (Monks, 2003; Archibald & Feldman, 2012; CAE, 2014).

Research has shown that the factors that influence alumni financial giving include demographic characteristics (Hoyt, 2004; Monks, 2003), academic experiences (Monks, 2003; Pumerantz, 2005), social experiences (Monks, 2005; Thomas & Smart, 2005; Volkwein, 1989), and alumni participation variables (Gaier, 2005; Gallo & Hubschman, 2003).

Although there is ample evidence to support the importance of alumni giving, researchers have not examined the factors that influence young alumni giving. This study sought to determine if demographic characteristics, academic experiences and social experiences explain the variance in alumni giving to their alma mater within five years of graduating. I conducted a case study at a single institution and used Volkwein's (1989) model of giving coupled with data from the 2011 National Survey of Student Engagement (NSSE) that captured alumni's demographic characteristics and measured their academic and social experiences while in college. I merged NSSE with data about giving that I retrieved from the Development Office at the selected institution.

The variables included five Demographic items, fourteen Academic Experience items with numerous sub-items, and twelve Social Experience items with numerous sub-items. Exploratory factor analysis revealed five academic factors and four social factors. The results of a multiple regression analysis revealed that only one factor, Class Assignments, explained the variance in young alumni giving, but it may have been spurious. It would appear that demographic characteristics and academic and social factors determined from NSSE are not particularly useful in explaining giving by young alumni. Indeed, only 14.5% of participants actually made a donation within five years of graduating. Clearly more research is needed to expand upon the literature about alumni giving.

# Factors in the Undergraduate Experience that Influence Young Alumni Giving

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## General Audience Abstract

Public funding of higher education has declined substantially in recent years (Alexander, 2000; Esposito, 2010; Mortenson, 2012; NACUBO, 2011; Redd, 2014; Serna & Harris, 2014), while operating costs and demand have increased (Desrochers & Kirshstein, 2012; Mortenson, 2012; Mumper & Freeman, 2011; NCSES, 2014; Serna & Harris, 2014; St. John & Parsons, 2004), forcing institutions to look for alternative sources of revenue (NCSL, 2010). One such alternative source of revenue is alumni giving (Monks, 2003; Archibald & Feldman, 2012; CAE, 2014).

This study sought to determine if demographic characteristics, and academic and social experiences while in college, explain the differences in alumni giving to their alma mater within five years of graduating. Using a single institution and Volkwein's (1989) model of giving, coupled with data from the 2011 National Survey of Student Engagement (NSSE) and institutional giving data, it would appear that demographic characteristics and academic and social factors determined from NSSE are not particularly useful in explaining giving by young alumni.

## ACKNOWLEDGEMENTS

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## Chapter One

### Introduction

There is a financial crisis in higher education (Alexander, 2000; Davis, 2013; Desrochers & Kirshstein 2012; Esposito, 2010; Kena et al., 2014; Mortenson, 2012; Mumper & Freeman, 2011; Redd, 2014; Serna & Harris, 2014; St. John & Parsons, 2004). The state and local share of funding provided to institutions of higher education peaked in 1975 and constituted 60.3% of institutional funding. By 2010 that number was reduced by nearly half, to 34.1% (Mortenson, 2012). The recession that devastated state budgets in the first decade of the 21<sup>st</sup> century caused many states to dramatically decrease state support to public institutions of higher education. Between 2007-08 and 2009-10 only 12 states increased financial support to postsecondary education (Esposito, 2010).

In FY 2010 state appropriations for public 4-year colleges and universities declined between 9% and 13% from the previous year, leaving state support at its lowest level since 2000 (Davis, 2013; Desrochers & Kirshstein 2012). State and local appropriations have fallen at all types of institutions, but research and master's institutions were hit particularly hard: a 24% decline between 2006-2009 resulting in the first time that net tuition revenue exceeded funding from state appropriations at those institutions. State funding is particularly challenging because states, by law, are required to balance their budgets (Alexander, 2000; Serna & Harris, 2014). As public financial resources dwindle, states struggle to appropriate limited funds to their agencies (Alexander, 2000).

At the same time funding from public sources has declined, costs to operate institutions of higher education and demand for their services have increased (Mumper & Freeman, 2011; St. John & Parsons, 2004; Serna & Harris, 2014). Tension exists between institutions' need to increase tuition costs and state governments, responding to constituent concerns, striving to limit those increases. There is evidence that lower tuition increases are realized when regulated by the state (Kim & Ko, 2015). Between 2006 and 2009 total operating costs at U.S. postsecondary institutions increased 20% from \$219.1 billion to \$262.8 billion (National Association of College and University Business Officers [NACUBO], 2012). In 2000, public funds for higher education exceeded tuition revenues from students by \$3,000 - \$5,000 per student, but by 2010 that figure fell to approximately \$500 per student (Desrochers & Kirshstein, 2012). Indeed, appropriations to higher education today remain lower (in constant dollars) than in most years since FY 1980

(National Conference of State Legislatures Blue Ribbon Commission on Higher Education [NCSL], 2010).

During a similar period of time, (1990 to 2012), undergraduate enrollment in degree-granting postsecondary institutions rose from 12 million students to 17.7 million students, an increase of 48%. This trend is expected to continue as the number of students is projected to increase to 20.2 million by 2023 (Kena et al., 2014). At public institutions during the same period of time, the number of undergraduate students rose from 9.7 million to 13.5 million, an increase of 39% (Kena et al., 2014).

This convergence of shrinking state support, increased operational costs, and growing demand has resulted in the need to generate new sources of revenue for the higher education sector (NCSL, 2010). Several new revenue streams have emerged in recent years. To start, many institutional leaders have felt compelled to increase tuition. However, the public outcry against the high price of attending college and the increasing amount of student debt is driving governments and governing boards to limit tuition increases (St. John & Parsons, 2004).

Consequently, academic leaders from institutions of higher education are progressively relying on alternative sources of revenue to finance their operating and capital budgets. These other sources of income may be public, including government sponsored research and development (R&D) funds. R&D contributions to higher education include support from agencies such as the Departments of Defense and Health and Human Services, NASA, the National Science Foundation (NSF), and USDA. R & D in the United States reached the \$1 billion mark in 1963 and by 2016 was \$72 billion (Britt, 2016; NSF, 2017).

Federal government officials understand the importance of continued investment in basic and applied research and development (Shapiro, 2013). R & D support, especially in times of decreased state spending on higher education and growing global competition in high technology industries, is not likely to decrease. Federal officials recognize the significance of R & D funding to building and sustaining an outstanding system of higher education that prepares future scientists and engineers. They also understand the importance of economic growth in the United States and how higher education can play a significant role in not only educating citizens, and creating and marketing innovations, but also in the nation's affluence, continuing employment, security, and enhanced quality of life (National Science Board [NSB], 2012).

Although federal support is crucial, it is insufficient to fully fund the postsecondary enterprise. Increasingly, alternative sources of revenue for higher education originate in the private sector and include foundation grants, corporate donations, endowment income, and alumni contributions (Archibald & Feldman, 2012; Monks, 2003).

Educational foundations typically provide support in the form of grants. Thousands of foundations support a broad array of issues including social justice, health, education, art, humanities, access and affordability. Some of these organizations fund work in the social sciences, like the Koch Foundation (free societies), Posse Foundation (leadership) and The Ford Foundation (social justice). Others support greater access and affordability to higher education and sustaining a career; these include the Lumina Foundation and The Bill and Melinda Gates Foundation. There are many others that support specific initiatives in the arts or humanities, such as The National Art Education Foundation that supports issues surrounding art education (Bill and Melinda Gates Foundation, 2017; Charles Koch Foundation, 2017; Ford Foundation, 2016; Jenkins, 2017; National Art Education Foundation, 2017; The Posse Foundation, 2014).

Overall, foundations provided an estimated \$12.5 billion in support to postsecondary education in 2016, up from \$4.2 billion in 1997 (Council for Aid to Education [CAE], 2017). Even during economic crises, foundation grants have remained fairly stable, evidence of their continuing commitment to issues of interest to higher education (Lawrence & Marino, 2003). Still other giving to higher education comes from corporations. These funds include cash and in-kind gifts generated through corporate giving programs as well as grants and gifts made by corporate foundations (McConnell, 2015). Corporate giving has expanded over the decades to include employee volunteerism and employee matching programs (van Fleet, 2010). In general, corporate giving is influenced by the profits earned as well as a corporation's giving philosophy. Giving philosophy can vary from taking advantage of tax incentives and boosting profits through advertising sponsorships to the more altruistic sentiment of being good corporate citizens (van Fleet, 2010).

Corporate giving to higher education has increased dramatically since the mid-1960s, from about \$5 million in 1967 to the all-time high of \$17.61 billion in 2005 (van Fleet, 2010). Corporate giving trends are impacted by the economic climate as was seen during the 1970s and the more recent 2008 recession (van Fleet, 2010). Although corporate giving to higher education

has not returned to its 2005 high, it still represents 16.1% or \$56.6 billion of private support to the higher education sector (CAE, 2017).

Overall, postsecondary institutions received a record-breaking \$41 billion from charitable contributions in 2016 according to the annual Voluntary Support of Education (VSE) report (2016). In addition to the \$6.6 billion (16.1%) donated by corporations, that \$41 billion included contributions of \$12.5 billion (30%) by foundations. Religious and other organizations contributed \$4.5 billion (11%) (CAE 2017). This is especially relevant as the economy recovers from the recent economic downturn and indicates that donors are committed to private support of education (CAE, 2017).

One other constituency was significant in terms of support for higher education: individuals. The VSE (2016) report revealed that 24.2% (\$9.9 billion) of the \$41 billion was donated by alumni while non-alumni contributions represented 18.3% (\$7.5 billion) of that total (CAE 2017). These forms of philanthropic giving support programs and can build an institution's endowment funds.

Philanthropic support might be considered an outcome of the collegiate experience. There are several models describing student outcomes of college, including Astin's Theory of Student Involvement (1984), Tinto's (1993) Theory of Student Departure, and Pascarella & Terrenzini's (1991) college impact models. Astin (1984) suggests undergraduate student development is dependent upon the amount of physical and psychological effort put forth by students in their academic and non-academic endeavors. Tinto's (1993) theory focuses on student retention as an indicator of students' college experience and includes variables such as their integration into the institution, the quality of their interaction with faculty and the college's commitment to them (Tinto, 1987). Pascarella and Terrenzini (1991), suggest that other outcomes of college include psychosocial changes in areas such as self-understanding and relationships, as well as changes in attitudes and values. Moral development and readiness to be productive members of the workforce and society reflect other outcomes of college (Graham & Gisi, 2000).

Student outcomes like effort, integration to campus, and psychosocial changes are elusive and difficult to assess. Giving to one's alma mater, however, is an outcome of the collegiate experience that might be easier to measure. There are several models in the literature that reveal reasons for alumni giving; all seem to focus on individual motivation and behavior. Alumni

giving to their alma mater is influenced by their willingness to give, their involvement in the university, their perceptions of the economic environment, the perceived need of the institution, whether they received a scholarship, and their capacity to give (Hoyt 2004). That is, alumni must be motivated to give and willing to invest money and/or time in their alma mater.

Another study espouses that student and alumni experiences, including giving, are significantly related to the perceptions they have about the quality of their educational experience (Gallo & Hubschman, 2003). Factors that determine the quality of their educational experience include demographic background, the impact of educational programs and experiences, involvement in activities and organizations while in college, and employment history and experiences (Gallo & Hubschman, 2003).

Most relevant to my study is the Volkwein (1989) model of alumni giving. Much of his research suggests that the amount and frequency of alumni giving are functions of both capacity and motivation to give (Volkwein, et al., 1989). Factors that influence motivation to give include personality and values while factors that determine capacity to give include socioeconomic background and achievements. Other factors that influence capacity and motivation include demographic background and prior academic and social experiences (Volkwein, et al., 1989).

The Volkwein Model of Alumni Giving (1989) considers capacity to give to be dependent upon occupational status, wealth, number of dependents, highest degree earned, and educational progress. Motivation to give is influenced by such factors as multiple degrees from the college, proximity to and communication from the college, aspirations and career values, and alumni involvement with the institution. Other factors that influence motivation to give include satisfaction with occupation and income, professional and civic service and the perceived need of institutional support.

As shown in Figure 1, there are many factors that influence both capacity to give and motivation to give. These factors can be broken down into two types, demographic background and college experiences and outcomes. Demographic background takes into account socioeconomic status, age, graduation year, gender, race/ethnicity, intergenerational attendance, and whether the student entered as a freshman or transfer student. The college experience and outcomes are also influenced by whether they entered as a freshman or transfer student in

addition to their GPA, major, extracurricular activities, academic experiences, relationships with faculty and peers and their personal and intellectual growth (Volkwein, 2010).

Figure 1

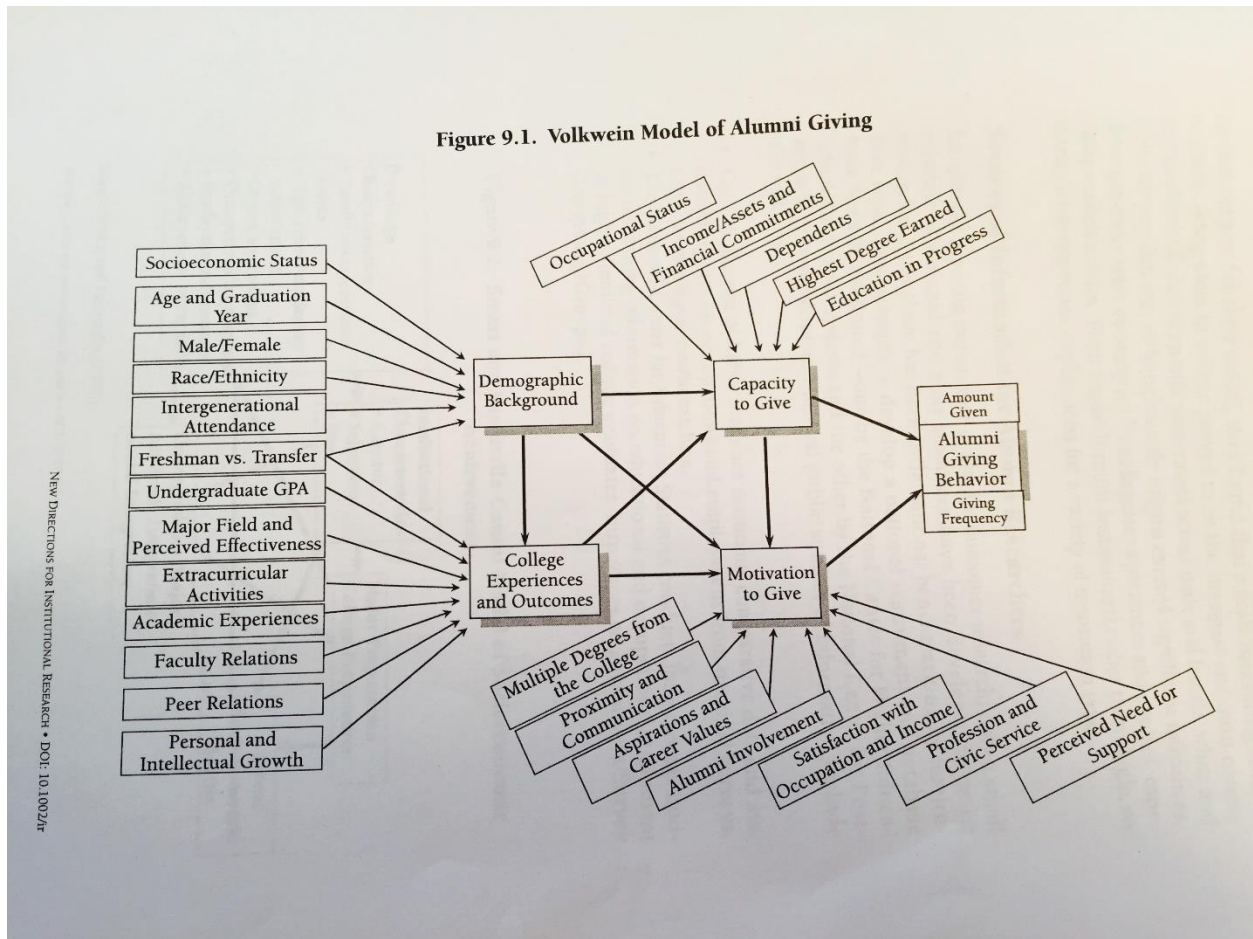


Figure 1: Volkwein Model of Alumni Giving (Volkwein, 1989)

Positive student experiences translate into positive perceptions by alumni and increase the likelihood that alumni will give to the university (Gallo & Hubschman, 2003).

There are several instruments that are used to measure college student outcomes. The National Survey of Student Engagement (NSSE) gathers information from college graduates about several of the Volkwein factors, including demographics, participation in academic and social activities, and relationships with faculty and peers (Redd, 2014). My study used NSSE items as proxies for the outcomes associated with Volkwein’s (1989) theory. I supplemented the NSSE dataset with information from institutional records related to alumni giving.



## **Statement of the Problem**

In summary, a perfect storm has engulfed the higher education enterprise in recent years. Public funding has declined precipitously (Alexander, 2000; Esposito, 2010; Mortenson, 2012; NACUBO, 2011; Redd, 2014; Serna & Harris, 2014). At the same time, operating costs in the postsecondary sector have increased (Desrochers & Kirshstein, 2012; Mumper & Freeman, 2011; Mortenson, 2012; St. John & Parsons, 2004). Further compounding the problem, demand for higher education continues to climb (Mumper & Freeman, 2011; NCSSES, 2014; Serna & Harris, 2014).

In response, postsecondary institutions have looked to increase funds from four alternative sources (NCSL, 2010). These include R & D (NCSSES, 2014; Shapiro, 2013; NSB, 2012), foundations (CAE, 2014; Lawrence & Marino, 2003; McConnell, 2012), corporations (McConnell, 2012; van Fleet, 2010; CAE, 2014), and individual giving by alumni (Monks, 2003; Archibald & Feldman, 2012; CAE, 2014).

Alumni giving can be considered an outcome of the collegiate experience. There are several models for measuring this outcome (Astin, 1984; Graham & Gisi, 2000; Pascarella & Terenzini, 1991; Tinto, 1993) that include individual motivation, behavior, educational experiences, and capacity to give (Hoyt, 2004; Gallo & Hubschman, 2003; Volkwein, et al., 1989). Most relevant to my study is the Volkwein Model of Alumni Giving (1989) that suggests that the factors that influence giving include demographic factors, academic experiences, and social experiences. The National Survey of Student Engagement (NSSE, 2011) gathers information from college graduates about their personal (demographic) characteristics, as well as their participation in academic and social programs and activities (NSSE, 2011).

Institutions of higher education depend on alumni giving as an important resource for success. Financial giving is an easily recognized and measurable form of alumni support (Johnson & Eckel, 1997; Gaier, 2005). There is ample evidence in the literature about the motivation factors and capacity factors that influence alumni giving to their alma mater (Volkwein, et al., 1989). The current study seeks to expand the existing literature by examining the degree to which Demographics, Academic Experiences and Social Experiences influence alumni financial giving.

## **Purpose of the Study**

The purpose of this study was to examine factors that influence alumni financial giving to their alma mater within five years of graduation. The conceptual framework I chose for this study was a modified version of Volkwein's Model of Alumni Giving (1989). Specifically, I looked at the degree to which Demographic characteristics, Academic Experiences, and Social Experiences explained the variance in alumni giving.

Demographic Variables (DV) were defined as sex, international status, racial or ethnic identification, grades, and parents' level of education. Academic Experiences (AE) were defined as the extent of involvement in the curricular experience (e.g., faculty interaction inside and outside of class, the quality of relationships with faculty and staff, preparation for class, participation in academic activities and satisfaction with the educational experience). Social Experiences (SE) were defined as extracurricular activities (e.g., interaction with others, participation in student organizations, community events, and service).

The sample included alumni from a research extensive university in the mid-Atlantic region of the United States. Data for the study came from two sources at the selected university. Specifically, I used National Survey of Student Engagement (NSSE) data gathered from alumni who graduated in 2011 and provided by the Office of Assessment and Evaluation. Using specific selection variables, I narrowed the sample to 559 participants. I supplemented the institutional dataset with information about the five-year giving history of those 559 alumni that I derived from the Development Office.

## **Research Questions**

This study was designed to answer four research questions:

1. To what extent do demographic factors explain the variance in alumni giving within five years of graduation?
2. To what extent do academic experiences explain the variance in alumni giving within five years of graduation?
3. To what extent do social experiences explain the variance in alumni giving within five years of graduation?
4. To what extent do demographic factors and academic and social experiences explain the variance in alumni giving within five years of graduation?

## **Significance of the Study**

This study was significant for several campus constituencies including senior level development professionals, vice presidents for student affairs, academic leaders, and first year experience program developers. The results of this study provided senior level development professionals with data about what types of social experiences influence alumni to give to their alma mater within five years of graduating. Development professionals might use the results to collaborate with student affairs professionals to design social programs at the undergraduate level in hopes of cultivating future donors.

Additionally, the results of this study provided vice presidents for student affairs with data to support what types of social experiences lead to giving. Vice presidents for student affairs may use this information to educate their staff to promote programs that lead to giving.

Academic leaders might benefit from the results as well. The findings identified the academic experiences that were associated with giving. Deans and Provosts might use the data to examine the academic services (e.g., faculty contact with students, service learning opportunities) at their own campuses in an effort to promote giving.

Lastly, developers of first year experience initiatives might use the data to determine what types of programs lead to positive academic and social experiences during the freshman year and subsequently might lead to giving by alumni. They may use this information to guide curricular development and the types of experiences introduced during a student's first year in college.

The present study also had significance for future research. For example, my data came from alumni of a single research extensive university. A future study might examine what factors predict alumni financial giving at other types of institutions (e.g., liberal arts colleges, community colleges). Such a study would expand on the information available about the prediction of giving based on institutional type.

Second, my study was based on quantitative data. A future study might look at giving through a qualitative study involving interviews and focus groups in order to gain a deeper understanding of what undergraduate experiences lead to giving by alumni.

Lastly, this study determined what academic and social experiences influence giving. Another study could examine what other factors, such as major or profession might explain variability in alumni financial giving.

My study was also significant for future policy. The results provided faculty and administrators with information about the academic experiences associated with alumni giving. They might use the results when shaping policies about criteria for new or revised curricular offerings.

In addition, the results provided student affairs professionals with information about the types of social experiences that influence alumni financial giving. Student affairs leaders might incorporate the data when designing criteria for future programs and services.

Finally, the results of this study provided senior leadership in university development with information about the types of programs or experiences that influence alumni giving. Senior leaders in the development office might use the results when creating criteria for new outreach initiatives.

### **Delimitations**

As with all research, the present study had some initial delimitations. The first dealt with the sample. All of the participants in this study attended the same institution. It is possible that alumni at this institution differed in some important way from alumni at other research extensive institutions. If so, this might have influenced the results in some unforeseen manner.

Another potential delimitation was the use of existing data. The NSSE dataset contains information from college and university students about their participation in select campus programs and activities using a pre-determined set of variables. The study was limited to the variables in the data set.

A third delimitation related to the fact that all participants were volunteers. It is possible that those who volunteered to complete the 2011 NSSE instrument had either a very positive or very negative experience at the institution that prompted them to participate in the study. If so, this might have skewed the data.

Despite these delimitations, this was a worthwhile study. It filled a gap in the literature related to how different student characteristics and academic and social experiences influenced alumni giving. Cultivating alumni donors is increasingly important to university leaders and this study offered some initial insight into how this revenue stream might be promoted.

### **Organization of the Study**

This study is organized around five chapters. The first chapter introduced the topic of the study, the purpose statement, the research questions and significance of the study. The second

chapter reviews the literature relevant to the study. Chapter Three presents the methodology of the study, including how the sample was selected and the procedures used to collect and analyze the data. The fourth chapter describes the results of the study while the final chapter discusses those results and their implications for future practice and research.

## Chapter Two

### Literature Review

There were two bodies of literature that were relevant to this study. The first included studies on charitable giving in general. Three subsets of studies were revealed in the literature: demographic variables, motivational factors, and capacity factors. The second body of literature examined alumni giving to higher education. These works revealed four subsets of studies: demographic variables, academic experiences, social experiences and alumni participation and satisfaction. This chapter is organized around these two sections and their respective subsections.

#### **Charitable Giving in General**

Philanthropy is generally defined as charitable giving with the intent to improve the quality of life, wellbeing, and culture of humankind, usually in support of moral or social reform (Hall, 2006; Vesterlund, 2006). More than \$390 billion in charitable contributions were made in 2016 in the United States (Giving USA, 2017). The largest percentage of charitable contributions went to religious organizations (32%), followed by human services and grant making foundations (22%), education (15%), and health organizations (8%). There are many studies that examine why people make charitable contributions.

#### **Demographic Factors**

Demographic characteristics are associated with giving. To start, there is research on gender and charitable donations. The preponderance of evidence suggests that women give more often and more generously to charities than men (Bekkers, 2010; Hall, 2010; Mesch 2012; O'Malley, 1992; Shelley & Polonsky, 2002). Giving more may be a reflection of women's helping nature, whereas men tend to rely on pragmatic reasons when giving (Shelley & Polonsky, 2002). Women tend to be more generous perhaps because of their empathetic nature and traditional role as caregiver (Mesch, 2012). They are more likely to seek advice on their investments (Wasley, 2009). In addition, women live longer than men and may even inherit twice, once from their parents and again from their spouse (Lodge, 2014). Although most recent research indicates that women give more, one older study found that men give 16% more than women (O'Malley, 1992).

Age also plays a role as giving tends to change over time. As people age, they tend to give more often (Shelley & Polonsky, 2002) and it is generally older people who tend to give

(O'Malley, 1992; Shelley & Polonsky, 2002). This may be due to the fact that age is associated with increased wealth. For many, having lived a long and prosperous life leads to a desire to provide for future generations (O'Malley, 1992). Again, however, the results are mixed. Most studies revealed older people tend to give more, but one study found that millennial and Generation X women who are single and unaffiliated with a religion give more than twice as much as older, similarly unreligious men (Lindsay, 2014).

There are several socioeconomic variables that affect giving. The level of education one achieves plays a role (Bekkers, 2010; O'Malley, 1992) as does social class (Shelley & Polonsky, 2002), and income (Bekkers, 2010; Melchiori, 1988; Szady, 1988). The aforementioned variables may be the result of one's upbringing and other social influences and expectations (Bekkers, 2010; O'Malley, 1992; Shelley & Polonsky, 2002). Another socioeconomic variable that may affect giving is where one lives. People who live in urban areas are more likely to give (Bekkers, 2010; Shelley & Polonsky, 2002). Those who live in more urban areas may be exposed to more causes (Shelley & Polonsky, 2002) and citywide problems and issues (O'Malley, 1992). Urban dwellers may also reflect greater income and be more aware of needs (O'Malley, 1992).

Finally, there are several socio-demographic factors that influence giving. These include religious affiliation (Bekkers, 2010; Campbell, 2013; Hoyt, 2004; O'Malley, 1992; Gose, 2012; Wood & Houghland, 1990; Wuthnow, 2004), political activity (Brady, Verba & Schlozman, 1995; O'Malley, 1992), and volunteerism (Bekkers, 2010; O'Malley, 1992). Those who give the most live in more religious regions of the country where tithing to churches is the norm (Gose, 2012). The most religious people tend to be the most generous (Campbell, 2013; Daniels, 2013). This may be the result of the social networks that form within religious institutions and influence people to give more (Campbell, 2013; Wuthnow, 2004). Lastly, being raised in a religious home may influence giving to the church over the lifetime (Wuthnow, 2004). However, there is some evidence that the intensity of one's religion may not be as strong an influence on giving as previously thought (Lindsay, 2014).

Although political activity may be the result of a general interest in politics, the literature indicates that other factors may be more influential. These include the time to participate, the money to do so and the civic skills one has (Brady, Verba & Schlozman, 1995). Time to participate includes working on a campaign, serving on local boards, writing local officials, and

related activities (Brady, Verba & Schlozman, 1995). Monetary contributions are simply related to the amount of money available and are often influenced by education and SES (Brady, Verba & Schlozman, 1995). Finally, civic involvement is often linked to the level of education achieved and related activities including classes in government and the ability to form and articulate opinions. Those who are involved in their communities may also be more likely to give as they would be exposed to the needs and usages of charitable donations (O'Malley, 1992).

### **Motivation to Give**

Several motivations for giving repeatedly surface in the literature and can be organized into four groups: personal interests, economic interests, social interests, and relational interests. Personal interests are influenced by one's allegiance to or empathy for an organization (Bekkers, 2010; Mann, 2007). The amount of interaction a donor has may influence the perceived quality, value and satisfaction with the organization, and lead to giving (Mann, 2007). Empathy is another trait that may influence giving; specifically, those who give are generally concerned for the welfare of others, either through the ability to see the world from another's viewpoint or to relate emotionally to others' circumstances (Bekkers, 2010).

Some people give with an expectation of reciprocity or are influenced by reinforcement; that is, the direct benefit or tangibles they receive in exchange for their charitable contribution (Bekkers, 2010; Hoyt, 2004; Mann, 2007; Shelley & Polonsky, 2002). For example, in a church setting, members may give regularly and in return receive the benefit of spiritual well-being and the support of a community (Mann, 2007), or material incentives, such as their name in the press or on a donor wall, or special seating or recognition at an event (Bekkers, 2010). The rate of interaction between individuals or friends also increases the likelihood of giving. The more often the interaction occurs, the more likely one is to give (Bekkers, 2010).

Other personal issues that influence giving are one's willingness or propensity to give (Bekkers, 2010; Mann, 2007) and a predisposition towards giving (O'Malley, 1992). Those who regularly attend artistic programs, for example, might not only be motivated to give to a particular program, but also may learn to appreciate other types of artistic programs, resulting in further giving (O'Malley, 1992). One study revealed the willingness to give is influenced by both the type of support being solicited and the person being asked (Bekkers, 2007). Educational and family experiences may also influence propensity to give, as does participation



in community activities (O'Malley, 1992). Finally, a psychological factor that is influential is simply feeling good about oneself, described as a "warm glow" (Bekkers, 2010).

Economic interests influence some donors depending on their income, the level of expected contribution, and the benefit the gift will support (Bekkers, 2010; Mann, 2007; Vesterlund, 2006). A donor may be more likely to give based on the impact the gift will have on others (Mann, 2007; Vesterlund, 2006). Those who do contribute are sometimes seen as performing a deliberate, self-serving act where the donor receives a tax deduction or personal recognition (Shelley & Polonsky, 2002; Vesterlund, 2006). For example, Milton Freidman suggests "the only justification for philanthropy is tax avoidance" (Shelley & Polonsky, 2002 p. 22).

There are social reasons associated with charitable giving. Altruism is seen as one motivation. It involves a sense of social obligation to better society by providing goods and services (Bruggink & Siddique, 1995; Mann, 2007; Shelley & Polonsky, 2002; Vesterlund, 2006). An awareness of need (Mann, 2007; O'Malley, 1992; Shelley & Polonsky, 2002) and knowledge of how the money will be used (O'Malley, 1992) with an emphasis on effectiveness and efficiency of the organization all influence giving (Bekkers, 2010; Shelley & Polonsky, 2002).

Some people give because they are motivated by others' behavior (modeling), social pressure or approval, prestige, or a fear of a damaged reputation by not giving (Bekkers, 2010; Hatfield, Walster & Piliavin, 1978; Hoyt, 2004; Mann, 2007; Shelley & Polonsky, 2002; Vesterlund, 2006). Others are more influenced by reinforcement such as a social reward or desire for status and relationships with people in positions to approve or disapprove (Bekkers, 2010; Hoyt, 2004; Mann, 2007). The higher the social reward for giving (or the higher the social risk for not giving), the greater the likelihood of giving (Bekkers, 2010).

Lastly, relational interests can influence the motivation to give. This includes both personal and organizational relationships. Personal influences that can affect giving include existing relationships and the agreeableness of the person who asks for a donation (Bekkers, 2010), the modeling that exists (Hoyt, 2004), and the donor's previous giving (Bekkers, 2010; Shelley & Polonsky, 2002). From an organizational relational standpoint, influencers include the mission of the organization (O'Malley, 1992) and how the donor connects or identifies with the

organization (Bitner & Hubbard, 1994; Mann, 2007). Evidence suggests that a high level of connectedness or belongingness with an organization influences giving (Mann, 2007).

### **Capacity to Give**

Finally, another variable consistently revealed in research is the capacity of an individual or household to give (Baade & Sundberg, 1996; Bekkers, 2010; Clotfelter, 2003; Monks, 2003; O'Malley, 1992; Thomas & Smart, 2005). Capacity to give is generally defined as income, but also includes assets and other financial commitments (Volkwein, 2010), or availability of resources (Weerts & Ronca, 2007). These financial assets could be considered achievement variables (Volkwein, 2010).

Other, more personal factors that may influence capacity include marital or cohabitation status (O'Malley, 1992) and number of dependents or family size (O'Malley, 1992; Volkwein, 2010; Weerts & Ronca, 2007). The ages of children and the schooling of children and grandchildren may also influence capacity to give. For example, school may become more costly as children age, or families may choose to send them to private schools (Weerts & Ronca, 2007). Other personal factors that determine capacity include occupational status and highest degree earned (Baade & Sundberg, 1993; Bekkers, 2010; Monks, 2003; O'Malley, 1992; Thomas & Smart, 2005; Volkwein, 2010).

### **Alumni Financial Giving**

There is also ample research on alumni giving to higher education. Institutions of higher education depend on alumni giving as an important resource for their success (Gaier, 2005). The body of literature on alumni giving to higher education reveals four subsets of studies: demographic variables, academic experiences, social experiences and alumni participation and satisfaction.

### **Demographic Variables**

A number of demographic variables that have been correlated with alumni giving have held up over time, including age, (Baade & Sundberg, 1993; Bruggink & Siddiqui, 1995; Gaier, 2005; Hoyt, 2004; Mosser, 1993; Taylor & Martin, 1993, 1995; Thomas & Smart, 2005), gender (Taylor & Martin, 1993), race (Miller & Casebeer, 1990; Monks, 2003), family status (Monks, 2003; Mosser, 1993; Taylor & Martin, 1993; Thomas & Smart, 2005; Young & Fischer, 1996), education (Hoyt, 2004; Monks, 2003; Mosser, 1993; Steeper, 2009; Taylor & Martin, 1995), SES (Baade & Sundberg, 1993; Hoyt, 2004; Monks, 2003; Mosser, 1993; Steeper, 2009; Taylor

& Martin, 1993 & 1995; Young & Fischer, 1996), and location (McDermon & Shirley, 2009; Mosser, 1993; Taylor & Martin, 1993).

Age, or years since graduation, has a significant relationship to alumni giving in two ways (Baade & Sundberg, 1993; Bruggink & Siddiqui, 1995; Gaier, 2005; Hoyt, 2004; Mosser, 1993; Taylor & Martin, 1993, 1995; Thomas & Smart, 2005). First, once alumni start giving, they are more likely to continue giving (Hoyt, 2004; Lindahl & Winship, 1992; McDermond & Shirley, 2009; Mosser, 1993; Okunade & Justice, 1991). Secondly, as age increases, alumni are more likely to give and to give larger amounts (Hoyt, 2004; McDearmond & Shirley, 2009; Thomas & Smart, 2005). This may be the result of having received more solicitations and/or more opportunities to give as well as having had more time to achieve higher income levels and more savings (Baade & Sundberg, 1993; Gaier, 2005; Thomas & Smart, 2005). Much has been written about giving as alumni age, but very little has been written about giving by young alumni, those within five years of graduation.

Early studies in the 1970s and 1980s revealed that men gave more to higher education than women (Taylor & Martin, 1993). More recently, however, researchers have found gender to have very little or no discriminating power between donors and non-donors (Hoyt, 2004; Monks, 2003; Mosser, 1993; Taylor & Martin, 1993). One study revealed that earlier reporting may have been skewed because of the traditional tendency to include only the male name in university giving records if a married couple were both alumni of the institution (Mosser, 1993).

Race and ethnicity are other factors that may influence alumni giving (Miller & Casebeer, 1990; Monks, 2003). One study found that Blacks, Hispanics, and multi-racial/ethnic groups give 39%, 23% and 27% less to their undergraduate alma maters than whites, respectively (Miller & Casebeer, 1990; Monks, 2003). Likewise, nationality makes a difference. U.S. citizens are over twice as likely to give as non-U.S. citizens (Monks, 2003).

There are several factors that relate giving to family status including marital status (Monks, 2003; Mosser, 1993), number and age of children (Monks, 2003; Taylor & Martin, 1993) and familial ties to their alma mater (Mosser, 1993, Thomas & Smart, 2005; Young & Fischer, 1996). To start, the research on marital status is inconclusive. In some studies, married couples give 18% more than their single counterparts (Monks, 2003), while other results indicate single alumni give more (Bruggink & Siddique, 1995) and still others reveal there is not much difference (Mosser, 1993). Other factors that influence more or less giving include whether the

spouse is also an alumnus of the same institution (Thomas & Smart, 2005; Young & Fischer, 1996) and whether parents or children are legacies, that is family members who have attended the same institution (Mosser, 1993; Steeper, 2009). Lifetime total donations can be influenced when the spouse is also an alumnus (Young & Fisher, 1996).

Several factors relating to education also impact alumni giving, including academic major (Hoyt, 2004; Monks, 2003; Taylor & Martin, 1993 & 1995). Majors in higher paying occupations and occupations requiring higher levels of education lead to higher household income and alumni who are more likely to give (Hoyt, 2004; Steeper, 2009). Taken a step further, subsequent enrollment in graduate school, whether at the same institution or not, has a positive impact on financial giving (Monks, 2003; Mosser, 1993; Taylor & Martin, 1993).

There is evidence that those with higher SES have a tendency to give more. Specifically, one's financial profile, including both individual and/or family income may influence giving to one's alma mater (Hoyt, 2004; Monks, 2003; Mosser, 1993; Steeper, 2009; Taylor & Martin, 1993 & 1995; Young & Fischer, 1996). Additionally, one's parental income is a predictor of alumni giving (Baade & Sundberg, 1993).

One final demographic variable associated with giving is location, or proximity to the institution. Those who live closer to an institution are more likely to give as they more readily see the need for or the potential benefit of their gift to the institution (McDearmond & Shirley; 2009; Mosser, 1993; Taylor and Martin, 1993).

### **Academic Experiences**

Student involvement on campus leads to a positive college experience that influences satisfaction and in turn may lead to alumni giving (Astin, 1984; Gaier, 2005; Gallo & Hubschman, 2003; Hoyt, 2004; Miller and Casebeer, 1990; Monks, 2003, Pumerantz, 2005; Tinto, 1993). The single most significant influence on alumni giving is individuals' satisfaction with their undergraduate experience (McDearmond & Shirley; 2009; Monks, 2003; Mosser, 1993; Spaeth & Greely, 1970, Thomas, 2005). Positive experiences increase the probability of giving just as negative experiences decrease the probability of giving (Pumerantz, 2005). Many studies focus on identifying experiences that influence alumni giving. These studies fall into two categories: academic experiences and social experiences.

There are at least five types of academic experiences that are associated with alumni giving. The first is relationships. Faculty interactions are highly correlated to a positive

academic experience that, in turn, influences giving behavior (Hartman & Schmidt, 1995; Monks, 2003; Mosser, 1993; Pumerantz, 2005). Other relationships deemed as important include interactions with major advisor, staff members, or administrators (Monks, 2003; Mosser, 1993; Outcalt, & Skewes-Cox, 2002; Spaeth & Greely, 1970; Steeper, 2009).

Academic programs that emphasize quality academic work also predict the likelihood of giving to an institution (Gaier, 2005). Additionally, successful academic integration is an important determinant of academic success (Volkwein, 1989; Melchiori, 1986; Szady, 1988). Academic experiences shape satisfaction (Gaier, 2005; Miller & Casebeer, 1990; Spaeth & Greely, 1970) and can include coursework (Gaier, 2005; Mosser, 1993), quality of instruction, courses, and programs (Gallo & Hubschman, 2003; Graham & Gisi, 2000; Hoyt, 2004), and class size (Graham & Gisi, 2000). In addition, greater involvement in academic groups such as departmental clubs and activities can also influence satisfaction that leads to alumni giving (Mosser, 1993; Taylor & Martin, 1993 & 1995; Thomas & Smart, 2005).

There is high positive correlation between academic achievement and satisfaction leading to giving (Baade & Sundberg, 1993; Miller & Casebeer, 1990). Academic achievement can include high GPA (Hoyt, 2004; Miller & Casebeer, 1990), academic honors (Monks, 2003) and student learning (Hoyt, 2004; Mosser, 1993). Other factors related to increased alumni satisfaction, and, in turn, giving, include academic advising, ease of registration, personal counseling, and other student services (Graham & Gisi, 2000).

Additional factors that influence academic satisfaction and alumni giving can be categorized as enriching educational experiences. These include participation in a professor's research (Baade & Sundberg, 1993; Pumerantz, (2005), independent research projects (O'Malley, 1992), internships (Monks, 2003; Outcalt & Skewes-Cox, 2002) and year-long study abroad programs (Young & Fischer, 1996). One study indicated that students who participate in independent research projects give 26% more than those who do not (O'Malley, 1992). However, individuals involved in independent study make significantly lower average donations (Monks, 2003).

Finally, students' financial aid status and the amount of their student loans may influence giving to their alma mater (McDearmond & Shirley, 2009; Monks, 2003). Recipients of financial aid of \$1,000 or more are more likely to make donations to their alma mater (Monks, 2003) as they may have a desire to give back so other students have a similar opportunity (Hoyt,

2004). However, receipt of a need-based loan lowers the probability of giving (Clotfelter, 2003) by 13% whereas receipt of a need-based grant increased the likelihood to 12%. The influence of financial aid and subsequent debt on alumni giving is a fairly recent phenomenon, emerging over the last 25 years (McDearmond & Shirley, 2009; Monks, 2003).

One study reveals contradictory results when it comes to involvement. In this case, creating opportunities for students to interact with alumni is a significant predictor of the student experience and subsequent alumni giving. These opportunities could include alumni speakers and panels, or meetings with alumni individually or in groups (Pumerantz, 2005).

### **Social Experiences**

In addition to academic experiences, social experiences at colleges and universities impact the quality of students' education, shape satisfaction with the university, and may lead to giving (Baade & Sundberg, 1993; Melchiori, 1988; Mosser, 1993; Spaeth & Greely, 1970; Szady, 1988; Thomas & Smart, 2005; Volkwein, 1989). Some research looks at what distinguishes givers from non-givers. Select extracurricular activities are correlated with alumni giving (Baade & Sundberg, 1993; Monks, 2005; Mosser, 1993). Participation in these activities may strengthen ties with the institution that subsequently lead to giving (Baade & Sundberg, 1993). For instance, active participation in student government is associated with giving (Baade & Sundberg, 1993; Monks, 2005; O'Malley, 1992; Thomas & Smart, 2005). Former student government association (SGA) representatives give 43% more than those who do not participate (O'Malley, 1992). Involvement with SGA strengthens ties with an institution (Baade & Sundberg, 1993). It would seem involvement in more competitive groups (i.e., SGA, Student Alumni Associates, and Program Council) and being the recipient of a campus-wide honor such as homecoming court leads to satisfaction (Thomas & Smart, 2005), and, in turn, giving.

As an individual extracurricular activity, involvement in fraternities and sororities are predictors of alumni giving (Bruggink & Siddiqui, 1995; Miller & Casebeer, 1990; Monks, 2005; Taylor & Martin, 1993; Thomas & Smart, 2005; Young & Fischer, 1996). However, there is other evidence that found no significant difference in alumni giving for those who participated in social fraternities and sororities (Gaier, 2005). However, Gaier (2005) reported that alumni participation was 78% more likely for those in fraternities and sororities and suggested the need for further research on giving

Other significant variables that influence alumni giving include volunteer work and amount of time watching TV (Young & Fischer, 1996), participation in performing arts/music, religious groups, or residence hall life (Monks, 2005), and participation in intercollegiate athletics (Monks, 2005; O'Malley, 1992). In the latter case, athletes were identified as giving 48% more than non-athletes (O'Malley, 1992).

Greater involvement in social, campus leadership, and academic groups is linked to a likelihood that students will contribute financially as alumni. The number of leadership opportunities students engage in increases the likelihood they will make lifetime donations (Outcalt & Skewes-Cox, 2012). Additionally, the more activities students participate in, the more likely they are to give (Hoyt, 2004; Steeper, 2009; Thomas & Smart, 2005).

Perhaps students who are involved on campus have more time and opportunities to build relationships that create feelings of connection to the institution (Thomas & Smart, 2005). Student leaders may be more likely to give back because they have more positive feelings and fonder memories (Thomas & Smart, 2005). Participation in even one formal student activity significantly increases the likelihood that alumni will give to the institution and become involved in the institution (Gaier, 2005). A different study posits that participation in academic groups, athletic activities, and performance and spiritual events has no significant relationship to alumni giving, but joining more competitive groups (Student Government, Student Alumni, University Program Council) does (Thomas & Smart, 2005). Although the relationship between undergraduate participation and alumni involvement is prevalent in much of the literature, there is some evidence that non-donors participate more in extracurricular activities (Miller & Casebeer, 1990) and some support for no correlation at all between giving and extracurricular activities (Taylor & Martin, 1995).

Relationships are also important when it comes to donations. Alumni are more likely to give based on the quality of relationships they had while they were students (Mosser, 1993; Outcalt & Skewes-Cox, 2002; Pumerantz, 2005; Young & Fischer, 1996). Relationships with other students are likely to influence sociability and involvement as alumni, and therefore giving (Young & Fischer, 1996). The sense of community can be a driving factor in alumni giving (Outcalt & Skewes-Cox, 20012). Lastly, involving students in the educational process by having them embrace the shared educational vision of the institution may lead to giving. This could be

accomplished through involving students in the development of the vision, communicating it to students or creating opportunities to live the vision every day (Baade & Sundberg, 1993).

### **Alumni Participation**

There is a great deal in the literature to support the positive relationship between undergraduate experiences and alumni involvement with their college or university (Bruggink & Siddiqui, 1995; Gaier, 2005; Hoyt, 2004; Taylor & Martin, 1993; Young & Fischer 1996). Alumni participation and giving increase significantly based on the degree of satisfaction with the undergraduate academic experience (Baade & Sundberg, 1993; Hoyt, 2003; Gaier, 2005; Gallo & Hubschman, 2003; Mosser, 1993). The literature reveals numerous factors that influence alumni satisfaction with and involvement in the university (Hartman & Schmidt, 1995; Hoyt, 2004).

For one, a person's experience during college may create a special sense of obligation that results in giving (Hoyt, 2004; Mann, 2007). This sense of obligation is further enhanced by feelings of allegiance and empathy towards the college (Bruggink & Siddiqui, 1995; Mann, 2007). Giving to help other students may be a purely altruistic motive (Hoyt, 2004), perhaps an effort to repay an institution for one's education (Leslie & Ramey, 1988). Alternatively, some alumni give simply for recognition (Bruggink & Siddiqui, 1995; Mann, 2007) or to improve their own reputation (reciprocity) (Bruggink & Siddiqui, 1995).

Research indicates that emotional attachment also prompts alumni to contribute financially to their alma mater (Baade & Sundberg, 1993; Brittingham & Pezzullo, 1989; Gaier, 2005; Gallo & Hubschman, 2003; Spaeth & Greely, 1970; Thomas & Smart, 2005). Attachment can emerge from a nostalgic feeling born out of traditions (Gaier, 2005; Leslie & Ramey, 1986) and manifest itself as pride (Baade & Sundberg, 1993; Pumerantz, 2005; Seymour, 1988). A college's philosophy of serving as a surrogate family may lead to pride and loyalty (Pumerantz, 2005). Loyalty is another form of emotional attachment alumni have toward their alma mater (Brittingham & Pezzullo, 1990; Mann, 2007; O'Malley, 1992; Gallo & Hubschman, 2003), that sometimes manifests itself through the perception of how the university experience shaped their preparation for life after college and the professional world (Gallo & Hubschman, 2003; Mosser, 1993).

Another factor repeated in the literature leading to alumni giving is a perceived need for financial support (Hoyt, 2004; Steeper, 2009; Thomas & Smart, 2005). Conversely, the single



greatest deterrent to giving is the perception that the university does not need financial support as much as other organizations (Thomas & Smart, 2005). Alumni with high levels of satisfaction and who were more involved on campus as undergraduates are more likely to perceive a need for donations and therefore donate (Hoyt, 2003).

Alumni perceptions are determined by their experiences (Baade & Sundberg, 1993). The number of alumni or university activities alumni participate in contributes to their attitude about the institution and their attitude toward the value of their education; both are significant predictors of giving (Bruggink & Siddiqui, 1995; Gaier (2005); Gallo & Hubschman, 2003; 2005; Hoyt, 2004; Mosser, 1993; Young & Fischer 1996). Alumni involvement could be as simple as reading alumni publications (Taylor & Martin, 1993) or participating in an off-campus event (Steeper, 2009).

The quality of relationships is another variable associated with giving (Baade & Sundberg, 1993; Brittingham & Pezzulo, 1989; Pumerantz, 2005; Spaeth & Greely, 1970; Steeper, 2009). These can include relationships between students and faculty, as well as relationships with alumni and faculty. Another form of relationship is with the institution. Institutions of higher quality make a greater impact on students and therefore create stronger bonds and a greater willingness to contribute (Baade & Sundberg, 1993). One last type of relationship is of legacies (Steeper, 2009). They tend to be more satisfied with their relationships with the university and therefore may be more likely to give (Clotfelter, 2003; O'Malley, 1992).

Feelings about the current state of the institution influence giving. Such feelings include a concern for the future wellbeing of the university (Gallo & Hubschman, 2003), an interest in improving the brand value and reputation of the institution (Mann, 2007) and prestige (Leslie & Ramey, 1988) such as published rankings that lead to the institution being held in high public regard (Baade & Sundberg, 1993; Leslie & Ramey, 1988). Another indicator of the current state of the university is the mission and vision of the university and the support for a clear vision and communicating that vision effectively (Pumerantz, 2005). Students who are most compatible with the character and mission of the campus from the beginning are more generous (Baade & Sundberg, 1993).

The final area of influence on alumni giving includes a willingness to give (Hoyt, 2004), past giving, and donor status. Past giving is highly correlated with continued giving (Hoyt, 2004; Lindahl & Winship, 1992; McDearmond & Shirley, 2009; Mosser, 1993; Okunade &

Justice, 1991). Just as the giving status of a donor may lead to additional solicitations by mail or email, more conversations and visits with institutional fund raisers may influence the likelihood they will continue to give (Hoyt, 2004; Mosser, 1993).

Much of the literature addresses alumni giving over time. Although there is limited research on young alumni giving, what work has been done focuses on alumni under 35 years old or those 10 to 15 years post-graduation (McDearmond & Shirley, 2009; Monks, 2003).

In summary, two types of giving have been explored in the literature. They are charitable giving in general and alumni financial giving. Three sets of variables influence charitable giving in general. Demographic factors include gender (Shelley & Polonsky, 2002), age (Shelley & Polonsky, 2002), socioeconomic status (Bekkers, 2010; O'Malley, 1992), social class (Shelley & Polonsky, 2002), income (Bekkers, 2010; Melchiori, 1988; Szady, 1988), and urban dwellers (Bekkers, 2010). Motivation, the second variable that influences giving includes one's willingness or propensity to give (Bekkers, 2010; Mann, 2007), a predisposition towards giving (O'Malley, 1992), educational and family experiences (O'Malley, 1992), and simply feeling good about oneself (Bekkers, 2010). Capacity to give is influenced by individual or household income (Bekkers, 2010; Monks, 2003; Thomas & Smart, 2005) and assets and other financial commitments (Volkwein, 2010; Weerts & Ronca, 2007). Other, more personal factors include marital or cohabitation status (O'Malley, 1992) and number of dependents or family size (O'Malley, 1992; Volkwein, 2010; Weerts & Ronca, 2007), ages of children and the schooling of children and grandchildren (Weerts & Ronca, 2007), and occupational status and highest degree earned (Bekkers, 2010; Thomas & Smart, 2005; Volkwein, 2010).

Four sets of variables influence alumni financial giving. Demographic variables include age (Gaier, 2005; Thomas & Smart, 2005), gender (Hoyt, 2004; Monks, 2003), marital status (Monks, 2003; Mosser, 1993), familial ties to their alma mater (Mosser, 1993; Thomas & Smart, 2005), education (Hoyt, 2004; Steeper, 2009), SES (Hoyt, 2004; Steeper, 2009), and proximity to the institution (McDearmond & Shirley). Academic experiences, the second variable, include relationships (Monks, 2003; Pumerantz, 2005), academic programs (Gaier, 2005; Melchiori, 1988; Szady, 1988), academic experiences (Gaier, 2005; Volkwein, 1989), enriching educational experiences (Pumerantz, 2005), and students' financial aid status (McDearmond & Shirley, 2009; Monks, 2003). The third variable, social experiences (Thomas & Smart, 2005; Volkwein, 1989) include extracurricular activities (Monks, 2005; Thomas & Smart, 2005), and quality of

relationships (Pumerantz, 2005). The final variable, alumni participation includes degree of satisfaction with the undergraduate academic experience (Gaier, 2005; Mann, 2007), which creates a variety of positive emotions toward the institution (Pumerantz, 2005; Thomas & Smart, 2005). In addition, perceived need for financial support (Steeper, 2009; Thomas & Smart, 2005), experiences and involvement with the university (Gaier, 2005; Gallo & Hubschman, 2003), quality of relationships (Baade & Sundberg, 1993; Pumerantz, 2005), institutional reputation (Mann, 2007; Pumerantz, 2005), and past giving (Hoyt, 2004; McDearmond & Shirley, 2009) all influence alumni giving.

There is an abundance of evidence about the demographic characteristics (Hoyt, 2004; Monks, 2003), academic experiences (Monks, 2003; Pumerantz, 2005), social experiences (Monks, 2005; Thomas & Smart, 2005; Volkwein, 1989), and alumni participation variables (Gaier, 2005; Gallo & Hubschman, 2003) that influence giving among alumni in general. It is also evident that once an alumnus makes a donation to the institution, that person is more likely to continue to make donations (Hoyt, 2004; McDearmond & Shirley, 2009). Absent in the literature is research about what prompts recent alumni (within five years of graduation) to give. My study was designed to address that gap in the literature.

## Chapter Three

### Methodology

The purpose of this study was to examine factors that influence alumni financial giving to their alma mater within five years of graduation. The conceptual framework I chose for this study was a modified version of Volkwein's Model of Alumni Giving (1989). Specifically, I looked at the degree to which Demographic characteristics, Academic Experiences, and Social Experiences explained the variance in alumni giving.

Demographic Variables (DV) were defined as sex, international status, racial or ethnic identification, grades, and parents' level of education. Academic Experiences (AE) were defined as the extent of involvement in the curricular experience (e.g., faculty interaction inside and outside of class, the quality of relationships with faculty and staff, preparation for class, participation in academic activities and satisfaction with the educational experience). Social Experiences (SE) were defined as extracurricular activities (e.g., interaction with others, participation in student organizations, community events, and service).

The sample included alumni from a research extensive university in the mid-Atlantic region of the United States. Data for the study came from two sources at the selected university. Specifically, I used National Survey of Student Engagement (NSSE) data gathered from alumni who graduated in 2011 and provided by the Office of Assessment and Evaluation. Using specific selection variables, I narrowed the sample to 559 participants. I supplemented the institutional dataset with information about the five-year giving history of those 559 alumni that I derived from the Development Office.

This study was designed to answer the following questions:

1. To what extent do demographic factors explain the variance in alumni giving within five years of graduation?
2. To what extent do academic experiences explain the variance in alumni giving within five years of graduation?
3. To what extent do social experiences explain the variance in alumni giving within five years of graduation?
4. To what extent do demographic factors and academic and social experiences explain the variance in alumni giving within five years of graduation?

This chapter describes the methodology used in this study. It begins by describing the sample selection, instrumentation, and the validity and reliability of the data. I also present the data collection and analysis procedures.

### **Sample Selection**

This study entailed the use of National Survey of Student Engagement (NSSE) data and data on alumni giving. The nature of the dataset needed to conduct the study was such that a case study of a single institution was appropriate. The institution was a public, doctoral research extensive university with an enrollment of approximately 30,000 students and an alumni population of approximately 250,000.

The sample consisted of alumni who met six criteria. All participants needed to have completed the NSSE, to be 20-23 years of age when completing the NSSE, to be classified as a senior, to have begun their academic career at said institution, to have been a full-time student, and to have included their student ID number on the NSSE.

First, participants had to have completed the National Survey of Student Engagement (NSSE) in 2011. Since data for the study came from the NSSE, only those who completed that instrument were included in the study. There were 2,048 total individuals from the selected institution who completed the 2011 NSSE survey.

Second, the intent of the study was to examine traditional aged (20-23 years old) students. Non-traditional aged students may have had different types of experiences than traditional aged students. In addition, upon graduation, the responsibilities of non-traditional students might differ from more traditional aged students in terms of their familial and financial obligations. NSSE asked students to select their birth year, which they recoded to an age category. The response options reported by NSSE were 1 = 19 or younger, 2 = 20-23, 3 = 24-29, 4 = 30-39, 5 = 40-55, and 6 = Over 55. Only those who responded that they were within the age range of 20-23 were selected for the study, leaving 775 total respondents. The 2011 NSSE survey was administered to both first year and senior students. By selecting only those who were 20-23 at the time they completed the survey, I essentially eliminated most of the first year respondents and dramatically decreased the number of participants remaining in my potential sample

I did, however, want to confirm that I only selected seniors. This would ensure that respondents had been out of college for five years at the time of the study. The university only

administers the NSSE periodically and the 2011 iteration was the most recent iteration of the survey that also would allow for respondents to be five years post-graduation. The corresponding item in the survey asked about their current college classification, with response options of 1 = Freshman/first year, 2 = Sophomore, 3 = Junior, 4 = Senior, and 5 = Unclassified. I chose only those respondents who identified themselves as seniors. This left 680 total respondents in the sample.

Fourth, the intent of the study was to focus on students who had attended only one institution of higher learning. Students who attended more than one institution may have had an interest in supporting both of their alma maters and may not have had the same types of experiences if they transferred from another institution. One item inquired about whether respondents started their academic career at the current institution with response options 1 = Started here, and 2 = Started elsewhere. I chose only those respondents who chose started at the study institution. That reduced the sample to 588 respondents.

Fifth, the participants needed to be full time students. Students who attended part time may have had different types of experiences and obligations than those who attended full time. The corresponding item on the instrument elicited information about the current academic term enrollment with response options of 1 = Less than full-time, and 2 = Full-time. I assumed those who were enrolled full-time when they completed the NSSE had been enrolled full-time throughout their collegiate experience so I chose only those who reported they attended full-time which left 566 respondents in the sample.

Lastly, student IDs needed to be included in the NSSE data so that I could retrieve giving information from the Development Office at the selected institution. The simplest way to retrieve data on alumni giving is by student ID number. This number remains intact throughout the transition from student to alumni status, while other data, such as address, email, and phone number may change. Once I confirmed that ID numbers were included, there were a total of 566 alumni in the sample at this stage of the process.

Data from the 2011 NSSE survey provided a reasonable potential sample size. It enabled me to eliminate cases that could not be used because participants did not meet all of the selection criteria or did not respond to all relevant items on the NSSE and still have a sufficient sample size to conduct the analysis.

## Instrumentation

Data for the study primarily came from the NSSE. The NSSE is a unit of the Center for Postsecondary Research (CPR) at Indiana University. The CPR administers several national surveys each year. The NSSE elicits information from college and university students about their participation in campus programs and activities (NSSE Website, 2016). It was administered to freshmen and seniors at the selected institution in 2006, 2008, 2011, 2014, and 2017. The NSSE is a copyrighted instrument and therefore is not appended in this study. Details about the NSSE are available at <http://nsse.indiana.edu>.

For purposes of this study, I used the 2011 survey results. The 2011 NSSE was a standardized survey made up of two sections that included 29 items with numerous sub-items. The first section of the instrument consisted of 14 items related to academic and extracurricular experiences during the school year. The second section of the instrument was made up of 15 demographic items.

I assigned all items into one of four groups: Demographic Variables (DV), Academic Experiences, (AE), Social Experiences (SE), and a miscellaneous category. The assignment of these items supported the conceptual framework for the study. That framework indicates that capacity and motivation to give are influenced by demographic background and prior academic and social experiences (Volkwein, et al., 1989). I started by looking at the demographic characteristics that were relevant to my study. I identified five DVs that included sex, international status, racial or ethnic identification, grades, and highest level of education for mother and father (which I used as a proxy for socioeconomic status [SES]).

Item 16 asked for the sex of participants with the corresponding response options 1 = Male and 2 = Female. Item 17 inquired about international status and the response options were 1 = No and 2 = Yes. Item 18 elicited data on racial or ethnic identity. The corresponding response options were 1) American Indian or other Native American, 2) Asian or Asian American, 3) Black or African American, 4) White (non-Hispanic), 5) Mexican or Mexican American, 6) Puerto Rican, 7) Other Hispanic or Latino, 8) Multiracial, 9) other, and 10) I prefer not to respond. Item 26 inquired about grades at the institution and had the following response options: 1 = C- or lower, 2 = C, 3 = C+, 4 = B-, 5 = B, 6 = B+, 7 = A-, 8 = A. Item 28 was broken into two sub-items (for mother and father) and inquired about their highest level of education. Response options for both were 1 = Did not finish high school, 2 = Graduated from

high school, 3 = Attended college but did not complete degree, 4 = Completed an associate's degree, 5 = Completed a bachelor's degree, 6 = Completed a master's degree, 7 = Completed a doctoral degree. Table 1 reports the Demographic variables I used in the study, including the item, the response options, and, if necessary, how responses were recoded.

Next, I identified 14 NSSE items with numerous sub-items that served as Academic Experiences (AE) for my study. These items focused on interactions with faculty and staff, academic work, exams, academic activities and experiences, support services, and skills learned. The first AE item included 20 sub-items that asked respondents how often they engaged in select student academic experiences at their institution (e.g. interaction with professors, interaction with classmates, and assignments). The response options included (1) never, (2) sometimes, (3) often, and (4) very often.

The second AE item included five sub-items that examined mental activities associated with coursework. Respondents were asked about the extent to which they engaged in activities like memorizing, analyzing, or making judgments. The response options included (1) very little, (2) some, (3) quite a bit, and (4) very much.

The third AE item included four sub-items that examined how many books were read and papers were written by respondents in their most recent academic year. The response options were 1 = none, 2 = 1-4, 3 = 5-10, 4 = 11-20, and 5 = more than 20.

The fourth AE item consisted of two sub-items that examined the number of hours spent on homework problem sets. The response options were 1 = none, 2 = 1-2, 3 = 3-4, 4 = 5-6, 5 = more than 6.

The fifth AE item looked at the extent to which exams challenged respondents to do their best work. The response option was a Likert-type scale that ranged from 1 = very little to 7 = very much.

The sixth AE item examined how often a participant had done one of three activities listed in the sub-items that related to personal learning and understanding. Response options were 1) never, 2) sometimes, 3) often, and 4) very often for all sub-items.

Item seven elicited information about Academic activities participants had done or planned to do before graduation. There were seven sub-items relevant to AE such as study abroad, internships, and other enriching academic experiences. The response options for all eight sub-items were 1) have not decided, 2) do not plan to do, 3) plan to do, and 4) done.



Table 1 <i>Demographic Variable Items from 2011 NSSE</i>			
Introductory Clause	Item	Response Option	Recoded As
Your sex:		1 = Male 2 = Female	
Are you an international student or foreign national?		1 = No 2 = Yes	
What is your racial or ethnic identification? (Select only one.)		1 = American Indian or other Native American 2 = Asian, Asian American or Pacific Islander 3 = Black or African American 4 = White (non-Hispanic) 5 = Mexican or Mexican American 6 = Puerto Rican 7 = Other Hispanic or Latino 8 = Multiracial 9=Other 10=I prefer not to respond	1 = Non-white 1,2,3,5,6,7,8,9  2 = White (non-Hispanic) 4  3 = I prefer not to respond 10
What have most of your grades been up to now at this institution?		1 = C- or lower 2 = C 3 = C+ 4 = B- 5 = B 6 = B+ 7 = A- 8 = A	0 = C- or lower 1 = C 2 = C+ 3 = B- 4 = B 5 = B+ 6 = A- 7 = A
What is the highest level of education that your father completed? What is the highest level of education that your mother completed?		1 = Did not finish high school 2 = Graduated from high school 3 = Attended college but did not complete degree 4 = Completed an associate's degree (A.A., A.S., etc.) 5 = Completed a bachelor's degree (B.A., B.S., etc.) 6 = Completed a master's degree (M.A., M.S., etc.)	1 = Low SES 1,2,3 2 = Middle SES 4,5 3 = High SES 6,7

		7 = Completed a doctoral degree (Ph.D., J.D., M.D., etc.)	
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The eighth AE item focused on two sub-items related to relationships. The first sub-item asked about relationships with faculty and response options ranged from 1 = unavailable, unhelpful, unsympathetic to 7 = available, helpful, sympathetic. Response options to the sub-item about relationships with administrative personnel ranged from 1 = unhelpful, inconsiderate, rigid to 7 = helpful, considerate, flexible.

The ninth item associated with AE examined the number of hours spent during the week on various activities. For instance, one sub-item asked about preparing for class or rehearsing. Response options for all of these sub-items were 1 = 0, 2 = 1-5, 3 = 6-10, 4 = 11-15, 5 = 16-20, 6 = 21-25, 7 = 26-30, and 8 = more than 30 hours.

The tenth AE item examined the extent to which respondents' institution emphasized academic work. One sub-item inquired about the time needed to succeed academically. Two other sub-items asked about academic support. Response options were 1) very little, 2) some, 3) quite a bit, and 4) very much.

The eleventh item focused on contributions the college experience made to knowledge, skills and personal development. Thirteen sub-items focused on gaining specific academic skills. Response options were 1) very little, 2) some, 3) quite a bit, and 4) very much.

The twelfth item was about the quality of academic advising. The response options were 1) poor, 2) fair, 3) good, and 4) excellent. The final two items each asked a single question and I categorized both as AE and SE. Item thirteen asked respondents to rate their entire educational experience as: 1) poor, 2) fair, 3) good, and 4) excellent. Item 14 asked if respondents could do it all over again, would they attend the same institution. The response options were 1) definitely no, 2) probably no, 3) probably yes, and 4) definitely yes.

Table 2 lists all the items and sub-items I designated as Academic Experiences along with necessary recoding of responses. It should be noted that in some instances, select sub-items were worded in such a way that reverse scoring was necessary. Those items, and the way there were recoded, are shaded on the Table.

There were 12 items with numerous sub-items that I chose to represent Social Experiences (SE). These items focused on social interactions, reading for pleasure, cultural and community service activities, co-curricular activities, as well as support services and skills learned.

Table 2  
*Academic Experiences Items from 2011 NSSE*

Introductory Clause	Item	Response Option	Recorded As
<p>In your experience at your institution during the current school year, about how often have you done each of the following?</p>	<p>A) Asked questions in class or contributed to class discussions            B) Made a class presentation            C) Prepared two or more drafts of a paper or assignment before turning it in            D) Worked on a paper or project that required integrating ideas or information from various sources            E) Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments            F) Come to class without completing readings or assignments            G) Worked with other students on projects during class            H) Worked with classmates outside of class to prepare class assignments            I) Put together ideas or concepts from different courses when completing assignments or during class discussions            J) Tutored or taught other students (paid or voluntary)            K) Participated in a community-based project (e.g., service learning) as part of a regular course            L) Used an electronic medium (listserve, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment</p>	<p>1 = Never            2 = Sometimes            3 = Often            4 = Very Often</p>	<p>1 = Very Often            2 = Often            3 = Sometimes            4 = Never</p>



	<p>D) Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions</p> <p>E) Applying theories or concepts to practical problems or in new situations</p>		
<p>During the current school year, about how much reading and writing have you done?</p>	<p>A) Number of assigned textbooks, books, or book-length packs of course readings</p> <p>C) Number of written papers or reports of 20 pages or more</p> <p>D) Number of written papers or reports between 5 and 19 pages</p> <p>E) Number of written papers or reports of fewer than 5 pages</p>	<p>1 = None</p> <p>2 = 1-4</p> <p>3 = 5-10</p> <p>4 = 11-20</p> <p>5 = More than 20</p>	<p>1 = More than 20</p> <p>2 = 11-20</p> <p>3 = 5-10</p> <p>4 = 1-4</p> <p>5 = None</p>
<p>In a typical week, how many homework problem sets do you complete?</p>	<p>A) Number of problem sets that take you more than an hour to complete</p> <p>B) Number of problem sets that take you less than an hour to complete</p>	<p>1 = None</p> <p>2 = 1-2</p> <p>3 = 3-4</p> <p>4 = 5-6</p> <p>5 = More than 6</p>	<p>1 = More than 6</p> <p>2 = 5-6</p> <p>3 = 3-4</p> <p>4 = 1-2</p> <p>5 = None</p>
<p>Select the circle that best represents the extent to which your examinations during the current school year have challenged you to do your best work.</p>		<p>1 = Very little</p> <p>2 = 2</p> <p>3 = 3</p> <p>4 = 4</p> <p>5 = 5</p> <p>6 = 6</p> <p>7 = Very much</p>	<p>1 = Very little</p> <p>1, 2, 3,</p> <p>2 = Average 4</p> <p>3 = Very much</p> <p>5,6,7</p>
<p>During the current school year, about how often have you done each of the following?</p>	<p>D) Examined the strengths and weaknesses of your own views on a topic or issue</p> <p>E) Tried to better understand someone else's views by imagining how</p>	<p>1 = Never</p> <p>2 = Sometimes</p> <p>3 = Often</p> <p>4 = Very often</p>	

	<p>an issue looks from his or her perspective</p> <p>F) Learned something that changed the way you understand an issue or concept</p>		
<p>Which of the following have you done or do you plan to do before you graduate from your institution?</p>	<p>A) Practicum, internship, field experience, co-op experience, or clinical assignment</p> <p>C) Participate in a learning community or some other formal program where groups of students take two or more classes together</p> <p>D) Work on a research project with a faculty member outside of course or program requirements</p> <p>E) Foreign language coursework</p> <p>F) Study abroad</p> <p>G) Independent study or self-designed major</p> <p>H) Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)</p>	<p>1 = Have not decided</p> <p>2 = Do not plan to do</p> <p>3 = Plan to do</p> <p>4 = Done</p>	<p>1 = Do not plan to do</p> <p>2 = Have not decided</p>
<p>Select the circle that best represents the quality of your relationships with people at your institution.</p>	<p>B) Relationships with faculty members</p> <p>C) Relationships with administrative personnel and offices</p>	<p>1 = Unavailable, Unhelpful, Unsympathetic</p> <p>7 = Available, Helpful, Sympathetic</p> <p>1 = Unhelpful, Inconsiderate, Rigid</p> <p>7 = Helpful, Considerate, Flexible</p>	
<p>About how many hours do you spend in a typical 7-day week doing each of the following?</p>	<p>A) Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)</p>	<p>1 = 0</p> <p>2 = 1-5</p> <p>3 = 6-10</p> <p>4 = 11-15</p> <p>5 = 16-20</p> <p>6 = 21-25</p> <p>7 = 26-30</p>	

		8 = More than 30 hours	
To what extent does your institution emphasize each of the following?	A) Spending significant amounts of time studying and on academic work B) Providing the support you need to help you succeed academically G) Using computers in academic work	1 = Very little 2 = Some 3 = Quite a bit 4 = Very much	
To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?	A) Acquiring a broad general education B) Acquiring job or work-related knowledge and skills C) Writing clearly and effectively D) Speaking clearly and effectively E) Thinking critically and analytically F) Analyzing quantitative problems G) Using computing and information technology H) Working effectively with others J) Learning effectively on your own K) Understanding yourself L) Understanding people of other racial and ethnic backgrounds M) Solving complex real-world problems N) Developing a personal code of values and ethics	1 = Very little 2 = Some 3 = Quite a bit 4 = Very much	
Overall, how would you evaluate the quality of academic advising you have received at your institution?		1 = Poor 2 = Fair 3 = Good 4 = Excellent	
How would you evaluate your entire educational experience at this institution?		1 = Poor 2 = Fair 3 = Good 4 = Excellent	
If you could start over again, would you go to the same institution you are now attending?		1 = Definitely no 2 = Probably no 3 = Probably yes	



		4 = Definitely yes	
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The first SE item asked respondents how often they engaged in select student experiences at their institution. Two of the sub-items related to SE and elicited information about whether respondents had serious conversations with students from a different racial background or that were different from themselves. The response options included (1) never, (2) sometimes, (3) often, and (4) very often.

The second SE item contained one sub-item. It asked how many books respondents read on their own in the most recent academic year. The response options were 1 = none, 2 = 1-4, 3 = 5-10, 4 = 11-20, and 5 = more than 20.

The third item associated with SE examined how often a student had engaged in different activities listed in the sub-items. Three sub-items included participating in cultural, physical fitness and spiritual activities. Response options were 1) never, 2) sometimes, 3) often, and 4) very often for all sub-items.

The fourth item elicited information about social activities students had done or planned to do before graduation. One sub-item, volunteer work, was included as a SE. The response options were 1) have not decided, 2) do not plan to do, 3) plan to do, and 4) done.

The fifth item focused on relationships with other students. The Likert-type response options ranged from 1 = unfriendly, unsupportive, sense of alienation to 7 = friendly, supportive, sense of belonging.

The sixth item examined the number of hours spent during the week on various activities. Two sub-items included in SE were social activities and relaxing. Response options were 1 = 0, 2 = 1-5, 3 = 6-10, 4 = 11-15, 5 = 16-20, 6 = 21-25, 7 = 26-30, and 8 = more than 30 hours.

The seventh item examined the extent to which respondents' institution emphasized a variety of support services. I categorized as SE four sub-items that focused on support and activities. Response options were 1) very little, 2) some, 3) quite a bit, and 4) very much.

The eighth item focused on contributions the college experience made to knowledge, skills and personal development. Two sub-items were categorized as SE and assessed contributions to community and spirituality. Response options to all sub-items were 1) very little, 2) some, 3) quite a bit, and 4) very much.

As noted previously, two items each asked a single question and were categorized as both AE and SE. The ninth asked respondents to rate their entire educational experience as: 1) poor, 2) fair, 3) good, and 4) excellent. The tenth item asked if respondents could do it all over again,

would they attend the same institution. The response options were 1) definitely no, 2) probably no, 3) probably yes, and 4) definitely yes. The eleventh item asked if respondents were involved in a fraternity or sorority. The twelfth and final item inquired about whether the student played collegiate sports. Response options to both questions were 1 = No, and 2 = Yes. Table 3 lists all those items assigned to the category of Social Experiences and includes the response options and recoding plan.

### **Validity and Reliability**

Validity and reliability are important matters in quantitative studies. Validity refers to the extent to which the NSSE measures what it is supposed to measure. NSSE staff have examined several types of validity including response process validity, content validity, construct validity, concurrent validity, predictive validity, known group's validity and consequential validity (NSSE Website, 2016).

The number of schools that administer the NSSE and the frequency with which they administer it support the validity of the instrument. The survey is administered annually to students at hundreds of schools throughout the U.S. Participation varies by institution, with some participating annually and others participating once every two or three years. In 2015, there were 587 colleges and universities that participated that included 323,801 students. Since 2000, over 1,600 schools have participated, and approximately five million students have completed the NSSE (NSSE Website, 2016).

However, there is contradictory evidence that questions the validity of the instrument, suggesting that the NSSE survey lacks validity in several areas. These include the argument that the categories, or domains, used by NSSE may be more empirical than theoretical, and therefore too broad. There are also concerns about the ability of college students to easily answer questions about their behaviors, attitudes, and facts. Additionally, the vagueness of the questions may allow students to interpret items differently (McCormick & McClenney, 2011; Porter, 2011). Other evidence supports the validity of the NSSE benchmarks for liberal arts institutions, but questions the validity of results for research extensive institutions (Campbell & Cabrera, 2011; Lutz & Culver, 2010; McCormick & McClenney, 2011). Despite these concerns, I assumed the NSSE to be a valid instrument for purposes of this study.

Reliability refers to the extent to which the measurement is internally consistent so that over time or by using different forms of the NSSE survey, the data and results are similar and,

Table 3  
*Social Experiences Items from 2011 NSSE*

Introductory Clause	Item	Response Option	Recoded As
In your experience at your institution during the current school year, about how often have you done each of the following?	U) Had Serious conversations with students of a different race or ethnicity than your own V) Had Serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	1 = Never 2 = Sometimes 3 = Often 4 = Very Often	
During the current school year, about how much reading and writing have you done?	B) Number of books read on your own (not assigned) for personal enjoyment or academic enrichment	1 = None 2 = 1-4 3 = 5-10 4 = 11-20 5 = More than 20	
During the current school year, about how often have you done each of the following?	A) Attended an art exhibit, play, dance, music, theater, or other performance B) Exercised or participated in physical fitness activities C) Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	1 = Never 2 = Sometimes 3 = Often 4 = Very often	
Which of the following have you done or do you plan to do before you graduate from your institution?	B) Community service or volunteer work	1 = Have not decided 2 = Do not plan to do 3 = Plan to do 4 = Done	1 = Do not plan to do 2 = Have not decided
Select the circle that best represents the quality of your relationships with people at your institution.	A) Relationships with <u>other students</u>	1 = Unfriendly, Unsupportive, Sense of alienation 7 = Friendly, Supportive, Sense of belonging	

<p>About how many hours do you spend in a typical 7-day week doing each of the following?</p>	<p>D) Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.) E) Relaxing and socializing (watching TV, partying, etc.)</p>	<p>1 = 0 2 = 1-5 3 = 6-10 4 = 11-15 5 = 16-20 6 = 21-25 7 = 26-30 8 = More than 30 hours</p>	
<p>To what extent does your institution emphasize each of the following?</p>	<p>C) Encouraging contact among students from different economic, social, and racial or ethnic backgrounds D) Helping you cope with your non-academic responsibilities (work, family, etc.) E) Providing the support you need to thrive socially F) Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)</p>	<p>1 = Very little 2 = Some 3 = Quite a bit 4 = Very much</p>	
<p>To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?</p>	<p>O) Contributing to the welfare of your community P) Developing a deepened sense of spirituality</p>	<p>1 = Very little 2 = Some 3 = Quite a bit 4 = Very much</p>	
<p>How would you evaluate your entire educational experience at this institution?</p>		<p>1 = Poor 2 = Fair 3 = Good 4 = Excellent</p>	
<p>If you could start over again, would you go to the <i>same institution</i> you are now attending?</p>		<p>1 = Definitely no 2 = Probably no 3 = Probably yes 4 = Definitely yes</p>	
<p>Are you a member of a social fraternity or sorority?</p>		<p>1 = No 2 = Yes</p>	
<p>Are you a student-athlete on a team sponsored by your institution's athletics department?</p>		<p>1 = No 2 = Yes</p>	

therefore, generalizable to populations (NSSE Website, 2016). Reliability also refers to the consistency or stability of measurement. The reliability evidence assesses the extent to which items within a scale are internally consistent or homogenous and the extent to which results are similar across periods of time or different forms of the instrument. Use of a reliable instrument or scale implies that data and results can be reproduced. NSSE administrators have tested for several types of reliability including internal consistency, temporal stability, and equivalence (NSSE Website, 2016). The consistency for the majority of questions and answers has remained stable since 2000, indicating that the instrument is reliable.

### **Data Collection**

To start the data collection process, I obtained approval from the Institutional Review Board (IRB) for Research Involving Human Subjects at the institution of study. The approval letter appears in Appendix A.

Then, I collected the 2011 NSSE dataset from the target institution. The Office of Assessment and Evaluation manages this dataset. I requested and received from staff in that office the complete 2011 NSSE dataset. This included responses from the 2,048 students who completed the instrument that year.

The next step in the data collection process involved getting approval from staff in the Development Office on campus to share their data. I was required to sign a Non-Disclosure Agreement to keep the study institution from being named publicly and to ensure that confidential information would not be shared with anyone. Once I had completed the sample selection process, I sent the dataset to the Development staff. I asked for the five-year giving history for each respondent in the data set, by year and cumulatively for the five-year period. Since the data set was from 2011, I asked for 2011-2015 giving records. Student IDs were included in the data set sent to the Development Office but removed by Development staff before the data set was returned to me. At the end of this process, I had a dataset that included 2011 NSSE responses from 566 eligible participants along with the giving history of those participants.

### **Data Analysis Procedure**

Secondary analysis was used in this study, meaning the analysis was conducted on previously collected data. My goal was to answer new questions using data that already existed. The data analysis for the current study was performed in a series of steps. First, I cleaned the

data. I then eliminated those items from the dataset that I categorized as miscellaneous. Since I already used the selection variable “began at the study institution,” I eliminated one variable with 5 sub-items related to other types of schools the participants might have attended since graduating high school. Similarly, I eliminated items about veteran status and veteran pay, as well as the item about taking all classes on line. I also eliminated questions around disabilities, major, and athletic team because of the number of missing cases. Lastly, I eliminated “hours working” and “distance living from campus.” Next, I deleted all missing responses coded as NULL, and left those cells blank. I then removed seven participants (from my sample of 566) whose data were missing more than 10 responses but left in those participants with 10 or fewer missing responses. This left 559 eligible participants in my final sample. Since there were missing responses in some cases, this resulted in different sample sizes for different items in my analysis.

The second step in the data analysis procedure involved recoding the data and creating proxies, as necessary. For Demographic Variables (DV) (see Table 1), I collapsed eight racial or ethnic identification items, and recoded as 1 = nonwhite, 2 = white and 3 = I prefer not to respond. Then I recoded eight grade identification items with response options of 1 to 8 to 0 to 7.

Next, I created a proxy for SES. Item number 27 asked respondents for highest level of education completed by a) their father, and b) their mother. Response options were, 1) did not finish high school, 2) graduated from high school, 3) attended college, but did not complete degree, 4) completed an associate’s degree, 5) completed a bachelor’s degree, 6) completed a master’s degree, and 7) completed a doctoral degree. I created a composite score for each respondent by adding the responses for father’s and mother’s level of education. For example, if a participant’s mother completed a bachelor’s degree (5) and father completed an associate’s degree (4), the composite score for that participant was 9. Therefore, the possible scores for SES ranged from 2-14. I assigned composite scores to groups, based on common sense. Low SES included those respondents who had scores of 2-6 (neither parent completed college); middle SES scores ranged from 7-10 (at least one parent completed college); and high SES ranged from 11-14 (at least one parent completed a masters or doctoral degree).

Within the Academic Experience, items (AE) (see Table 2) I reverse coded six variables by inverting the response options to align with other questions in the instrument where the

positive response was a higher number. For example, one item asked, “In your experience at your institution during the current school year, about how often have you done each of the following? One sub-item asked how often the respondent had “Come to class without completing readings or assignments,” I recoded the response options 1 = Never, 2 = Sometimes, 3 = Often and 4 = Very Often to 1 = Very Often, 2 = Often, 3 = Sometimes, and 4 = Never so that the preferred response corresponded with a higher score. Another item asked, “During the current school year, how much has your coursework emphasized the following mental activities?” Two sub items regarding “memorizing facts” and “analyzing the basic elements of an idea” were recoded from 1 = Very Little, 2 = Some, 3 = Quite a bit, and 4 = Very much to 1 = Very much, 2 = Quite a bit, 3 = Some, and 4 = Very little. Another Item asked, “During the current school year, about how much reading and writing have you done.” Two of the sub items were recoded from 1 = None, 2 = 1-4, 3 = 5-10, 4 = 11-20, and 5 = More than 20 to 1 = More than 20, 2 = 11-20, 3 = 5-10, 4 = 1-4, and 5 = None. In a similar question, “In a typical week, how many homework problem sets do you complete?” a sub-item asked about the “Number of problem sets that take you less than an hour to complete.” I recoded responses to 1 = More than 6, 2 = 5-6, 3 = 3-4, 4 = 1-2 and 5 = None. The next question, “Select the circle that best represents the extent to which your examinations during the current year have challenged you to do your best work” were recoded to 1, 2, 3 = Very little, 4 = Average, and 5, 6, 7 = Very much. Lastly, in AE items, when asked whether respondents have done or plan to do before they graduate, I reversed responses 1 = Have not decided and 2 = Do not plan to do.

There was one SE item that needed to be recoded. When asked about activities respondents had done or planned to do, the response options were 1 = Have not decided, 2 = Do not plan to do, 3 = Plan to do, and 4 = Done. I reversed responses 1 and 2 since “Do not plan to do”: was a less desirable response than “Have not decided” (see Table 3).

The third step in the analysis process involved exploratory factor analysis. First, I conducted an exploratory factor analysis on academic and social variables to identify those items and sub-items that seemed to form a factor that measured something. I took several steps with each set of variables to identify factors to use in my study. To start, I ran a Varimax Rotated Factor Matrix to determine the correlation of items. I sought an alpha of .5 or higher. In cases where I did not achieve the .5 threshold, I eliminated items from the factor until the alpha score achieved that level as long as there were at least three items that comprised that factor, and none



of the items in the factor loaded on other factors at a level higher than .3. I also analyzed the Kaiser-Meyer-Olkin measure of sampling adequacy, which determines the appropriateness of the factor analysis. A measure of 0.5-1.0 is adequate for the items to proceed through the factor analysis. In addition, I ran a Scree Plot for each set of variables to further understand the data.

For Academic Experiences there was correlation between 26 of 64 items. The Kaiser-Meyer-Olkin result (.883) fell within the appropriate range to move forward with the analysis. From the Varimax Rotation (see Table 4) analysis and Scree Plot (see Figure 2), five factors emerged: Personal Gains, Faculty Interactions, Cognitive Activities, Examine Views and Class Assignments.

For Social Experiences there was correlation between 11 of 20 items. This Kaiser-Meyer-Olkin result (.754) also fell within the appropriate range to move forward. From this

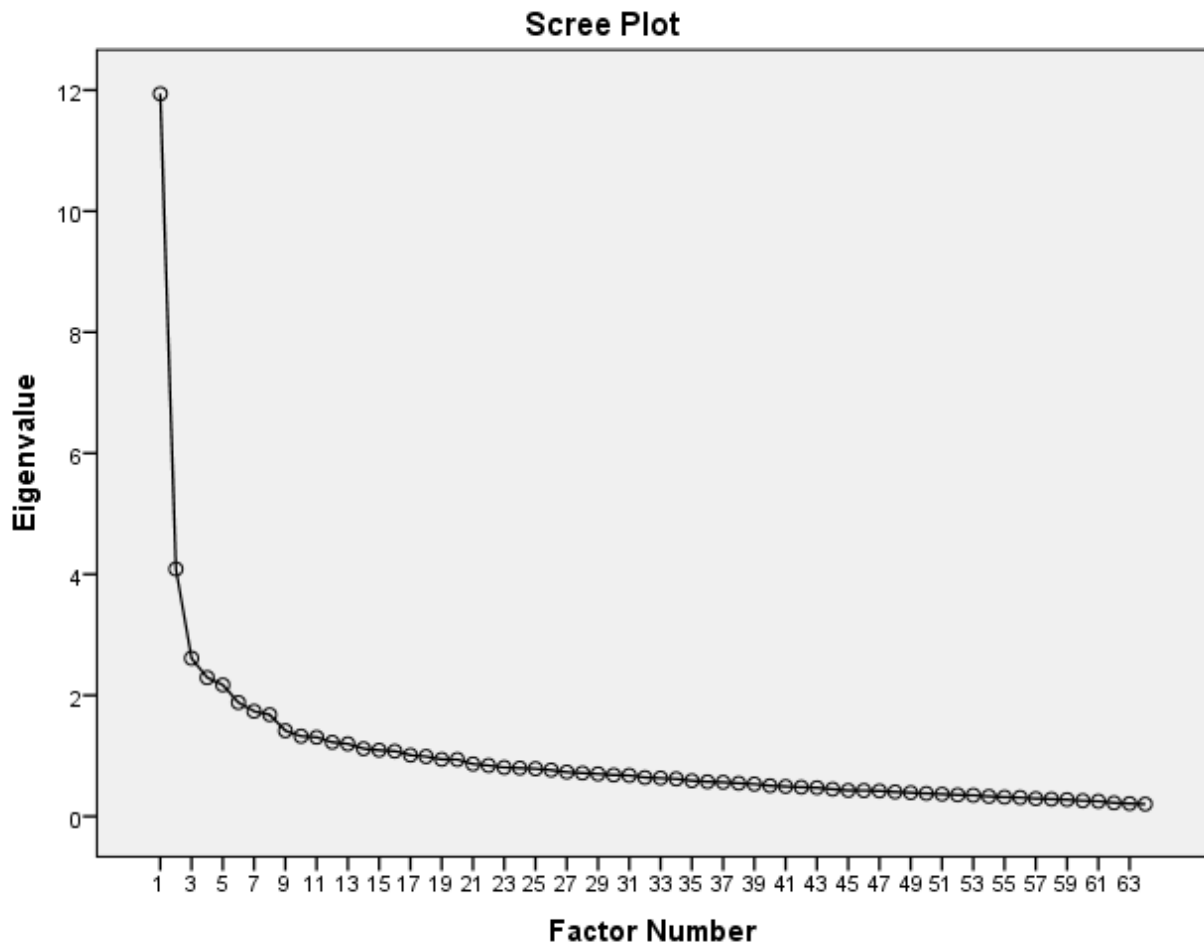


Figure 2. Scree Plot for Academic Experiences

Table 4

*Summary of Exploratory Factor Analysis Results for Academic Experiences (N= 559)*

Item	Personal Gains	Faculty Interactions	Cognitive Activities	Examine Views	Class Assignments
Asked questions in class or contributed to class discussions	.078	.404	.155	.079	.164
Made a class presentation	.145	.221	.081	.007	.087
Prepared two or more drafts of a paper or assignment before turning it in	.177	.236	.123	.021	.110
Worked on a paper or project that required integrating ideas or information from various sources	.114	.283	.262	.129	.258
Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	.221	.305	.106	.169	.300
Come to class without completing readings or assignments	-.068	-.084	-.051	.162	-.043
Worked with other students on projects during class	.180	.097	.109	.174	.033
Worked with classmates outside of class to prepare class assignments	.138	.006	.079	-.068	.014
Put together ideas or concepts from different courses when	.169	.286	.331	.163	.134

completing assignments or during class discussions					
Tutored or taught other students (paid or voluntary)	.020	.174	.098	.082	.046
Participated in a community-based project (e.g., service learning) as part of a regular course	.136	.111	.043	.100	.138
Used an electronic medium (listsev, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	.099	.156	.175	.102	.077
Used e-mail to communicate with an instructor	.100	.312	.104	.058	.092
Discussed grades or assignments with an instructor	.173	<b>.509</b>	.113	.020	.019
Talked about career plans with a faculty member or advisor	.169	<b>.695</b>	.064	.092	.018
Discussed ideas from your readings or classes with faculty members outside of class	.058	<b>.624</b>	.161	.161	.032
Received prompt written or oral feedback from faculty on your academic performance	.264	.310	.226	.105	.076

Worked harder than you thought you could to meet an instructor's standards or expectations	.171	.209	.123	.063	.037
Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	.151	<b>.504</b>	.043	.100	.052
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	.102	.398	.083	.359	-.025
Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	.019	.029	-.030	.019	.077
Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	.203	.109	<b>.608</b>	.013	.080
Synthesizing and organizing ideas, information, or experiences into new, more complex	.232	.197	<b>.741</b>	.076	.089

interpretations and relationships					
Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	.231	.100	<b>.577</b>	.181	.079
Applying theories or concepts to practical problems or in new situations	.399	.156	.475	.011	.074
Number of assigned textbooks, books, or book-length packs of course readings	.027	.159	.059	.087	<b>.531</b>
Number of written papers or reports of 20 pages or more	.027	-.052	.133	.006	.363
Number of written papers or reports between 5 and 19 pages	.045	.000	.089	.055	<b>.719</b>
Number of written papers or reports of fewer than 5 pages	.118	.022	.031	.031	<b>.682</b>
Number of problem sets that take you more than an hour to complete	-.045	-.046	-.008	.027	-.013
Number of problem sets that take you less than an hour to complete	.053	.050	.012	.103	.109

Select the circle that best represents the extent to which your examinations during the current school year have challenged you to do your best work.	.289	.048	.076	-.091	.011
Examined the strengths and weaknesses of your own views on a topic or issue	.031	.147	.040	<b>.784</b>	.124
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	.101	.118	.095	<b>.765</b>	.049
Learned something that changed the way you understand an issue or concept	.182	.189	.113	<b>.573</b>	.071
Practicum, internship, field experience, co-op experience, or clinical assignment	-.013	.072	-.012	-.083	-.022
Participate in a learning community or some other formal program where groups of students take two or more classes together	.005	.212	.007	.052	.024
Work on a research project with a faculty	-.018	.194	.049	.023	.123

member outside of course or program requirements					
Foreign language coursework	.006	.126	.018	-.003	.023
Study abroad	.049	.020	-.058	.076	.026
Independent study or self-designed major	.029	.289	.045	.141	-.053
Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)	.051	.008	.039	.067	-.041
Relationships with faculty members	.429	.299	.114	.064	.037
Relationships with administrative personnel and offices	.422	.112	.060	-.024	.020
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	-.043	.046	.071	.038	.014
Spending significant amounts of time studying and on academic work	.237	.021	.137	.002	-.084
Providing the support you need to help you succeed academically	<b>.506</b>	.096	.052	-.068	.048
Using computers in academic work	.172	.083	.012	.091	.052

Acquiring a broad general education	<b>.535</b>	.035	.095	.104	.081
Acquiring job or work-related knowledge and skills	<b>.639</b>	.069	.119	.005	-.021
Writing clearly and effectively	<b>.631</b>	.088	.109	.020	.220
Speaking clearly and effectively	<b>.688</b>	.132	.115	-.012	.108
Thinking critically and analytically	<b>.657</b>	.053	.288	.098	.080
Analyzing quantitative problems	.482	-.130	.170	.023	-.008
Using computing and information technology	.446	-.065	.189	.090	-.164
Working effectively with others	<b>.670</b>	.101	.045	.022	.043
Learning effectively on your own	<b>.546</b>	.069	.146	.078	.043
Understanding yourself	<b>.652</b>	.061	-.007	.161	-.016
Understanding people of other racial and ethnic backgrounds	<b>.674</b>	.124	.042	.214	.037
Solving complex real-world problems	<b>.702</b>	.103	.172	.091	-.007
Developing a personal code of values and ethics	<b>.720</b>	.168	.081	.133	.029
Overall, how would you evaluate the quality of academic advising you have received at your institution?	.422	.077	.032	-.133	.030
How would you evaluate your entire	<b>.642</b>	.014	.123	-.075	.072



educational experience at this institution?					
If you could start over again, would you go to the same institution you are now attending?	.458	-.005	.083	-.039	-.050

analysis, including the Varimax Rotation (see Table 5) and Scree Plot (see Figure 3), four factors emerged: Supportive Environment, Institutional Satisfaction, Conversations with Others who are Different, and Spirituality. The latter three factors each consisted of only two items but I believed they merited inclusion in the study. There were only two items in the NSSE that asked about satisfaction with the educational experience, two items that elicited data about conversations with diverse others, and two items that inquired about participation in religious or spiritual activities. All three of these topics have been positively associated with giving in prior studies, however, so I elected to include these factors in the analysis. Table 6 shows the items associated with the five academic factors and four social factors.

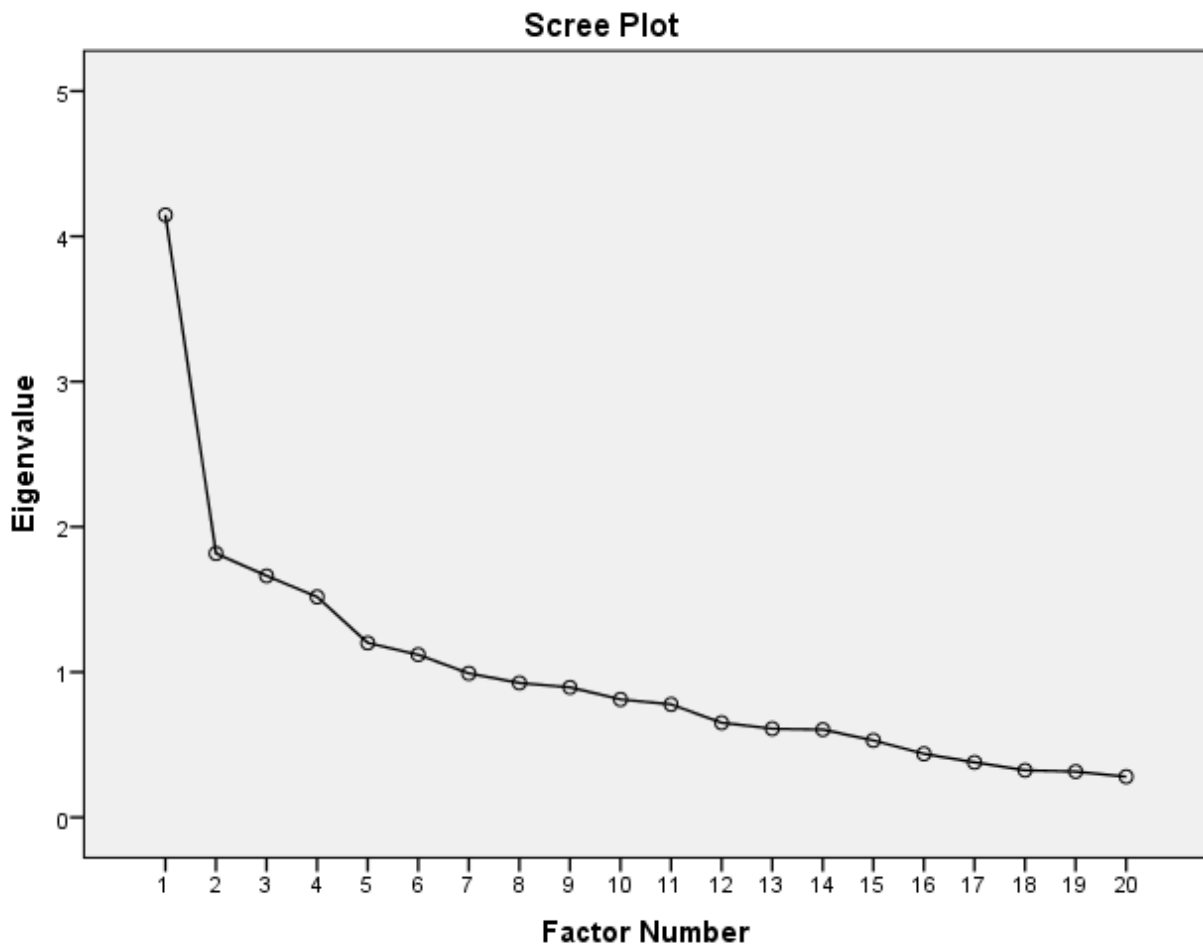


Figure 3. Scree Plot for Social Experiences

	Supportive Environment	Institutional Satisfaction	Conversations with Others who are Different	Spirituality
Had Serious conversations with students of a different race or ethnicity than your own	.067	.039	<b>.875</b>	-.029
Had Serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	.071	.060	<b>.782</b>	-.018
Number of books read on your own (not assigned) for personal enjoyment or academic enrichment	.009	-.025	.140	.114
Attended an art exhibit, play, dance, music, theater, or other performance	.168	-.007	.237	.025
Exercised or participated in physical fitness activities	.072	.155	.025	.082
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	.016	.040	-.012	<b>.756</b>
Community service or volunteer work	.009	.066	.061	.090
Relationships with <u>other students</u>	.179	.484	.075	.014
Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	.102	.046	.083	.057
Relaxing and socializing (watching TV, partying, etc.)	.044	.061	.012	-.135
Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	<b>.616</b>	.193	.160	.096
Helping you cope with your non-academic responsibilities (work, family, etc.)	<b>.787</b>	.117	.061	.047
Providing the support you need to thrive socially	<b>.757</b>	.178	.004	.087

Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)	<b>.594</b>	.266	.026	-.014
Contributing to the welfare of your community	<b>.518</b>	.291	.075	.157
Developing a deepened sense of spirituality	.326	.116	.020	<b>.669</b>
How would you evaluate your entire educational experience at this institution?	.302	<b>.738</b>	-.001	.004
If you could start over again, would you go to the <i>same institution</i> you are now attending?	.203	<b>.695</b>	-.017	.049
Are you a member of a social fraternity or sorority?	-.048	.027	-.040	-.200
Are you a student-athlete on a team sponsored by your institution's athletics department?	.038	-.009	-.010	.024

Table 6

*Items Associated with Academic and Social Factors*

<b>Type</b>	<b>Factor</b>	<b>Items</b>
<b>Academic Experience Variables</b>		
	<b>Personal Gains</b>	
		Providing the support you need to help you succeed academically
		Acquiring a broad general education
		Acquiring job or work-related knowledge and skills
		Writing clearly and effectively
		Speaking clearly and effectively
		Thinking critically and analytically
		Working effectively with others
		Learning effectively on your own
		Understanding yourself
		Understanding people of other racial and ethnic backgrounds
		Solving complex real-world problems
		Developing a personal code of values and ethics
		How would you evaluate your entire educational experience at this institution?
	<b>Faculty Interactions</b>	
		Discussed grades or assignments with an instructor
		Talked about career plans with a faculty member or advisor
		Discussed ideas from your readings or classes with faculty members outside of class
		Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)
	<b>Cognitive Activities</b>	
		Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
		Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships
		Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
	<b>Examine Views</b>	
		Examined the strengths and weaknesses of your own views on a topic or issue
		Tried to better understand someone else's views by imagining how an issue looks from his or her perspective

		Learned something that changed the way you understand an issue or concept
	<b>Class Assignments</b>	
		Number of assigned textbooks, books, or book-length packs of course readings
		Number of written papers or reports between 5 and 19 pages
		Number of written papers or reports of fewer than 5 pages
<b>Social Experience Variables</b>		
	<b>Supportive Environment</b>	
		Encouraging contact among students from different economic, social, and racial or ethnic backgrounds
		Helping you cope with your non-academic responsibilities (work, family, etc.)
		Providing the support you need to thrive socially
		Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)
		Contributing to the welfare of your community
	<b>Institutional Satisfaction</b>	
		How would you evaluate your entire educational experience at this institution?
		If you could start over again, would you go to the <i>same institution</i> you are now attending?
	<b>Conversations with Others who are Different</b>	
		Had Serious conversations with students of a different race or ethnicity than your own
		Had Serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values
	<b>Spirituality</b>	
		Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)
		Developing a deepened sense of spirituality

Next, using the five-year giving data provided by staff in the Development office, I created a mean dollar amount of contributions made by each participant. Finally, I analyzed the data to address the research questions in the study. I conducted a multiple regression to determine if variance in the dependent variable, dollar amount given, was the result of any of the independent variables: demographic characteristics, academic experiences or social experiences during college. I ran a regression model that included demographic variables and academic experiences and social experiences.

In conclusion, the current study was designed to examine whether undergraduate student involvement influences alumni financial giving to their alma mater. Demographic Variables, Academic Experiences, and Social Experiences were examined to determine if they could predict variance in alumni financial giving. The methodology used in this chapter provided the necessary data to answer the research questions posed in the study.

## Chapter Four

### Results of Study

This chapter is designed to report the results of the study. First the sample is described. Next, I present the results of the data analysis to determine if young alumni giving is influenced by demographic characteristics and/or academic and/or social experiences. The analysis enabled me to address the four research questions posed in the study.

#### **Sample**

The data for this study were derived from an institutional data set of responses to the 2011 NSSE survey. The original sample of 2,048 was reduced by selecting only those respondents who were between the age of 20-23, were seniors, had only attended one institution, and who attended as a full-time student. After further eliminating cases with 10 or more missing responses, the final sample consisted of 559 participants.

The sample consisted of more females (52%) than males (48%). The enrollment numbers at the institution were females 43% and males 57%, so women were overrepresented in the sample. The participants were almost exclusively American (98.5%) and mostly white (85%). Most of the respondents had grades of B- or better (89%) with a much smaller number reporting a C+ or lower (11%). The vast majority (87.75%) were from medium or high SES backgrounds (as measured by parents' educational levels). A small number of students (16%) were members of a fraternity or sorority, and even fewer were athletes (3%). A description of the sample is included in Table 7. The table also indicates only a limited number of participants made a donation to their alma mater within five years of graduating (14%); most (86%) did not.

#### **Results of Data Analysis**

Before I ran the regression analysis I took two other steps. First, I prepared the data on demographic characteristics. I created dummy variables for sex, international status, race or ethnic identification, grades and SES. Both sex and international status had two response options and used the following dummy variables: dsex was 0=male and 1=female and dinternat was 0=American and 1=non-American. Race or ethnicity and SES were both recoded (as described in Chapter Three) and then dummy coded. For race or ethnicity I coded: dnonwhite where 0=white or no response and 1=nonwhite and dnoracereported where 0=white or nonwhite and 1=no response. For SES I coded: dmedses where 0=low or high SES and 1=middle SES and dlowses where 0=medium or high SES and 1=low SES. Grades were recoded from 1 to 8



Table 7  
*Demographic Characteristics of the Sample (N=559)*

Characteristic	N	%
Giving		
Givers	81	14.49
Non-Givers	478	85.51
Sex		
Male	269	48.12
Female	290	51.88
International Student		
American	549	98.21
International	8	1.43
Racial or Ethnic Identity		
White	477	85.33
Non-White	82	14.67
Grades		
A	111	19.86
B	110	19.68
B+	137	24.51
B-	116	20.75
C+	46	8.23
C	13	2.33
C- or Lower	1	0.18
SES		
High SES	230	41.14
Medium SES	257	45.97
Low SES	68	12.16
Fraternity/Sorority Member		
Member	90	16.10
Non-Member	468	83.72
Student Athlete		
Athlete	15	2.68

response options to 0 to 7 and remained a continuous variable.

Second, I created composite scores for each factor. I assumed equal weighting among items in creating those composite scores. The composite consisted of the mean of the sum of scores for items in each factor. For example, one academic factor, Faculty Interactions, was made up of four items: Discussed grades or assignments with an instructor; Talked about career plans with a faculty member or advisor; Discussed ideas from your readings or classes with faculty members outside of class; and Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.). If a participant responded to those items with ratings of 3, 4, 2, 3, the mean score of items would be 3 (3 +4+2+3=12, 12 divided by 4 =3). I created a composite score for five Academic factors (Personal Gains, Faculty Interactions, Cognitive Activities, Examine Views, Class Assignments) and four Social factors (Supportive Environment, Institutional Satisfaction, Conversations with Others who are Different, Spirituality).

Next I ran a regression analysis. I started by conducting regression analysis for the dependent variable giving and the independent variables for demographic characteristics that included sex, international student, racial or ethnic identification, grades and father's and mother's education (SES). The formula looked like:

$$\text{Giving}_i = \beta_0 + \beta_1 * \text{dsex} + \beta_2 * \text{dinternat} + \beta_3 * \text{dnonwhite} + \beta_4 * \text{dnoracereported} + \beta_5 * \text{recodedgrades} + \beta_6 * \text{dmedses} + \beta_7 * \text{dlowses}$$

Then, I expanded the formula by adding independent variables for Academic factors:

$$\beta_8 * \text{com\_apersonalgains\_mean} + \beta_9 * \text{com\_afacultyinteraction\_mean} + \beta_{10} * \text{com\_acognact\_mean} + \beta_{11} * \text{com\_aexamineviews\_mean} + \beta_{12} * \text{com\_aclassassignment\_mean}$$

Finally, I added independent variables for Social factors to the formula:

$$\beta_{13} * \text{com\_ssuppenviron\_mean} + \beta_{14} * \text{com\_sinstsatisf\_mean} + \beta_{15} * \text{com\_sdifference\_mean} + \beta_{16} * \text{com\_spirit\_mean} + E_i$$

I ran the regression analysis which revealed interesting results. The first research question in the study sought to determine to what degree demographic factors explain the variance in alumni giving within five years of graduation. The analysis revealed that none of the five demographic variables were significant at the .05 level. Significance ranged from .324 to .991.

The second research question focused on the extent that academic experiences explain the variance in alumni giving within five years of graduating. One of the five academic factors, Personal Gains, included 13 items and I wanted to be sure those items could not be further collapsed into more than a single factor. Therefore, after conducting the initial exploratory factor analysis using a Varimax rotation, I conducted the exploratory factor analysis again to see if I could reduce the number of items in that factor, but the results indicated that all 13 items should remain in that factor. One of the five academic factors, Class Assignments, was significant at .028. The items in this factor asked about the number of assigned books, and number of written papers between 5 and 19 pages and fewer than 5 pages. (see Table 6). The results of the other four factors were not significant at the .05 level.

The third research question sought to determine if social experiences explain the variance in alumni giving within five years of graduating. Three of the four social factors consisted of only two items: Institutional Satisfaction, Conversations with Others who are Different, and Spirituality. In each of these factors, there were only two items in the NSSE that asked about these topics. Additionally, all three were cited in prior literature as associated with giving. Hence, I included them in the regression analysis. Even so, none of the four factors identified were significant at the .05 level.

The final research question examined the degree to which demographic, academic and social factors collectively explained the variance in giving. The analysis revealed that these variables accounted for a non-significant degree (2.9%) of variance ( $R^2 = 0.29$ ). It is important to note that this model explains only about 3% of variance in giving. Obviously, more research is needed to explore what influences young alumni to contribute to their alma mater. The results of the analysis are reported in Table 8.

In summary, it would appear that demographic characteristics and academic and social factors determined from NSSE are not particularly useful in explaining the giving by young alumni.

Table 8

*Summary of Multiple Regression Analysis for Demographic, Academic and Social Variables Predicting Young Alumni Giving (N = 559)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	Sig
(Constant)	54.294	83.062		.514
dsex	15.896	19.789	.037	.422
dinternat	-1.049	91.133	-.001	.991
dnonwhite	-18.050	29.163	-.029	.536
dNoRaceReported	-28.376	49.625	-.026	.568
recodedgrades	5.497	6.626	.040	.407
dmedses	-20.749	21.021	-.049	.324
dlowses	-29.428	33.022	-.044	.373
com_apersonalgains_mean	-29.420	25.888	-.082	.256
com_afacultyinteraction_mean	8.276	17.165	.026	.630
com_acognact_mean	22.958	17.063	.072	.179
com_aexamineviews_mean	-6.736	15.867	-.023	.671
com_aclassassignment_mean	-28.122	12.770	-.103	.028
com_ssuppenviron_mean	11.701	19.907	.037	.557
com_sinstsatisf_mean	15.677	20.597	.044	.447
com_sdifference_mean	-8.903	12.726	-.036	.485
com_sspirit_mean	-7.088	11.536	-.030	.539
$R^2 = .029$ ( $p < .05$ )				

## Chapter Five

### Discussion and Implications

This chapter consists of a discussion of the findings from the study. First, I review the results of the study and answer the four research questions presented in the study. Next, I discuss limitations to the study and describe how the findings confirm and contradict prior research. I then describe how the results might be used in future practice, future research and future policy. Finally, I offer my conclusion.

#### **Discussion**

This study was designed to answer four research questions. The first asked to what extent demographic factors explain the variance in alumni giving within five years of graduation. The next two questions focused on academic experiences and social experiences. The final question sought to examine to what extent demographic, academic, and social factors explain the variance in alumni giving within five years of graduation. I narrowed the results of an institutional data set from a 2011 NSSE survey, yielding 559 participants who were of traditional age, seniors, had attended only one institution and were full time students.

There were three key findings in this study. The first was related to what extent demographic and social factors explain the variance in alumni giving; neither was associated with giving. In terms of demographic characteristics, neither gender, race, citizenship status, grades, nor SES were significant in the regression analysis. This is interesting because prior studies have revealed that some of these characteristics do influence alumni giving (Beckers, 2010; Gaier, 2005; Hoyt, 2004; Miller & Casebeer, 1990). I discuss this in greater detail later in this chapter. For now, suffice it to say, that more research is needed to explore whether, and to what degree, different demographic characteristics are related to charitable giving.

I identified four social factors among the NSSE items and none were significant in the regression model. There are a couple possible explanations for this finding. First, there were not a lot of items in the NSSE instrument related to social experiences. There were 12 items that included 16 sub-items in those four social experience factors. Participants were therefore limited to the number and type of social experiences they could rate. Perhaps if more social experience items were included in the instrument (e.g., participation in clubs and organizations, student government, residence life), a richer array of social factors might have emerged. That might

have led to a relationship between social involvement on campus and subsequent donations to the institution.

Second, the items that formed the social factors had response options that focused on frequency rather than quality. Response options for the items assigned to the social category were never, sometimes, often and very often. Respondents, therefore, could only rate how frequently they engaged in a particular social activity. It would have been interesting to know, for example, whether participants would rate their involvement in clubs and organizations as exceptionally important to their undergraduate experience, or if such involvement was not particularly impactful. Perhaps if response options elicited data about the quality of social experiences, different results might have been achieved.

The second key finding was that only one of five academic factors proved to be significant in explaining the variance in alumni giving and that finding seems somewhat spurious for two reasons. First, there were 14 items that included 59 sub-items in the five academic factors. Class Assignments was the only factor in the study that proved significant in the regression model. The items that comprised this factor were the only items where the response options ranged from 1 to 5, rather than 1 to 4. Perhaps if I had calculated the weighted sum of the items to create factor scores (the weighting for each item being its loading on the factor) the results might have been different.

Likewise, it is important to look at the three items that comprised the Class Assignments factor: the number of assigned books, assigned papers of 5-19 pages, and assigned papers of fewer than 5 pages. The response options for number of assigned books were none, 1-4, 5-10, 11-20 and more than 20. The mean score of this item was 2.99, indicating that most participants were assigned 5-10 books per year. These items were tied to the participants' perception of their academic experience. Essentially, then, this finding suggests that less rigorous academic assignments are more associated with giving. This is certainly counterintuitive and does not lead to particularly useful implications. For example, development officers would be hard pressed to suggest to faculty that they dumb down their class assignments in order to promote financial contributions to the institution.

However, the study institution is a large public research university with a comprehensive curriculum that emphasizes different learning styles. It is possible that the students who responded were in less research-focused majors, or more experiential-based learning programs

where writing papers was not emphasized. It is also possible that large classes, typical at many major research institutions, rendered it impractical, if not impossible, for professors to grade so many lengthy papers in a semester. Clearly, more research is needed to explore both the academic experiences that are associated with giving as well as the role that class assignments play in alumni decisions to give to their alma mater.

The third, and most important, key finding is that young alumni for the most part do not give, particularly within five years of graduation. The total number of participants in the survey who gave was 81 (14.5%) of the 559 respondents. Individual giving over five years ranged from \$5 to \$21,000 with most giving \$1,000 or less over five years. Only seven alumni gave over \$1,500. One donor gave \$21,000. This is obviously an outlier as the next closest giving total was \$7,200. Total giving for all participants was \$58,477. There were 47 males and 34 females who gave. Gender and giving are discussed in a later section.

There could be several explanations for the finding that young alumni do not donate to their alma mater soon after they graduate. The first revolves simply around cash flow. Alumni may have a lot of student loan debt, they may be in graduate school, may not yet have a job, or they may be in an entry-level position that does not allow them the luxury of supporting charitable donations. In addition, they may be purchasing a new car, new house, or paying higher rent than they have been used to. Any of these factors would deter them from giving to their institution.

Second, it could be that there is no culture of philanthropy for students and young alumni at their institution. There can be no expectation of giving if there are no educational programs for students that introduce them to the importance of giving, or that showcase how giving impacts their education. Alumni who do not have an appreciation of the role that donations play in the daily life of the institution are arguably less likely to give.

Yet another possibility is that young alumni simply are not asked to give. My findings suggest that young alumni do not make donations, so the institution may not be allocating resources towards that endeavor. Perhaps an assumption that alumni only give as they age discourages staff in the Development Office from focusing on recent alumni. It is equally possible that limited numbers of Development staff can only focus their attention on older alumni. Likewise, Development staff may not be optimizing their opportunities with new alumni

by mentioning the importance of giving at chapter events, reunions, sporting events, or other places where alumni gather. All these eventualities would lead to limited giving by graduates.

Additionally, there may not be an easy mechanism for former students to give. Young alumni are likely to use new technologies and would prefer to make donations from a mobile device, or through an app or existing electronic banking relationship. The institution may be using older, more traditional means to raise money, such as mail, email and phone solicitations, or even personal visits.

Finally, even though there is an abundance of research revealing that once alumni begin to give, they continue to give (Hoyt, 2004; McDearmond & Shirley, 2009, Mosser, 1993), institutions of higher education could unintentionally delay when giving starts. This study reveals that of 81 contributors, 49 made a single donation, while 31 made at least two donations within the five-year period. Only three graduates made a contribution in each of the five years and in 20 other cases (25%), once they started giving, they continued to give. There is also evidence that perhaps there was an orchestrated effort in 2013 to promote giving because not only did the most people give in that year, many of them gave \$25 suggesting that something (or someone) was encouraging them to give a minimum of \$25.

Overall, while interesting, my findings do not disclose what types of undergraduate characteristics or experiences lead to giving by alumni. This area of inquiry needs to be expanded to better understand what encourages or discourages them from making charitable contributions to higher education.

### **Limitations**

These key findings should be considered in light of several limitations to the study that merit attention. The first involves the low response rate to the survey. The survey was sent to over 11,000 freshmen and seniors, but only 2,048 students responded (19%). Participants also had to be seniors. Seven-hundred and fifty-six seniors responded, 36% of those who were invited to respond. This participation rate was higher than 19%. Additionally, all participation was voluntary. It is possible that those seniors who volunteered to participate had had a particularly positive or exceptionally negative undergraduate experience at the institution. If so, the data may not reflect a true representation of the student experience, hence limiting the generalizability of the results.



The second limitation related to the nature of the data in the study. I only used quantitative data yielded by the NSSE. If I had supplemented the quantitative data with more qualitative data, I may have been able to provide a richer, more in depth perspective to the findings. For example, had I conducted some interviews, I may have been able to gain richer explanations about the types of student activities the participants were involved in, and the types of experiences they had that contributed to their satisfaction or involvement, and subsequent giving (or decision not to give). Additionally, I may have been able to better understand their relationships with faculty, administrators and other students, and how those relationships influenced their undergraduate experience.

There were several limitations associated with the instrument. Some were related to the self-reported nature of the data. First, it is difficult to account for the participants' mindset when they responded to the survey. They could have taken the survey on a day when a particular academic or social experience could have affected their responses in a positive or negative way. Second, if a participant was feeling particularly satisfied or dissatisfied with their entire academic or social experience at the time they completed the NSSE, this could have influenced their responses in some unforeseen manner.

There were also limitations associated with using the NSSE as secondary data, rather than data collected specifically for this study. To start, since only items in the existing instrument could be included in the study, I used a modified version of Volkwein's (1989) theoretical framework and assigned items only to demographic, academic and social categories. This framework included other variables that I was unable to include in the study (e.g., perceived effectiveness, intergenerational attendance). Likewise, I had to calculate SES based on the only information available in the survey, mother's and father's education. Other factors that might have painted a more complete picture of SES (e.g., family income, parental occupations) were not available in the NSSE. Finally, another researcher might have categorized the items differently so the assignment of variables to groups might have influenced the results. For example, having serious conversations with students of a different race or ethnicity than your own may be categorized as a social experience by one researcher, whereas I categorized it as an academic experience.

Another limitation involved the analysis. Research has shown that exploratory factor analysis is sometimes a poor choice when designing a study and can produce misleading results

if chosen erroneously. Careful consideration should be given to other design methods when designing a study, as there are reasons to choose one over another. Similar techniques can provide different results, specifically when considering exploratory analysis and principal component analysis (Fabrigar, et al. 1999; Suhr, 2009).

The final limitation was the restricted number of participants who made donations to the institution within five years of graduating. There were only 81 participants out of 559 (14.5%) who made a donation. Using 10 years of giving history might have resulted in more donors for the study. This might have provided a more positive correlation of academic and social factors, and therefore may have helped explain the variance in alumni giving.

Despite these limitations, the results offer some interesting insights. It is important to examine how they relate to prior studies on this topic.

### **Relationships of the Findings to Prior Research**

The results of this study are interesting in that they both contradict and confirm prior research about giving by recent alumni. Consider the topic of demographic characteristics and giving. Prior research has revealed that one demographic factor in particular, sex, influences giving: males give more than females (O'Malley, 1992; Taylor and Martin, 1993). In some sense, my study supported this finding in that 58% of the people who gave were men. However, sex was not significant in the regression analysis in my study so I cannot say that men are significantly more likely to give to their alma maters than women are. Likewise, prior studies have suggested that women give more often than men (Bekkers, 2010; Hall, 2010; Mesch, 2012; Lodge 2014). I did not explore frequency of giving so cannot explain that. My finding that gender was not significant does confirm Hoyt's (2004) study in which sex did not make a difference in terms of alumni giving.

A second demographic factor in the study was religion, indicated in the literature as socio-demographic, but in my study as the social factor, spirituality. My study supports prior research that indicated religion does not have an influence on giving (Lindsay, 2014). I found no significant relationship between religion and giving, consistent with what others have found in the past (Bekkers, 2010; Campbell, 2013; Daniels, 2013; Gose, 2012).

Other demographic factors in my study that have been used in prior research include race and ethnicity. The literature reveals that race and ethnicity are other factors that may influence giving. In particular, Blacks, Hispanics and multi-race/ethnic groups give significantly less than

whites (Miller & Casebeer, 1990, Monks, 2003). My study reveals that 18.5% of participants who identified themselves as non-white gave, but I did not examine whether there were differences in the amount given and race was not significant in the regression. Consequently, my results contradict those of prior scholars.

Indeed, most of the demographic findings in the study contradict prior investigations. For example, prior scholars have found that people give as they get older (Shelley & Polonsky, 2002; Gaier, 2005; Hoyt, 2004). While I did not look at age as a specific variable, I did look at giving history over five years and there was nothing to suggest that more alumni gave in year five than in year one. It is important to note, however, that whether or not age is significantly associated with giving, the literature is clear that once alumni start giving, they likely will continue to give (Hoyt, 2004; McDearmond & Shirley, 2009). This same pattern was evident in my data.

Other demographic variables found in the past to influence giving include SES. I used the only proxy for SES, mother's and father's education, available in the NSSE. Many other studies define SES differently than I did and include social class (Shelley & Polonsky, 2002), income (Bekkers, 2010; Melchiori, 1988), upbringing and other social influences (Bekkers, 2010; Shelley & Polonsky, 2002), and parental income (Hoyt, 2004; Steeper, 2009). Although my results did not reveal a significant relationship between SES and giving, it could be that parental education was insufficient to calculate SES.

The second element I examined in my study related to social experiences. My findings were consistent with some prior researchers who found social experiences to have no influence on giving (Miller & Casebeer, 1990; Taylor & Martin, 1995). Those social experiences included participation in fraternities and sororities (Gaier, 2005) as well as involvement in athletic, performance, and spiritual groups (Thomas & Smart, 2005).

On the other hand, my findings contradict much of the prior literature on social experiences and giving. Indeed, prior studies overwhelmingly supported the notion that undergraduate experiences shape satisfaction and lead to giving (Baade & Sundberg, 1993; Thomas & Smart, 2005; Volkwein, 1989). A variety of co-curricular activities were found to influence satisfaction (Baade & Sundberg, 1993; Monks, 2005) including participation in fraternities and sororities (Bruggink & Siddiqui, 1995, Monks, 2005; Young & Fischer, 1996), performing and religious groups (Monks, 2005), and athletics (Monks, 2005; O'Malley, 1992).

Finally, relationships have been found to influence giving (Outcalt & Skewes-Cox, 2012; Pumerantz, 2005). I did not find that any of those factors were associated with giving so the evidence on the relationship between social experiences and giving remains equivocal.

The final element I examined in my study was Academic experience. Specifically, my findings support some of the literature that quality academic work (Gaier, 2005; Gallo & Hubschman, 2003; Hoyt 2004) influences giving. In my study, the Class Assignments factor was significant. Other variables in the literature that support this notion that academic work is related to giving include coursework (Gaier, 2005; Mosser, 1993), and quality of instruction, courses, and programs (Gallo & Hubschman, 2003; Graham & Gisi, 2000; Hoyt, 2004). Another variable that relates to class assignments and satisfaction is student learning (Hoyt, 2004; Miller & Casebeer, 1990), in that the quantity of written papers and books assigned impact the level of quality academic work and in turn may influence giving. One last item, academic group participation, was found to have no significant relationship to alumni giving in a prior study (Thomas & Smart, 2005). My results found that less rigorous class assignments were significantly associated with giving by young alumni. The spurious nature of this finding, however, must be considered when comparing prior research to my results.

Indeed, most of the findings in my study contradict the prior literature around Academic experiences. There has been a great deal of support for the notion that student involvement in academics leads to satisfaction which may lead to giving (Astin, 1984; Gaier, 2005; Pumerantz, 2005; Tinto, 1993). In addition, the single most significant influence on alumni giving is satisfaction with the undergraduate experience (McDearmond & Shirley, 2009; Monks, 2003; Thomas, 2005). This satisfaction is realized through relationships, specifically with faculty (Monks, 2003; Pumerantz, 2005) and advisors and administrative staff (Monks, 2003; Steeper, 2009). There is additional literature that revealed that the quality of relationships alumni had as students has a significant influence on alumni giving (Pumerantz, 2005; Steeper, 2009). I found none of these factors to be associated with giving in this study.

In other studies, other academic factors were found to influence student satisfaction, hence giving. These included academic integration (Volkwein, 1989), departmental clubs (Mosser, 1993; Thomas & Smart, 2005), academic achievement and satisfaction (Monks, 2003; Hoyt, 2004), and enriching educational experiences (Pumerantz, 2005; Monks, 2003, Outcalt & Skewes-Cox, 2002). However, none of these items were found to influence giving in my study.

The final finding of my study is that young alumni do not give. Once again, this seems to contradict previous literature. Giving is determined by an individual's motivation to give around four types of interests (Bekkers, 2010; Mann, 2007). The first is personal interests such as allegiance or empathy toward the institution (Bekkers, 2010; Mann, 2007), and willingness to give (Beckers, 2010; Mann, 2007). It is clear in the literature that students' allegiance to an institution can manifest itself as pride and loyalty, both of which can influence giving. The second, economic interests, include income (SES) and the benefit of the gift (Bekkers, 2010; Mann, 2007; Vesterlund, 2006). Social interests include awareness of need (Mann, 2007; Shelly & Polonsky, 2002); knowledge of how the money will be used (O'Malley 1992), the effectiveness (and efficiency) of the organization (Bekkers, 2010; Shelley & Polonsky, 2002), and social pressure or modeling (Bekkers, 2010: Vesterlund, 2006). Lastly there are relational interests, both personal and organizational (Bekkers, 2010; Mann, 2007) that influence giving. Although the factors in my study did not mirror these interests exactly, several were closely related. For example, one of my factors was Institutional Satisfaction and included items about overall satisfaction with the educational experience. I did not find that this, or any of the other motivational factors in my study were associated with giving.

Capacity also influences giving and is defined in the literature as income (Bekkers, 2010, Thomas & Smart, 2005; Volkwein, 2010) and the availability of resources (Weerts & Ronca, 2007). My study did not inquire about income, and therefore I cannot draw any conclusions about the relationship between income and giving.

Additional support in the literature on alumni giving relates to age, not as a demographic per se, but in that once alumni start giving, they continue to give, regardless of age (Hoyt, 2004; McDearmond & Shirley, 2009). Additionally, as alumni age, they are likely to give more (Hoyt, 2004, McDeamond & Shirley, 2009, Thomas & Smart, 2005). Finally, past giving highly correlates to continued giving (Hoyt, 2004; McDearmond & Shirley, 2009; Mosser, 1993). Although there is not an abundance of literature, what is clear is that once alumni start giving, they continue to give (Hoyt, 2004; McDearmond & Shirley, 2009), regardless of age. The results of my study seem to confirm this concept in that 25% of respondents continued to give annually, once they started to give.

One last finding in the literature is around alumni participation. There is a positive relationship between undergraduate experience, satisfaction and alumni involvement (giving)

(Gaier, 2005; Gallo & Hubschman, 2003; Hoyt, 2004). That involvement can be expressed as obligation, or allegiance and empathy. Obligation is framed in terms of satisfaction with the undergraduate experience (Hoyt, 2004; Mann, 2007) and can manifest itself as emotional attachment (Gaier, 2005; Gallo & Hubschman, 2003; Thomas & Smart, 2005), pride (Baade & Sundberg, 1993; Pumerantz, 2005), and loyalty (Mann, 2007; Galo & Hubshman, 2003). There were only two questions in my study that addressed this. One asked about how respondents would evaluate their entire educational experience, and the other asked if they would choose the same institution if they started all over again. Both of these questions could be related to obligation or emotional attachment but this factor was not significant in the regression analysis so my results contradict these previous studies.

### **Implications for Future Practice, Research and Policy**

Despite the degree to which my study contradicted prior literature, the findings have implications for future practice, research, and policy. Several groups in higher education may benefit from the findings including faculty, and enrollment, development, alumni and student affairs professionals. Interestingly, even though demographics were not associated with giving in my study, the literature is rich with evidence that demographics do influence giving. Campus leaders may want to track factors other than gender, race and SES as they relate to giving. Certainly, most institutions track giving by these variables. However, it also might behoove them to conduct research on other demographic characteristics of current donors (e.g., time to degree, GPA). This might help them target donors with specific demographic characteristics and design programs to promote giving by those factors.

Faculty could be helpful to future giving by bringing alumni who work in a related profession into the classroom to talk about the importance of giving back. By coordinating with alumni and development professionals to strategically identify successful alumni, faculty could expose students to alumni who engaged in a variety of undergraduate experiences. Alumni could talk about how they benefited from their classroom experiences, and meaningful faculty relationships they had as students. More importantly, alumni could talk about how the generosity of others benefitted them personally as a student, and then lead into a conversation about why they give back today. This could be the beginning of a process to educate students about the importance of philanthropy while they are still at the institution, rather than waiting until they have graduated and/or are older.

Similarly, student affairs professionals could create programs that feature successful alumni and provide opportunities for them to interact with students. For example, professionals could work with a specific college, say Business, and reward alumni for their success in the corporate world by inviting them to come to campus and share their experiences with current Business students. The alumni might talk about giving money to the university, or their involvement with the university in other ways (e.g., sponsoring internships, serving on advisory boards). Alumni would be offered many opportunities to interact with students during meetings, presentations, workshops, or in living and learning communities as a special guest lecturer, or alumnus/a-in-residence for a week.

To promote career exploration, alumni and students could be paired for a mentoring or shadowing experience that allows students to learn about how they can give back to the university both in terms of money and in other ways. For example, opportunities for interaction between alumni and students could be staged when alumni come back to campus to participate in career fairs. Many college fairs are managed by staff in colleges and departments and many companies send representatives who are alumni to campuses to recruit. Faculty and development staff could sponsor receptions, interviews, internship and co-op experiences to encourage interaction between alumni and students.

Development professionals are another group that could promote giving among recent alumni. Development professionals could create programs that educate students about the need for philanthropic support. They might focus their efforts on encouraging students to give to programs of personal interest (e.g., the clubs and organizations they belong to, favorite faculty member). They could inform students about the scholarships, professorships, research equipment, and buildings that are supported by private giving. Other opportunities to educate students about philanthropy could be through institutional affiliation shared by all students, like class gifts. Competitions and or campaigns to promote a class gift that might be announced at a shared event like commencement could provide a mechanism to educate students about the importance of philanthropy while they are still undergraduates. If students start to give while still undergraduates, prior research would suggest that they might continue to give as alumni.

Alumni professionals might create a student organization to focus on engagement and fundraising activities. Organizational goals could include educating students about the history and traditions of the university, educating them about how philanthropy benefits the institution,

and helping them create a plan to educate more students. This could be accomplished through programs like speakers, opportunities to engage with alumni professionals, and events that bring undergraduates into the campus alumni center. Educational campaigns could be designed through the creation of literature, multimedia presentations, and promotional giveaways.

One last implication for practice is for Development professionals to create a program, perhaps through social media channels, to get students/recent alumni in the habit of repetitive giving. The literature strongly indicates that once alumni start giving, they continue to give (Hoyt, 2004; McDearmond & Shirley, 2009, Mosser, 1993). It would behoove Development professionals to not only educate students and young alumni about giving, but to also make it easy for them to give. Today's undergraduates rely on their phones and other devices to stay informed and retrieve information. Development officers should explore apps and other forms of social media through which alumni can easily transfer money and/or sign up for monthly or annual monetary transfers to the institution.

Although there are implications for practice that emerged from my results, it is clear that more research is needed on the topic of giving among recent alumni. To start, my study used NSSE data and only one of my independent variables explained the variance in young alumni giving (and that one was inexplicable). Another study might use a different instrument with questions that better align with the Volkwein (1989) theoretical framework.

Adding qualitative research methods to supplement elements of the NSSE also might provide richer data on social and academic achievement and satisfaction. Qualitative research could allow for a deeper understanding of a variety of items. For example, the only factor in my study that had any significance to giving was Class Assignments. One interpretation of this finding is that faculty should assign less rigorous reading and writing to students to influence giving. A qualitative approach would allow for a more in-depth explanation of why this is so, and include an examination of the type of classes, other types of assignments in classes, the impact of classes on learning, or the grade received in a particular class.

A qualitative study might also provide evidence to support significance of other academic and social factors, such as quality of students' relationships with peers, faculty and administrators, and involvement in extra-curricular activities. For example, very few types of social experiences were measured by the NSSE. However, the literature indicates both specific types of organizational involvement and the number of organizations students participate in



influence satisfaction that can lead to giving. Types of organizations include residence hall groups, student government, program boards and student alumni groups, many of which students must compete to join. A qualitative study could explore the type of organizations students are involved in, specific organizational experiences, and number of organizations a student is involved in and connect that to propensity to donate to the institution.

Another future study might include more institutions. My study involved only one institution because retrieving data about giving is institution-specific. Adding more institutions might lead to findings that are more significant. Similarly, increasing the parameters for young alumni giving from 5 to 10 years could yield more than 81 donors and perhaps lead to more significant findings.

I also examined only specific demographic characteristics. Other scholars could focus on different demographic factors such academic major or post-graduate activities (e.g., job, graduate school). Expanding on the demographic factors might lead to insights into what factors are associated with financial giving by recent alumni.

I had no way of gathering information about whether respondents in my study received any financial aid. It would be interesting to look at the impact of financial aid, both loans and grants, on giving. A great deal has been written in the literature about capacity to give. Clearly student loan debt could have an effect on capacity. However, there is also evidence in the literature that students' experience, specifically their loyalty toward the institution, is influenced by the support they received from the university. There clearly is a need for more research to better understand the connection between support, satisfaction, and giving.

Finally, further research is needed to help development professionals create strategies to engage those who are already engaged with their alma mater. More specifically, strategies that garner additional support from those who already give are imperative to promote the future success of higher education (Drezner, 2011).

As stated previously, this study found very little significance between undergraduate student experiences and alumni giving. Hence, it is difficult to identify policy implications from the results. However, previous research indicates that with dwindling state support, philanthropic support of higher education is of even greater importance. In that vein, university leaders could create a policy to provide incentives for faculty support of university fundraising initiatives. This might be considered university service for purposes of promotion and tenure.

Garnering financial support for a department, research, or scholarships could be of great value to the university. Likewise, perhaps policy could be implemented by governance groups to create salary incentives for faculty and staff who assist in successful fundraising for the university.

Other implications for policy fall into the category of educating students. My study did not find significance between student experience and giving, but the literature strongly supports the idea that once alumni give, they continue to give. It would behoove universities, therefore, to step up efforts to educate students about the importance of giving. There are several scenarios that could influence future policy. The first is to create a policy that all senior seminar classes must devote at least one class period to exploring how private support is used at the university, the importance of private giving, and easy steps to do so. The content for this class could be created by development professionals and include information through a multimedia presentation and handouts such as updated data on current giving, current projects, future projects, and how to give. It could be that Development or Alumni professionals are tasked with delivering this information to senior seminar classes.

Another potential policy revolves around the idea of university administrators and faculty creating courses or a minor in the field of development/advancement. This could include classes on the history of giving in the United States, history of giving to higher education, giving theories, and current trends and data. In addition, classes in communications, public relations and design could provide students with the skills to create messaging and media assets. Classes could focus on the principles of fundraising, event planning, engagement and, budgeting. Finally, the literature also supports the notion of relationships as a factor in influencing a students' satisfaction with their undergraduate experience. In planning for a new class or minor, administrators and faculty could include an experiential component to provide internships, and mentoring and practicum experiences in Alumni Relations, Development, and/or Advancement. Such efforts would be consistent with the literature in that enriching academic experiences lead to students' satisfaction.

Another potential policy could be the establishment of a university-wide Giving Week. This could include educational programs and events to learn about giving, such as a day of giving, a day to thank donors, a day to share the impact of giving on the university, and/or opportunities to meet donors. A program of this kind could include personnel from Development, Alumni Relations, colleges, departments and student groups. To make it fun there

could be challenges, such as colleges matching donations for a particular program, or contests between colleges, departments, classes, or student organizations.

Finally, policy makers might create an official student organization. This would be connected to an institutional office (as opposed to simply gathering a group of students who apply to be a student organization), in support of the Development office. Students could be educated on the importance of fundraising and then trained to help with events and fundraising initiatives. This would be just one more opportunity to educate students, before they graduate and might lead to giving by many more young alumni.

### **Conclusion**

In conclusion, public institutions of higher education are suffering from dwindling state support at the same time they are experiencing increased operational costs coupled with an increased demand for their services. This reduction in state support has led institutions to seek alternative sources of financial support. These include support from federal agencies, foundations, and corporations. Although campus leaders can increase their efforts to secure such funds, they do not have very much control over whether they are successful.

Alumni giving is one alternative revenue stream that institutional leaders can control, to a larger extent. There is abundant evidence that once alumni start to make financial contributions to their alma mater, they are more likely to continue to give over time. Clearly, it would behoove institutional leaders to examine giving among their recent alumni and to allocate time and resources to promoting giving among this group if they expect to maximize the potential revenues they might raise from their graduates.

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## Appendix A: Institutional Review Board Approval Letter

### **Research Compliance** Institutional Review Board

300 Turner Street NW  
Blacksburg, Virginia 24061  
540/231-4606 Fax 540/231-0959  
email [irb@vt.edu](mailto:irb@vt.edu)  
website <http://www.irb.vt.edu>

### **MEMORANDUM**

**DATE:** August 25, 2017

**TO:** Debbie Day, Joan B Hirt, Gabriel Ramon Serna, Joshua M Cohen

**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires January 29, 2021)

**PROTOCOL TITLE:** Student Involvement Factors that Influence Young Alumni Giving

**IRB NUMBER:** 16-722

Effective August 25, 2017, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Continuing Review request for the above-mentioned research protocol. This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others. All investigators (listed above) are required to comply with the researcher requirements outlined at: <http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

### **PROTOCOL INFORMATION:**

Approved As: **Expedited, under 45 CFR 46.110 category(ies) 5**

Protocol Approval Date: **August 24, 2017**

Protocol Expiration Date: **August 23, 2018**

Continuing Review Due Date\*: **August 9, 2018**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

### **FEDERALLY FUNDED RESEARCH REQUIREMENTS:**

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required. IRB Number 16-722 page 2 of 2 Virginia Tech Institutional Review Board

Date\* OSP Number Sponsor Grant Comparison Conducted?

\* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

Institutional Review Board

300 Turner Street NW  
Blacksburg, Virginia 24061  
540/231-4606 Fax 540/231-0959  
email irb@vt.edu  
website <http://www.irb.vt.edu>

Wed 3/21/2018 10:40 PM

James F Volkwein <fred.volkwein@gmail.com>

To: Day, Debbie <hokie@vt.edu>

Hi Debbie-

I am writing to give you permission cite my work and to use my model of alumni gift giving in your research. Please let me know if you need more than this simple email, and share with me your research summary or draft of any publication that results from your work. I look forward to looking it up on the public access link.

All the best,  
DrV

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\*\*\*\*\*

J. Fredericks Volkwein  
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