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The Relationship of Tuition Discounting and Student Loan Debt at Faith-based Institutions

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THE RELATIONSHIP OF TUITION DISCOUNTING AND STUDENT LOAN DEBT AT FAITH-BASED INSTITUTIONS

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CERTIFICATE OF APPROVAL

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Abstract

Tuition discounting and student loan debt are two topics in United States higher education of growing concern among practitioners. Both of these financial constructs affect the overall cost of college and how students pay for their education. Bringing both concepts together, the purpose of the study was to explore quantitatively a relationship between tuition discounting and student loan debt at faith-based institutions. Specifically, the study examined the relationship of these two financial constructs at member institutions of the Council for Christian Colleges & Universities (CCCU). The definition of tuition discounting employed is the practice of providing non-repayable institutional grants and scholarships to offset published tuition prices. Student loan debt, a repayable form of aid, in the study focuses primarily on students who participate in Title IV financial aid programs through the federal government. Utilizing data gathered from the Integrated Postsecondary Education Data System (IPEDS), findings from the statistical analysis conducted displaed a statistically significant relationship between student loan debt and tuition discounting at faith-based institutions. Further exploration of the effect of published tuition price on this relationship indicated an increase in statistical significance of the relationship between the two constructs as the published tuition price increases. Given these results, the study provides information to be used in the decision-making of senior-level administrators as tuition discounting impacts students' ability to attend higher education.

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Chapter 1

Introduction

External factors play a significant role in the development of college students. According to Bronfenbrenner's ecological theory, exosystems influence the environment of individuals without including them (Evans, Forney, Guido, Patton, & Renn, 2010). External factors included in exosystems, to name only two, are financial aid policies and institutional decision makers. These financial and administrative elements of higher education have further implications in students' lives.

Within the realm of financial aid policies, tuition discounting and student loan debt act as significant influencers. Both tuition discounting and student loan debt are frequently researched areas. However, rarely are the two examined together. As the published prices of higher education continue rising, especially in private institutions, and resulting increases in student debt pose challenges, a potential relationship between these constructs emerges (Parrott, 2008). Because of the financial effects these constructs have on students, evaluating the possible relationship between tuition discounting and student debt is imperative.

Tuition discounting is a practice within higher education that is both ill defined and misunderstood. Taking on many definitions and forms, tuition discounting is often customized and individualized within a specific college or university (Allan, 1999). As a result, the working definition of tuition discounting often varies based on the setting and role of individuals interpreting (Allan, 1999). The practice of tuition discounting is rooted in the inflation of the published tuition price and compensation of this price through non-repayable institutional grants and scholarships (Hillman, 2012; Rine, 2016). This approach to college pricing is referred to as the “high-price/high-aid” model (Rine, 2016).

Tuition discounting requires inflated prices in tuition and, in turn, high amounts of aid provided to students by institutions. Students receive aid in the form of grants, which are non-repayable (Allan, 1999; Rine, 2016). Institutional grant aid is used to lower the published price for the student and provide affordability. Institutional grants and scholarships fall into two categories: funded and unfunded (Browning, 2013; Hillman, 2012; Rine, 2016). Funding sources for such aid include endowments, budgets, and tuition revenue (Browning, 2013; Hillman, 2012; Parrott, 2008; Rine, 2016). Tuition discounting is an essential feature for institutions, affecting student outcomes such as leadership and critical thinking (Park, Denson, & Johnson, 2014; Parrott, 2008). Institutions use discounting for admissions and retention purposes, providing strategic methods to commend academic and skill-related achievements (Parrott, 2008; Rine, 2016).

In many ways, criticism abounds concerning the institutional practice of tuition discounting in higher education. Affecting both financial and developmental aspects, tuition discounting remains a controversial, yet growing higher education practice. Discounting continues inflating college prices in public and private institutions (Hillman, 2010; Rine, 2016). Tuition discounting, remaining a widespread financial practice, perpetuates the development of a student debt crisis in modern day higher education.

In addition, financial aid is an essential factor that determines student access and ability to attend college. Within financial aid, many programs and options exist that students can utilize as they seek to pay for college. Keeping the vast nature of financial aid options in mind, student loans serve as the primary focus of the current study. Supplemental to grants and scholarships, loans are a repayable form of assistance available to students (Hershbein & Hollenbeck, 2015). Loans are available to students through Title IV financial aid programs and private lenders. Acquiring a loan may be a complicated and challenging process (Hornak, Farrell, & Jackson, 2010). Paired with a confusing application process, the use of student loans often impacts student behaviors, persistence through college, and value of a degree.

Paying for college by borrowing through loans requires students to acquire debt. Since the 1990s, the amount borrowed through student loan programs has quadrupled annually (Avery & Turner, 2012). Often, students either under- or over-borrow in striving to finance their studies (Avery & Turner, 2012). Financing higher education through repayable sources leads to certain behaviors in students. These attitudes can vary based on the type of institutions students attend, as well as influence of family and friends (Norvilitis & Batt, 2016; Zerquera, McGowan, & Ferguson, 2016). While research reveals patterns of student attitudes towards student debt, this area of study often proves challenging because of various financial aid options and choices concerning if and how to utilize loans (Hillman, 2015).

A student's persistence to graduation is also affected by the use of borrowing to attend college (Robb, Moody, & Abdel-Ghany, 2012). The amount of debt a student acquires directly impacts his or her ability to persist. Gender, involvement on campus, and academic year are all factors with specific outcomes related to student debt and persistence (Robb et al., 2012). However, the most important factor in a student's persistence to graduation with student loan debt is the absolute value of debt rather than accumulation (Robb et al., 2012).

Lastly, the research question presented specifically addresses the context of faith-based education. The current study primarily defined faith-based institutions as those subscribing to a Christian mission and a requisite set of educational practices. Operating with the same goals of preparing students for their professional lives and held to the same external standards, Christian higher education institutions are similar to other higher education institutions in the United States (Wells, 2016). However, Christian higher education specifically cultivates lifelong learners focused on how the convictions of their faith relate to their scholarship through a commitment to learning inside and outside of the classroom (Wells, 2016). Studies conducted show the current pressure placed on the faith-based sector of Christian higher education, especially regarding the ever-increasing cost to students (Rine & Guthrie, 2016; Williams, 2010).

With a growing concern for students acquiring loan debt and a constantly growing amount of money borrowed, a greater need for possible solutions now also exists. Loans provide access to higher education at a cost. Unpaid interest, penalties, charges, and fees also accompany the borrowed amount (Baum, 2015). Overall, tuition prices continually rise in higher education along with the amount of student loan debt.

Purpose of Study

The purpose of the study was to explore quantitatively a possible relationship between tuition discounting and student loan debt. Currently, existing research focuses on discounting at an institutional level and student debt from a student-centric perspective. Both constructs focus on the financial and developmental impacts on college students. Tuition discounting provides certain students with non-repayable aid while also publishing inflated prices. Student loan debt is used to supplement other sources of financial aid, requiring students to borrow and repay. Due to the widespread institutional reliance on tuition discounting and increase of student debt, further research of this topic yields awareness and provides suggestions for further practice.

Filling a gap in the existing literature begins with the formation of a body of literature relating these often-distant financial concepts. In order to best financially benefit our students, seeking out how these constructs could relate to inform the future leaders of higher education is crucial. The following question therefore guided the research:

> *What, if any, relationship exists between tuition discounting and student loan debt at faith-based institutions?*

Chapter 2

Literature Review

In higher education, both tuition discounting and student debt are rising concerns. While tuition discounting and student debt maintain a large body of research individually, little research explores the relationship they share. Most commonly, the practice of tuition discounting in the research relates to institutional financial decisions, while student debt literature focuses on the impact on students. The literature highlights important aspects of both tuition discounting and student debt as well as addresses the importance of the emphasis on faith-based institutions.

In order to address the relationship between the two presented variables, one must first understand tuition discounting and student debt. Tuition discounting practices are often unique to individual institutions (Allan, 1999). Most institutions have specific reasons for why and how to go about tuition discounting.

Tuition Discounting

Most often, tuition discounting is explored as a measure of the financial success and well-being of an institution as well as for enrollment and recruitment purposes. Browning (2013) linked financial position and tuition discounting practices. Research of this type helps to inform colleges and universities for institutional budgets and enrollment practices. To best understand the practice of tuition discounting, researchers focus on a few elements, including foundational definitions, history of the practice, institutional grants and scholarships, and emerging criticisms and benefits.

Definition and foundations of tuition discounting. Many different definitions exist within the literature for tuition discounting. The current study employed the definition of tuition discounting as the practice of a college or university to provide non-repayable, institutionally-funded grants to students in order to offset the published tuition price (Allan, 1999; Baum & Ma, 2010; Browning, 2013; Hillman, 2012; Rine, 2016). The practice of tuition discounting allows institutions to develop variable pricing options based on standards and qualifications for students (Parrott, 2008). Tuition discounting takes place in both private and public sectors of higher education (Hillman, 2010). However, private higher education is most likely to use tuition discounting due to higher levels of need based on more expensive tuition prices, some exceeding $55,000 (Baum & Ma, 2010; Hillman, 2010; Parrott, 2008). Thus, the current research primarily focused on tuition discounting in private higher education.

Two other terms arise from the practice of tuition discounting—"sticker price" and "net price." The published price or advertised price of a college or university is the "sticker price" (Baum & Ma, 2010; Rine, 2016). The sticker price is the price published before institutional grants and scholarships are added. The net price is the price paid by the student after taking all grants, aid, and scholarships into consideration. The tuition discount illustrates the ratio of grant aid provided by an institution to the sticker price (Baum & Ma, 2010).

Two remaining concepts, having to do with the funding of these provided discounts, are foundational to the practice of tuition discounting. With so many institutions—both financially unstable and stable—utilizing the practice of discounting (Browning, 2013), one must explore whether the discounts used are funded or unfunded.

Both funded and unfunded discounts are commonly used in higher education, and both affect institutions (Browning, 2013). Funded grants in tuition discounting include monies provided through endowment funds or annual budgets, set aside specifically for financial aid (Browning, 2013, Hillman, 2012, Rine, 2016). Funded discounts used by colleges and universities does not negatively impact institutions' revenues (Martin, 2012).

In contrast, funds for unfunded grants come from the tuition revenue of other students or budgets otherwise set aside by an institution for various purposes (Browning, 2013; Hillman, 2012; Rine, 2016). The use of unfunded aid links to other institutional factors. As explored by Martin (2012), using unfunded institutional discounts is related to the selectivity of institutions. Through a study of 178 private, non-profit institutions, Martin found as the rate of unfunded aid provided increased, selectivity decreased.

The goal of tuition discounting is to provide financial aid to recruit and retain students at a particular institution (Parrott, 2008). While some benefits fall to the student, tuition discounting allows a college or university to maximize its revenue (Parrott, 2008). Using previous data, institutions can calculate how to discount in order to maximize the financial benefits to the university (Parrott, 2008). This process of calculation allows for a customized process and plan for discounts at colleges and universities (Allan, 1999; Parrott, 2008).

Within that manner of customization, Allan (1999) addressed the three most common understandings of tuition discounting found in institutions. These types of discounting include simple tuition discounting, scholarship allowance, and student tuition discounting. In simple tuition discounting,, a college or university waives whole or part of the cost of its tuition (Allan, 1999). Scholarship allowance is the combination of waiving tuition and distributing gifts and endowments through institutional financial aid (Allan, 1999). Lastly, according to Allan (1999), student tuition discounting includes waiving the tuition price by distributing institutional grants and scholarships from both endowments and other external grants.

Tuition discounting via scholarship allowance is the most commonly accepted understanding, used in studies such as The National Association of College and University Business Officers (NACUBO) Tuition Discounting Study and College Board Tuition Discounting Study (Baum & Ma, 2010). With customization based on individual data and statistics, as well as the three types of aid distribution highlighted by Allan (1999), the practice of tuition discounting is specific and individualized to a particular college or university.

History of tuition discounting. With a basic understanding of tuition discounting, questions often arise as to when this practice began and became prevalent in higher education. The popularity of tuition discounting came about in the 1980s with a significant rise in college tuition prices (Breneman, 1994). When the practice of tuition discounting was first established, institutional discounts in the form of grant aid were distributed after students exhausted every other source of financial aid (Allan, 1999).

Tuition discounts were originally seen as a last resort for universities to aid students in attending a specific institution (Allan, 1999). Originally, using discounts was an institution's way of encouraging students from middle-class households to attend when they were unwilling to pay the published tuition price (Allan, 1999). Concerns over the practice of tuition discounting were noted early on when colleges initially began using discounts to meet levels of enrollment (Breneman, 1994).

Throughout the years, the practice of tuition discounting fluctuated and tuition discounting has become a generally accepted practice within higher education. Among private institutions in 2010, reports showed that 25% of colleges reported discount rates below 25%, while 25% of colleges reported discount rates above 40% (Baum & Ma, 2010). In 2015, the NACUBO (2016) reported an average discount rate of 48.6% for first-time, full-time students and an average discount rate of 42.5% for all undergraduate students. Overall, the highest rates of tuition discounting found in 4-year private institutions are rising (Baum & Lapovsky, 2006).

Due to the individualized nature of this practice, tuition discount rates often reflect the financial wellbeing of an institution. According to Martin (2012), "Financial strength includes factors such as endowment wealth, net tuition revenue per student, and demand for enrollment" (p. 111). These financial strength indicators, as Martin (2012) highlighted, express the sensitivity tied to an institution's tuition discount rate. While an institution may not directly publish its tuition discount rates, these rates can be calculated using data provided by the Integrated Postsecondary Education Data System (Duggan & Matthews, 2005). Along with the sensitive nature of these percentages, it is important to note the varying ways institutions calculate tuition discount rates (Davis & Redd, 2013).

Institutional grants and scholarships. Tuition discounts are provided to students through institutional grants and scholarships, which differ from common financial aid practices. Grants are given to students despite a financial need (Allan, 1999; Parrott, 2008). Students receive forms of institutional grants based on need, merit, and character (Rine, 2016). Institutional grants and scholarships are both funded and unfunded. While grants and scholarships provided by the institution aid students in paying for college, many institutions face challenges meeting the net revenue provided by tuition (Parrott, 2008). With many forms of aid provided by an institution, they may miss possible revenue opportunities from tuition. Though beneficial to students paying for college, this financial incentives trend forces colleges and universities to compete in the higher education market by providing large financial incentives to students (Breneman, 1994; Parrott, 2008).

Hurwitz (2012a) explored the effects of home equity-based grant aid allocation on the college choice of students. College-choice elasticity, defined by Hurwitz, is “the increase in the probability of choosing a particular sampled college caused by an increase of $1,000 in institutional grant aid” (2012a, p. 3). This study found students from low-income households are most likely to consider institutional grant aid when making their college choice (Hurwitz, 2012a). While sensitivity to institutional grant aid is relevant to lower-income students, no relationship exists between college-price elasticity and the race or ethnicity of students (Hurwitz, 2012b). Overall, his studies showed institutional grant aid can affect a student’s college choice when a family income is less than $50,000 per year. However, students from more wealthy families with a family income per year less than $200,000 are less likely to make a college decision considering the institutional grants and scholarships. While the pressure of institutions to provide institutional grants and scholarships remain, the study by Hurwitz (2012a) showed tuition discounts do not serve as a defining factor in the college decision process.

Another study of institutional grants and scholarships conducted by Park and colleagues (2014) examined the relationships of aid to student outcomes of teamwork, leadership, and critical thinking. This study showed the direct effect of receiving grants and scholarships on students. Overall, the study by Park and colleagues noted aid directly affected student outcomes, even when aid provided full coverage of tuition. Institutional grant aid led to increased gains in leadership and teamwork among students (Park et al., 2014). Increases in institutional grant aid had a significant relationship to leadership and critical thinking (Park et al., 2014). This research evidenced the positive benefits of institutional grants and scholarships for the students receiving them.

Without institutional grants and scholarships, some students would otherwise not be able to attend their institution of choice (Baum & Ma, 2010). While tuition discounts may pose a financial risk to institutions, aiding students in financing their education often leads to positive student outcomes. Despite the many criticisms of tuition discounting, many benefits to students exist.

Benefits and criticisms of tuition discounting. Along with criticisms, researchers identify many benefits of tuition discounting. Tuition discounts provide access for many students not financially capable of attending college, while other students are paying for their tuition through unfunded discounts (Allan, 1999; Lawson & Zerkle, 2006). These perspectives and opinions regarding the tuition discounting practices throughout the literature bring an important understanding of how tuition discounting is viewed within higher education. Bringing light to both the benefits and criticisms can help to better understand how specific individuals working in an institution perceive and understand this phenomenon.

Tuition discounting has many benefits. Providing institutional grants and scholarships through tuition discounting aids students in paying for college (Allan, 1999). Moreover, scholarships and grants help provide access to low-income and underprivileged students. Students whom institutions find desirable—but are financially unable to attend—are offered large discounts as a means to encourage enrollment despite the “sticker shock” (Breneman, 1994; Parrott, 2008). Again, “sticker shock,” referred to by Breneman (1994), is the initial reaction students and their families have to the published tuition price. Without this form of financial aid, many students likely could not attend college (Baum & Ma, 2010).

Though tuition discounting clearly benefits student recipients, the practice remains subject to criticism. Criticisms most often involve the use of unfunded discounts. Tuition discounting is also referred to as price discrimination, the practice of charging some students higher tuition prices than others to attend the same college or university (Lawson & Zerkle, 2006). Price discrimination is seen through the difference in the net price different students are charged to attend the same university (Lawson & Zerkle, 2006). Many stakeholders are involved in providing institutional grants and scholarships, including other students, as unfunded discounts are provided through the redirection of tuition revenue (Duggan & Matthews, 2005; Hillman, 2012; Rine, 2016). Using unfunded tuition discounts and reallocating institutional tuition revenue funds allows full-paying students to cover tuition for others. This redistribution takes place when wealthy students pay full tuition price, and their tuition funds are redirected to institutional grants and scholarships (Allen, 1999; Duggan & Matthews, 2005).

Another criticism of tuition discounting is, while institutional grants and aid are meant to assist low-income families, recently they have become available to wealthy and middle-class students (Hillman, 2010). At times, discounts provided to students of different economic backgrounds end up comparable (Hillman, 2010). Critics take issue with the premise that discounting has become so commonplace within higher education that tuition discounts are available to students irrespective of need (Duggan & Matthews, 2005). Even though tuition discounting remains a strong and defining characteristic of higher education, there is much debate to the benefits and positive impact of this practice.

Student Debt

With growing concerns over accessibility and affordability, financial aid and student loan debt remain relevant issues to higher education. Debate continues over the worth of higher education and the financial investment that students make in order to attend and complete college. The body of research pertaining to student debt is vast and covers many topical areas. Financial aid remains a complicated system with many options for loan programs. Student debt encompasses many outcomes affecting students, which include behaviors and decision making, persistence to graduation, involvement, and the value of a degree.

Understanding financial aid. How then does financial aid work? This question remains relevant not only for students and parents making college decisions, but also for professionals working within institutions. Financial aid incorporates several different aspects and sources of funding. Sources of funding include federal financial aid packages, institutional financial aid packages, and student loans (Allan, 1999; Avery & Turner, 2012). With a better understanding of types of financial aid packages, a better understanding of student loan debt is possible. While institutional grants and scholarships are attributed to tuition discounting, student loans are attributed to student debt (Hershbein & Hollenbeck, 2015).

Private institutions vs. public institutions. When considering financial aid, differences exist between the financial policies of private and public institutions. Private colleges are more likely to use specific packaging methods depending on each student's admission to the institution (Heller, 2008). Private institutions are more likely to have higher tuition rates and give larger financial aid packages containing institutional aid (Rine, 2016). In contrast to this system of high price and high aid in private institutions, public institutions practice tuition discounting and rely on state funding (Baum & Ma, 2010; Rine, 2016). Constantly rising tuition prices, steady family incomes, and the drastic shift in families' capacities for financial contribution create various challenges (Hornak et al., 2010). While distinct financial aid differences at public and private institutions remain, some similarities in financial aid practices also exist. The current study focused primarily on financial aid, specifically student loans, within the context of private, faith-based institutions.

Differentiating student loans in financial aid. Financial aid encompasses all types of aid that help students pay for college. A student loan, one type of aid, is an amount of money borrowed by a student in order to help that student pay for college. Student loans come with an expectation of repayment. Other forms of financial aid, such as scholarships and grants, do not come with expectations of repayment. Once all grants and scholarships are processed, student loans provide additional support for college payment (Hershbein & Hollenbeck, 2015). Currently, two types of loans are provided to students: federal loans and private loans (Akers, Chingos, & Henriques, 2015). Students seek out private loans through independent lenders, such as banks, varying by loan provider. Federal loans are provided through the federal government, which offers many different options of student loans.

Title IV Financial Aid Programs. Federal student loans are available to students under Title IV of the Higher Education Act of 1965, which created student loan programs, such as the Stafford loan program (Avery & Turner, 2012). To qualify for federal student loans, students must fill out the Free Application for Federal Student Aid or FAFSA, which provides students options for loans based on various financial eligibility indicators (Avery & Turner, 2012).

Three main types of federal student loans are provided to and used by students: subsidized Stafford loans, unsubsidized Stafford loans, and the Parent Loans for Undergraduate Students or PLUS (Avery & Turner, 2012). Each program is available to students based on financial and demographic information. Loans have different interest rates, deferral options, and maximum loan amounts (Avery & Tuner, 2012; Baum, 2015; Hillman, 2015). With multiple options available for students, the system of federal loans often proves challenging to understand and navigate. The constantly evolving policy environment leads to changing names of loan programs and difficulties in terms of navigating FAFSA (Hillman, 2015; Hornak et al., 2010). Federal student loan programs are the most utilized programs for students seeking loans. A basic understanding of loan programs helps to inform student attitudes toward their debt.

Student debt and related behaviors. Student loans help students to supplement the costs of attending college, but the resulting debt impacts students during college and after graduation. Many student loans attach fees and large amounts of unpaid accumulating interest (Baum, 2015). Student loan eligibility also produces hardship for students. With increasing college prices, federal loan offerings are not adjusting quickly enough to compensate for tuition hikes (Mumper, Gladieux, King, & Corrigan, 2016). Without the eligibility required to access federal student loans, many students are forced to take loans from private lenders, some of whom charge higher interest rates than federal loans (Mumper et al., 2016). The burden of student loans translates to both new loan borrowers and previous loan borrowers who are still repaying debt (Baum, 2015). Within higher education, growing concern and debate surround student debt. Recently, this concern regarding student debt has grown into a national student debt crisis.

Making the decision to acquire debt in the form of student loans requires information and knowledge. The choice to use loans to pay for college forces students to examine their own likelihood of persisting to graduation along with future career choices (Avery & Turner, 2012). Students are often unaware or uninformed about student loans, making them ill equipped to make the decisions about how to use loans to fund college (Simpson, Smith, Taylor, & Chadd, 2012). Simpson and colleagues (2012) noted students are often unaware of the type of financial aid supporting them.

Choice of loan program and amount borrowed is crucial to success and wellbeing in college (Norvillitis & Batt, 2016). Depending on the levels of debt required, a student's performance and involvement on campus is often greatly affected. The weight of such decisions fall more on families than students; however, many critics often blame students who over- or under-borrow as well as blaming the institutions themselves (Avery & Turner, 2012; Hornak et al., 2010).

The overwhelming burden students feel toward debt creates many different types of behaviors and attitudes in students. Various influences develop behavior surrounding student debt and borrowing (Zerquera et al., 2016). Those influences, such as family and peers, often impact a student's decision to borrow and feelings toward the amount borrowed. Robb and colleagues (2012) explored how debt affected students' persistence to graduation. Students with loan debt amounts from $10,000 to $30,000 had a higher chance of forgoing credit hours in a semester than those with no student loans (Robb et al., 2012). Actions of students with debt amounts exceeding $30,000 were not different in comparison to their classmates with no student loans (Robb et al., 2012). Students with the highest amounts of accumulated debt did not behave differently than students without debt. Still, a positive relationship emerged between a student's debt amount and likeliness to drop out of college (Robb et al., 2012). Findings show students felt most overwhelmed by the absolute amount of debt they required rather than the accumulation of debt (Robb et al., 2012). At any point, the burden of debt can overwhelm a student by its absolute value, rather than the accumulated amount (Robb et al., 2012).

Studies also show student debt can affect student involvement on campus. Hornak and colleagues (2010) highlighted the financial challenges impacting involvement of first-year students. Types of involvement included on campus jobs, social organizations, and educational associations (Hornak et al., 2010). Most students in this study held on-campus jobs, and those not working on campus sought jobs off-campus. Moreover, students with financial worries were forced to limit their levels of involvement due to financial concerns (Hornak et al., 2010). Consequently, students must weigh the benefits and potential fees of becoming involved in campus activities.

Attitudes towards student debt. Norvillitis and Batt (2016) developed and used a scale addressing student loan attitudes. This study found, when students acquired their loans, they also assumed jobs after college would quickly allow them to repay their loans. While some students resisted the idea of acquiring loans, some students viewed loans as a necessity to attend college (Norvillitis & Batt, 2016). Zerquera and colleagues (2016) conducted a similar study addressing loan attitudes and found students typically fall into three categories: averters, intermediates, and accepters. All three attitudes come with specific implications. Accepters tend to view student loan debt as a normalcy in higher education (Zerquera et al., 2016). In contrast, averters avoid debt at all costs, taking measures to avoid taking on any debts (Zerquera et al., 2016). Intermediates are the middle ground. They take on small amounts of student debt and are greatly influenced by the negative experiences of others (Zerquera et al., 2016). Research also shows students have many postures towards loan debt. These attitudes surrounding student loans and acquiring student debt can affect outcomes, such as persistence to graduate, student involvement, and value of degree.

Value of Degree

One of the biggest questions facing higher education involves the worth of a college degree. Is the price of college worth it? Is college a worthwhile investment? This concern of a degree’s worth is impacted by the rising tuition prices. Menard (2013) found a college degree enables students to achieve longitudinal financial satisfaction. More college graduates were financially satisfied over time than their peers who only acquired a high-school diploma (Menard, 2013). Having a bachelor’s degree is an indicator often used to gauge financial satisfaction overtime (Menard, 2013). This study showed even though students are burdened by the financial struggles of obtaining college degrees, over time the investment proved worthwhile through financial satisfaction.

Another important source connecting student debt and worthwhileness of college is the Gallop-Purdue Index (GPI) Report in 2015, which included institutional diversity of around 29,000 participants. Alumni provided personal perspectives on their financial positions in relation to the costs of higher education. Answers from the survey showed no significant differences based on institutional type (Gallop-Perdue Index, 2015).

The Gallup-Purdue Index Report found that only half of college and university alumni viewed their investment in their post-secondary education as worthwhile (Gallop-Perdue Index, 2015). Answers within this category differed depending on demographic information. Recent alumni were less likely to view their college investment as worthwhile, a view more commonly held among unemployed and underemployed graduates (Gallop-Perdue Index, 2015). Alumni who found the cost of college worthwhile were most likely involved in on-campus activities (Gallop-Perdue Index, 2015). Influences of campus involvement, such as mentorship and organization involvement, increased positive feedback on college investment. The Gallup-Purdue Index explored the relationship between student debt, the value of a degree, and the worthwhileness of the college experience.

Faith-based Institutions

Representing more than 180 Christ-centered colleges and universities globally, the Council for Christian Colleges & Universities (CCCU, n.d.) works "to advance the cause of Christ-centered higher education and to help our institutions transform lives by faithfully relating scholarship and service to biblical truth" (para. 1). By mission and value, the CCCU represents a group of denominationally diverse institutions of Christian higher education.

Beginning with the colonial colleges, higher education served religious missions by preparing young men for ministry and clerical work (Ringenberg, 2006). Over time, universities once serving a purely Christian mission secularized. Ringenberg (2006) noted four main reasons driving the secularization process: higher criticism, relativism, Darwinism, and pluralism. The four marks of secularization, as well as competition from other growing institutions, led many private colleges to secularize. Despite that impact of that process, many post-secondary institutions remain faithful to their Christian mission and work. By outlining and supporting core values, the CCCU confers membership on institutions that are Christ-centered in mission and practice.

Literature notes the current pressure placed on particularly Christian institutions of higher education that are Protestant and mostly evangelical in nature. Christian institutions are often questioned for affordability and access, leaving this higher education sector in a season of constant pressure (Rine & Guthrie, 2016). Research highlights the immediate importance of commitment, steadfastness, and dedication as leaders and practitioners in the faith-based sector work among the many external pressures (Rine & Guthrie, 2016).

Affordability and faith-based institutions. All of the institutions in the CCCU depend on tuition-revenue given their non-profit status. Over time, this group of non-profit institutions is growing more dependent upon student tuition for revenue (Rine, 2016). Cost of attendance leads some institutions to seek status among a hierarchy of institutions displaying prestige (Winston, 1999). Despite the many pressures facing Christian higher education and the need to seek prestige within the sector, studies also show the problem of escalating prices of attendance, which can then impact practices within institutions such as tuition discounting.

Williams (2010) highlighted the perceived factors of the increase in tuition prices. Among the forty-nine senior level administrators involved as participants in this study, many factors for the continually rising prices were identified. Institutional benefits, student services, and marketing to prospective students were a few key factors for escalating costs. Particularly, Williams also pointed to senior-level administrators viewing unfunded student financial aid as a factor for rising prices. The concern raised among senior-level administrators in this study elicits attention to the tuition discounting practices at faith-based institutions.

Benefits of Study

The current study sought to provide both general and specific benefits to higher education. Generally, through the exploration of the relationship between tuition discounting and student loan debt, this research bridged a gap in the literature between these respective constructs. Due to the common use of institutional grants and scholarships within higher education, this research sought to develop an understanding of the impact of unfunded grants and scholarships on rates of student loan debt in faith-based institutions. Specifically, this research provides insights into the practices of small, private faith-based institutions and offers a foundation for further research in the future.

Chapter 3

Methodology

The purpose of this quantitative study was to examine the statistical relationship between tuition discount rates and student debt amounts as they exist at CCCU institutions. In particular, the research attempted to answer the following question: What is the relationship, if any, between tuition discounting and student loan debt at faith-based institutions? From this exploratory question, the research was guided by the hypotheses below:

H_0: There is no statistically significant relationship found between tuition discounting and average student Title IV loan amounts.

H_a: There is a significant relationship between tuition discount rates and average student Title IV loan amounts.

Approach and Design

A quantitative approach allows the researcher to determine statistical significance between two variables (Creswell, 2015). The current study used a correlational design, which provides the ability and opportunity for the researcher to measure the association or relationship between a set of variables (Creswell, 2015). Through the analysis process, the researcher sought to find a relationship in which the variables directly influenced each other.

Context and Participants

Using the Integrated Postsecondary Education Data System (IPEDS), data was gathered from institutions within the Council for Christian Colleges and Universities (CCCU). Data from IPEDS is collected continually through surveys conducted by the U.S. Department of Education's National Center for Education Statistics (NCES). Basic data used to describe trends in higher education provide IPEDS with eight categories of data resources: institutional characteristics, institutional prices, admissions, enrollment, student financial aid, degrees and certificates conferred, student persistence and success, and institutional resources.

Within the CCCU, all North American institutions are regionally accredited colleges and universities with Christ-centered mission statements and historically Christian roots. Institutions are afforded one of three membership classifications: governing members, associate members, or collaborative partners. Membership is then based on five core requirements: institutional type and accreditation, Christian mission, employment policy, cooperation and participation, and institutional integrity. The sample of the current study focused on institutions in the United States at all levels of membership.

Description of Sample

Of the 141 institutions in the United States with one of the three membership statuses in the CCCU, the 131 college and universities displayed in Appendix A were included in this study. Ten institutions (see Appendix B) were eliminated from the sample due to lack of information provided in the IPEDS database, as well as missing data points for any of the years captured in the data set.

Due to the creation of a trend in colleges and universities utilizing tuition discounting techniques in the 1980s (Breneman, 1994), a wide range of years—from the 2008-2009 to 2015-2016 academic years—were represented in the data and analyses. The eight-year span allowed the researcher to fully explore the trends of both tuition discounting and student loan debt at CCCU institutions.

Procedures

First, the researcher compiled a master list of CCCU institutions. Using that list of institutions, data was then extracted from the online IPEDS database into a Microsoft Excel spreadsheet. All data obtained were kept secure and only used for the purpose of the study. The data that was used included but was not limited to amounts of institutional grants and scholarships offered and average amounts of Title IV loans.

Independent and Dependent Variables

The dependent variable for the study was the amount of student loan debt. Through IPEDS data, the researcher highlighted the amount of aid provided to students in the form of loans. After applying the statistical test, a further relationship between the variables was explored.

The independent variable, tuition discounting—as defined by Browning (2013), Hillman (2012), and Rine (2016)—consists of institutional grants and scholarships awarded to students. Within the IPEDS data, the researcher focused on grants and scholarships offered by the institution to full-time, degree-seeking, undergraduate students. From the available IPEDS data, the researcher used a calculation similar to one used by Duggan and Matthews (2005) and Martin (2012) to determine the tuition discount rate for each institution.

Calculating Tuition Discounting

The researcher calculated the tuition discount rate for the institutions in the sample. The calculation used for tuition discounting relied on different sources and was verified by experts in the field. The study used the following formula and variables to calculate tuition discounting:

Calculation:

$$\frac{Total\ instiutional\ financial\ aid\ (funded\ and\ unfunded)}{Gross\ tuition\ and\ mandatory\ fees}$$

Variables included institutional grants (funded), institutional grants (unfunded), tuition and fees (total), and allowances applied to tuition and fees.

The following calculation and variables were used for gross tuition and mandatory fees:

Calculation:

$$Tuition\ and\ fees\ (total) + Allowance\ applied\ to\ tuition\ and\ fees$$

Variables included tuition and fees (total) ad allowances applied to tuition and fees.

This formula is based off of the scholarship allowance understanding of tuition discounting defined by Allan (1999). In his evaluation of three different outlooks, Allan (1999) defined scholarship allowance as institutionally funded financial aid that includes a waiver of tuition plus gifts and endowments. Allan's understanding combined funded and unfunded institutional grants and scholarships. The scholarship allowance is the definition used by the NACUBO Tuition Discounting study, an annual tuition discounting study. Many of the variables used in the formula are based on Martin's (2012) study. While Martin controlled for both unfunded and funded institutional grants, the current study combined both types of discounts due to the impact of any grants on students. Whether the student receives unfunded or funded institutional grants, both have equivalent and direct impact on the student paying tuition.

The calculation for gross tuition and fees employed is based off the calculation used by Martin (2012) and the definitions in IPEDS. In his study on tuition discounting, Martin defined the calculation of gross tuition and fees as the sum of total tuition and fees and allowances applied to tuition and fees. Furthermore, IPEDS defines total tuition and fees as "[t]he amount of tuition and educational fees, net of any allowances applied in the general purpose financial statements" (National Center for Education Statistics, n.d.). Based off this definition, allowances applied must be added in order to properly calculate the correct gross tuition and mandatory fees.

Data Analysis

The first step in the data analysis was to compile the descriptive statistics, including distribution, central tendency, and dispersion. The researcher used the descriptive statistics to define possible patterns or relationships formed in the data. Creswell (2015) explained, "Descriptive statistics will help you summarize the overall trends or tendencies in your data, provide an understanding of how varied your scores might be, and provide insight into where one scores stands in comparison with others" (p. 181).

Next, the researcher analyzed the data using a correlational explanatory approach. Creswell (2015) defined correlational research design as a use of "a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently" (p. 339). Using a scatter plot, the researcher sought to find the linear relationship among the variables. Pearson's correlation was then used to analyze the data. This form of data analysis was used to test the research hypothesis. Finally, *r* squared was calculated to "express the magnitude of association between the two variables" (Creswell, 2012, p. 348).

After the first analysis was conducted, the researcher decided to do an exploratory analysis observing the impact a college's or university's published tuition price had on the relationship of the presented variables: student loan debt and tuition discounting. Using the variable in IPEDS of published out-of-state tuition and fees—excluding room and board costs—institutions were separated into quartiles based on most expensive and least expensive. This variable was chosen between the options of in- or out-of-state, due to the pricing structures of private institutions, of which all CCCU institutions fall into that category. Only first-time, full-time undergraduates were included, which differs from the emphasis on all undergraduates used for the previous correlation.

Using percentile scores, the institutions were then separated into quartiles. Institutions in the 25th and 75th percentile were analyzed for any possible relationship in the same way as the main data set. Once the percentiles were defined, the researcher utilized Pearson's correlation to test for any relationship between tuition discounting and student indebtedness while also controlling for the least and most expensive institutions within the CCCU.

Chapter 4

Results

Introduction

Again, the purpose of this research was to answer the question: What is the relationship, if any, between tuition discounting and student loan debt at faith-based institutions? Null and alternative hypotheses were used to guide the research and answer the proposed question. Using both a guiding question and hypotheses, the relationship between tuition discounting and student debt at CCCU institutions was explored.

Descriptive Statistics

As stated in the previous chapter, descriptive statistics helped to define the data set for particular variables. Without regard to change over time, the mean of the first variable—federal student loan amounts, in U.S. dollars, awarded at 131 CCCU institutions for undergraduate studies from 2008-2016—was M= 7576.51 (SD = 853.04). Similarly, the overall mean for the second variable—tuition discount rate over the same period of time—was M= 0.33 (SD= 0.1), with Min= 0 and Max = 0.75.

In this case, Figures 1 and 2 show the means of both average tuition discount rate and average amount of federal student loans for all included CCCU institutions over the course of eight years. The line graphs presented (Figure 1 and 2) show a steady increase in both variables over time. That change over time serves as a clearer representation of the full set of data for the 131 institutions used in the analysis.

Change over Time in Variables

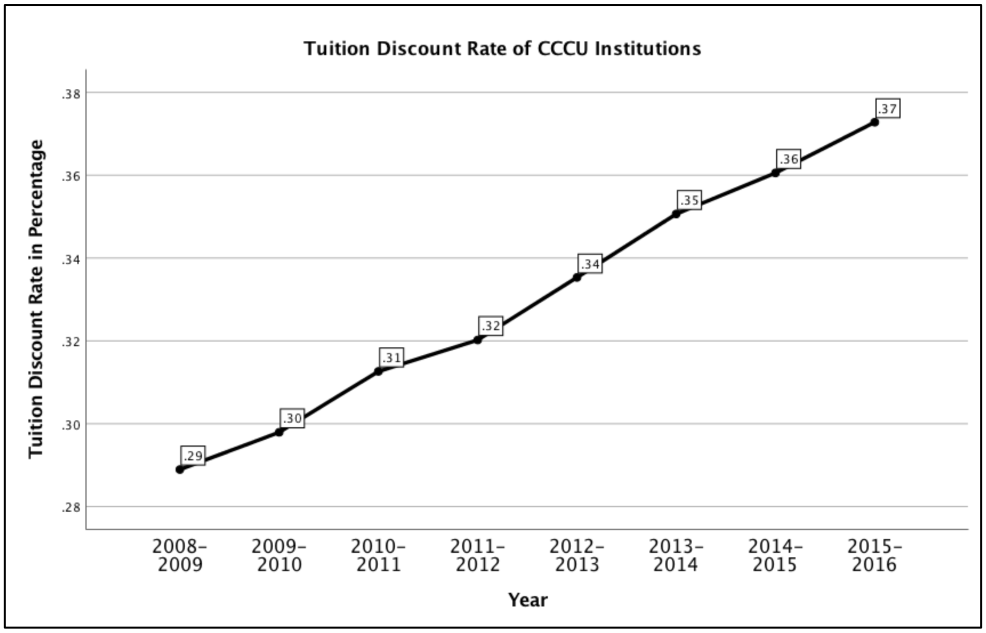

Figure 1. Tuition discount rate of CCCU institutions.

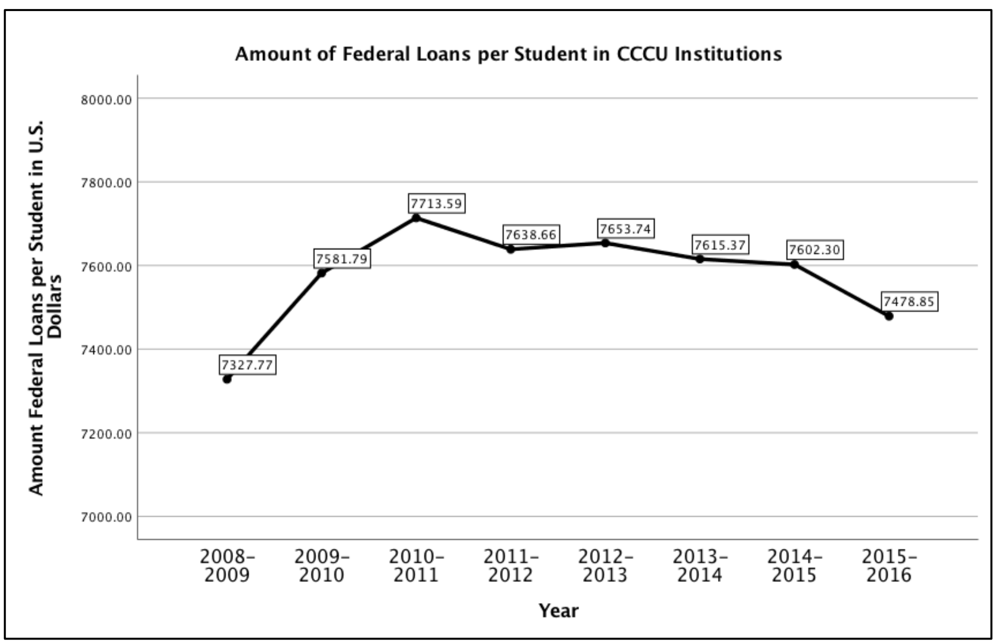

Figure 2. Amount of federal loans per student in CCCU institutions

Strength of Linear Relationship Correlation

Figure 3 is the scatter plot for tuition discounting and indebtedness. The plotted data reveals a slight negative linear relationship between the variables. The Pearson correlation coefficient indicated a significant relationship between tuition discount rates and student indebtedness at CCCU institutions, r (129) = -.241, p = .005, and r^2 = .058. Based on Creswell (2012), r indicates the direction of the relationship. In this instance, the negative sign indicated an inverse relationship between the variables. The correlation is weak, falling between the .20 to .35 range (Creswell, 2012).

Finally, the p value represents the significance found in the relationship between the two variables. Since the p value for this data analysis is less than the level of significance at .05, a significant relationship can be concluded. Furthermore, this significant relationship allows for the rejection of the null hypothesis and acceptance of the alternative.

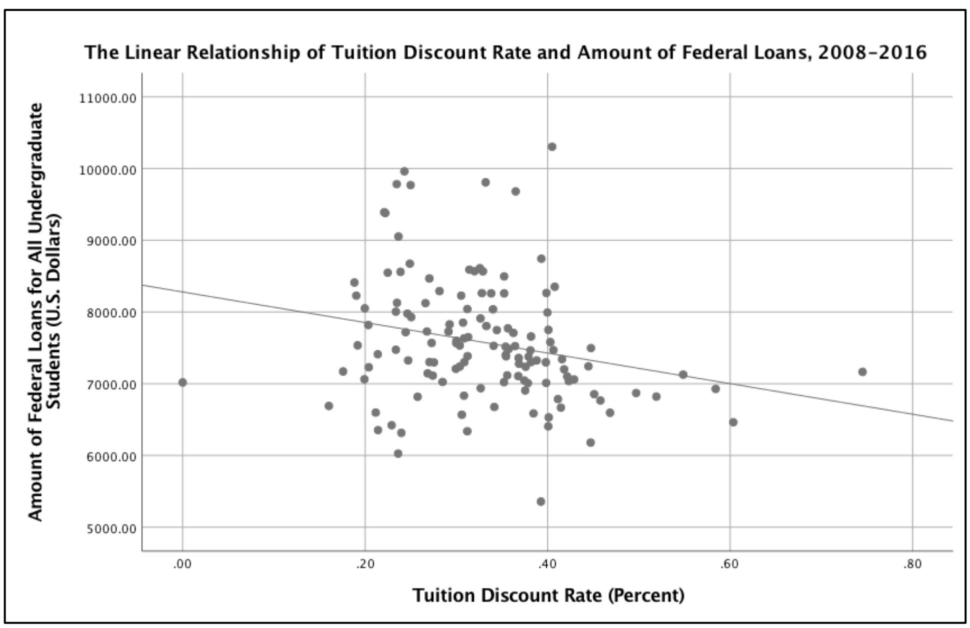

Figure 3. The linear relationship of tuition discount rate and amount of federal loans, 2008-2016

Impact of College Published Tuition Price

Defined by Rine (2016) and Baum and Ma (2010), the "sticker price" of a college or university is the published, advertised cost of attendance before any possible aid is deducted. Sticker shock, addressed by both Parrott (2008) and Breneman (1994), is the initial reaction of prospective students and their families to the published price. For some students, institutional grants and scholarships provided in the form of tuition discounts allow them to attend colleges and universities to which they may not otherwise have financial access.

Correlation based on published tuition price. Based on knowledge from previous research and the findings from the current study, controlling for the impact of college price on the relationship between tuition discounting and student debt proved logical. The purpose for this exploration was to help better understand the results. The data set was defined into quartiles, and both the 25th and 75th percentile were analyzed. The maximum threshold for the 25th percentile was $18,421.50, while the minimum within the 75th percentile was $25,179.00

Within the 25th percentile, 33 institutions fall below $18,421.50. The lowest published tuition price within the dataset is $10,108.75. The 75th percentile rank is made up of 33 institutions that are $25,179 or above. The highest tuition price within the data set is $42,145. Within the 25th percentile, a correlation between tuition discounting and student debt yields r (31) = -0.053, r^2= 0.003, indicating a very weak, if any, inverse relationship. Moreover, because p = 0.796 is greater than the .05 level of significance, the relationship is not statistically significant. Furthermore, within the 75th percentile, the correlation calculation yields r (31)= -0.370, r^2 = 0.137 with a p value of .034, indicating a statistically significant relationship. Considering the *r* squared value for the 75th percentile, tuition discounting explains nearly 14% of the variability in students' indebtedness.

Consequently, considering the role of the institutional prices, the results of further statistical analysis indicate a weak, negative correlation within the 75th percentile and no significant relationship in the 25th percentile. Findings from both exploratory analyses reveal that, as published price of an institution increases, the inverse correlation between average tuition discount rate and amount of indebtedness becomes stronger. Looking at Figure 4 and Figure 5 allows for a clear comparison of the linear relationships between student loan debt amounts and tuition discount rates within both percentiles.

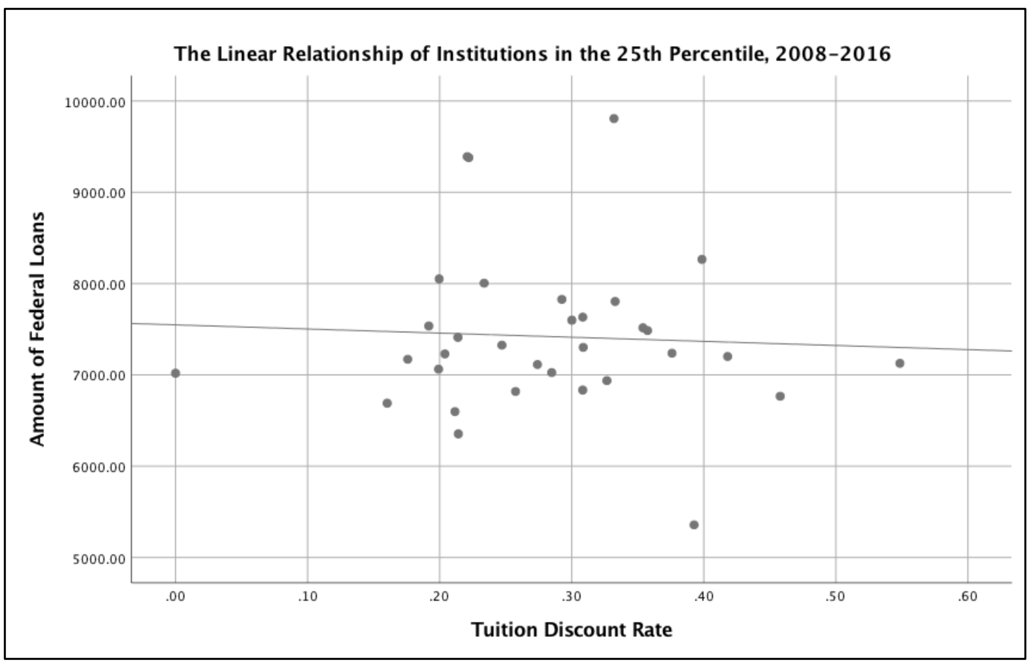

Figure 4. The linear relationship of institutions in the 25th percentile, 2008-2016.

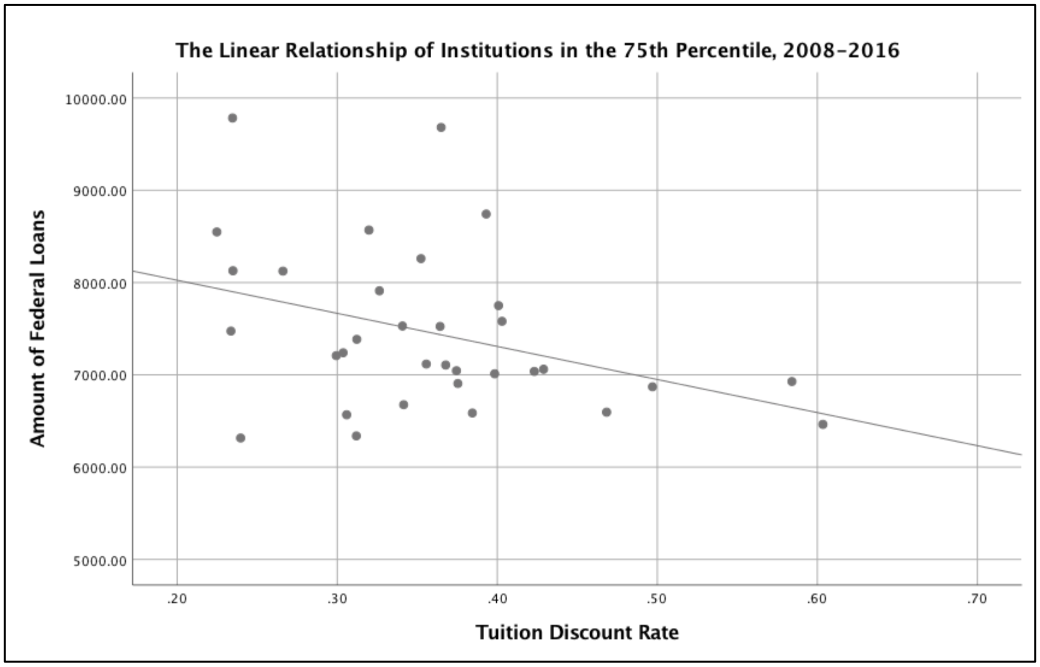

Figure 5. The linear relationship of institutions in the 75th percentile, 2008-2016.

In conclusion, the results of the study show a weak negative but significant relationship between tuition discounting and student loan debt. Further exploration then points to the possibility that, as an institution's published tuition price increases, the relationship between tuition discounting and student debt increases in strength. These findings and interpretations as they relate to the field of higher education and how they contribute to the growing body of knowledge focused on tuition discounting are discussed in greater detail in the next chapter.

Chapter 5

Discussion

The results reported in the previous chapter support the hypothesis that the average amount of Title IV student loan debt is significantly related to tuition discount rates at CCCU institutions. While the correlation is weak, the current study demonstrates a significant relationship between student loan debt and tuition discounting exists. The relationship between these two variables is also negative, indicating as tuition discount rates increase, student loan debt decreases.

An additional means of analysis exploring the impact of published tuition price revealed that the published tuition price affects the relationship between tuition discounting and student loan debt. As published tuition and fees rise, the significance in relationship also rises. This study's findings add insights into existing research on tuition discounting. Given the results, the study provides information that can be used for decision-making by senior-level administrators as tuition discounting directly impacts students' financial abilities to attend their higher education institutions. Further research could offer even more insights into the relationship between the two variables.

According to Breneman (1994) and Allan (1999), institutional grants and scholarships often were the final source of aid provided to students when such practices began in the 1980s. Funds from the university were primarily used to entice middle-class students to attend (Allan, 1999). However, these funds recently have been used to attract a diverse sample of prospective students. Based on the descriptive statistics, the average discount rate found among 131 CCCU institutions is 33%, explaining the reliance institutions currently place on the practice of tuition discounting in the recruitment of students. The current study, along with studies conducted annually by College Board and NACUBO (2016), show the increased reliance on tuition discounting practices.

According to Hurwitz (2012b), students from low-income households are more likely to attend a college or university with an increase of $1,000 in institutional aid. Lowering the amount of debt by providing more institutional aid is a useful strategy for the recruitment for prospective students with family incomes of less than $50,000 (Hurwitz, 2012b). Institutions with higher discount rates will most likely be able to provide larger amounts of institutional aid to prospective students. Results from the current study show how increased tuition discounting can relieve the debt burden of students from lower family incomes. Relieving the burden of debt increases students' wellbeing, allowing them more freedom to participate in campus activities and, in turn, decreasing their likelihood to drop out of college (Hornak et al., 2010; Robb et al., 2012).

The use of tuition discounting also impacts the debt attitudes outlined by Zerquera and colleagues (2016). If higher tuition discount rates lead to decreased amounts of student debt, attitudes toward the accumulation of debt can be significantly impacted. Often the student's family aids and impacts a student's decision to take on student debt (Avery & Turner, 2012). Decreased loan amounts due to tuition discounting could impact students who fall into the category of averters, or students and families who avoid taking on any type of student loan debt. As the average amount of student loan debt decreases and institutional aid increases, students may view the benefits of institutional aid more positively, becoming increasingly willing to acquire additional loans. Families of these students could also feel less burdened when their student is provided a non-repayable form of aid.

Robb and colleagues (2012) explored the impact debt amounts have on a student's persistence to graduation. In particular, students accruing debt between $10,000 and $30,000 are more likely to forgo credit hours; also, as a student's debt increased, their likelihood of dropping out increases as well (Rob et al., 2012). Students with loan amounts above $30,000 do not have differing behaviors from students with no debt. One drawback to the finding of the current study is the impact on a student's persistence to graduation. While it is beneficial for students to have lower debt amounts, those who fall into the $10,000 to $30,000 range of indebtedness face the lowest probability of persistence to graduation. If increases in tuition discounting lower a student's debt amount into this range, that student's risk of dropping out also increases.

The current study also emphasized the benefits of tuition discounting for recruitment. As noted by Browning (2013), unstable and stable institutions rely on the practice of tuition discounting, both using the practice to recruit students. Parrott (2008) highlighted the positive outcomes of tuition discounting, including the benefits of recruitment and retaining students. The relationship found between tuition discount rates and student loan debt is an example of these benefits to students. Prospective students view institutional aid positively and are more likely to attend an institution providing more aid as their family income levels decrease. Despite the benefits provided to a student, the financial position of an institution providing this type of aid needs to be examined.

While the current study relied on an understanding of tuition discounting in terms of scholarship allowance (Allan, 1999), recalling the two types of discounting this understanding combines proves important. Scholarship allowance accounts for both unfunded and funded institutional grants and scholarships. Unfunded grants and scholarships are given to students through generated tuition revenue, that is, no specific budget or funds are dedicated to providing this aid (Hillman, 2012; Rine, 2016). While institutions determine their own practices in terms of tuition discounting (Parrott, 2008), maximizing the benefits to the student ought to be a priority. The results of the current study, along with the current body of literature, suggest ways institutions using tuition discounting can affect the financial aid situation of a student.

Implications for Practice

The current study highlights one of the major benefits of institutional aid provided to students. Altogether, as tuition discounting increases, the amount of loans a student acquires decreases. This finding implies tuition discounting should be increased in order to create more debt relief and access to students. While drawing such a conclusion is fair, institutions need to consider ways they discount tuition. Senior-level administrators need to find a balance between providing beneficial institutional aid to prospective and current students while also protecting the financial stability of their institutions.

Institutions can find this balance of benefit and security by using primarily funded tuition discounts. As Martin (2012) noted, utilizing funded tuition discounts comes with no risk to the university. Rather than relying on unfunded tuition discounts, institutions should consider providing beneficial aid opportunities for students without unintended risks to the institution. Utilizing funded tuition discounts requires an institution to primarily rely on donations or endowment earnings for institutional aid (Browning, 2013). Increasing alumni donations to endowed scholarships is a beneficial way of increasing the amount of funded discounts available. Reaching out to successful alumni who are many years beyond graduation could yield the creation of more endowed scholarships. Targeting alumni to provide endowed scholarships will require a mature development office and the persistent work of gathering large institutional gifts. Such a course of action could move an institution away from using its tuition revenue to provide financial aid for students.

Areas of concern for both students and the institution must be taken into consideration in decision-making. Browning (2013) found that both financially stable and unstable institutions use tuition discounting. In particular, Browning validated the relationship between tuition discounting and financial position. As tuition discount rates increase, the financial position of institutions already in crisis declines. While stable institutions rely on discounts for charitable purposes, unstable institutions jeopardize their financial positions through these practices (Browning, 2013). Browning (2013) concluded that, for both stable and unstable institutions, tuition discounting remains appealing because of its usefulness as a recruitment tactic. The results from Browning's research, combined with the results found in the current study, imply practitioners working in areas of financial aid or budgeting need to have a heightened awareness of the institutions financial position along with the financial benefits tuition discount provides to students.

Along with examining the financial position of institutions, practitioners can work to increase the financial literacy of students receiving institutional aid. As seen through a study conducted by Simpson and colleagues (2012), many students are often unaware of the financial aid they are using to attend their institutions. The different ramifications of taking out repayable versus non-repayable financial aid can greatly impact a student's wellbeing (Hornak et al., 2010; Robb et al., 2012). As Simpson and colleagues emphasized lack of financial literacy, the relationship found in the current study emphasizes the importance of financial literacy of students. Results show that providing institutional grants and scholarships, especially in the most expensive universities, greatly decreases the amount of student loans a student requests.

From these findings, institutions need to make students aware of the institutional grants and scholarships available upon applying. The Higher Education Opportunity Act of 2008 Section 111 addresses transparency in college tuition price, introducing the concept of net price calculators. Later amended into the Higher Education Act Section 132(h) and emphasized in a 2013 *Dear Colleague Letter*, all institutions receiving Title IV funds must post a standard net price calculator on their respective websites. This calculator allows prospective students and their families to observe potential costs when considering particular institutions. Expanding upon the details required with net price calculators could greatly benefit students and families.

A switch to a reliance on funded tuition discounting allows institutions even greater abilities to advertise available scholarships rather than relying on tuition revenue to provide scholarships. Increased control over using funded institutional aid from endowment or donations funds allows practitioners to educate students on the benefits aid has in terms of overall indebtedness while attending. As both institutional aid and federal loans impact a student's wellbeing (Hornak et al., 2010; Robb et al., 2012; Simpson et al., 2012), institutional recognition of the debt relief their aid provides to students is critical. Institutions must thus understand their role and the control they have over the current state involving discounting and indebtedness of students.

Implications for Future Research

This research allows future studies to further clarify these results and expand on them in at least two ways. First, utilizing a qualitative component or overall method can greatly expand this research. Results of the study relied solely on quantitative data obtained through IPEDS reports. Expanding the study with a quantitative approach is then possible in at least a couple of ways. For example, future research investigating individual institutions' approaches toward tuition discounting and the effects of such approaches on students will greatly benefit practitioners. Also, future research could bring more depth and insight into the benefits and impacts of tuition discounting on student loan debt by conducting qualitative interviews with practitioners and students. Applying a mixed methods approach to research on related topics will bring more clarity and further depth of understanding.

Second, while the current study included an additional exploratory analysis of the relationship between tuition discounting and student debt impacted by institutional price, future studies could further explore other impacting factors. Such studies could utilize a similar protocol, while identifying the impact of other influential variables, such as average amount of institutional aid a student receives or the tuition discount rates themselves. For example, future research could examine the statistical relationship controlling for the increase in tuition discount rate. Due to the limited scope of the study, the researcher was only able to conduct an exploratory correlation for one factor. The relationship found in the study could be furthered when controlled for other factors, such as tuition discount rates themselves. The study could greatly benefit from exploratory correlations controlling for many other factors impacting student loan debt and tuition discount rate.

Limitations of the Study

Several limitations, however, also define the current study and include at least low *r* squared values and correlations, the scope of the study, and the institutional type of the sample. Future researchers should work to improve on these limitations as they pursue the topic further.

First, a major limitation is related to the strength of the correlation. Pearson's correlation measured the linear relationship between the variables. While the relationship of the variables exists, it is important to note the *r* values found in the analysis were low. A weak correlation coefficient allows the researcher to recognize the correlation but does not allow for making predictions based on the presented results.

A second limitation of the study is the type of institutions used in the sample population. The study primarily focused on faith-based institutions that are members of the CCCU. Not all institutions faith-based in mission are members of the CCCU, excluding institutions also a part of the faith-based sector. Considering the sample population, results are not representative of all institutions. The study was limited by the scope of institutions represented.

Next, the formula for calculating tuition discount rate is also a limitation of the study. Currently, no single, widely accepted formula for tuition discount rate exists. Many practitioners and researchers disagree on the formula used to find tuition discount rates. While the research brought together input from experts in the field as well as an understanding developed by Allan (1999), the way tuition discount rate was calculated impacts the transferability of the study. Future studies could potentially use a different calculation and understanding of the tuition discount rate formula.

Finally, the variable for published tuition prices utilized in the additional analysis was focused primarily on full-time, first-time undergraduate students. Using an IPEDS variable focused on the exclusion of undergraduates beyond their first-year was inconsistent with the other variables found within the study. Utilizing a variable for published tuition price for all undergraduates, if available, could potentially impact the results of the exploratory correlations.

Conclusion

The negative relationship found between tuition discounting and student loan debt at faith-based institutions provides senior-level decision-makers with crucial information on how tuition discounting practices impact students. Moving forward, tuition discounting should no longer be seen through a lens focusing primarily on the institution. Decisions regarding discounting practices should be viewed from the student perspective. As Bronfenbrenner notes in his ecological theory, students are impacted by exosystems, influencing but not including them (Evans et al., 2010). Senior-level leaders are responsible for caring and advocating for their students, and that process now begins even before admitted students choose to enroll. As tuition discounting expands, leaders must understand the benefits and drawbacks their decisions have on those for whose care they are responsible.

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Appendix A

Sample of CCCU Institutions Used in Study

Unit ID	Institution Name
222178	Abilene Christian University
150066	Anderson University- IN
217633	Anderson University- SC
105899	Arizona Christian University
156213	Asbury University
109785	Azusa Pacific University
223232	Baylor University
175421	Belhaven University
173142	Bethany Lutheran College
150145	Bethel College-Indiana
173160	Bethel University
110097	Biola University
231554	Bluefield College
215114	Cairn University-Langhorne
110361	California Baptist University
169080	Calvin College
198136	Campbell University
156365	Campbellsville University
219806	Carson-Newman University
154855	Central Christian College of Kansas
217688	Charleston Southern University
126669	Colorado Christian University
217925	Columbia International University
112075	Concordia University-Irvine
210331	Corban University
170037	Cornerstone University
139393	Covenant College
174862	Crown College
224226	Dallas Baptist University

153250	Dordt College
224527	East Texas Baptist University
165644	Eastern Nazarene College
212133	Eastern University
139630	Emmanuel College
217998	Erskine College
177339	Evangel University
101189	Faulkner University
205957	Franciscan University of Steubenville
114813	Fresno Pacific University
155089	Friends University
212656	Geneva College
208822	George Fox University
165936	Gordon College
150677	Grace College and Theological Seminary
145372	Greenville College
177542	Hannibal-LaGrange University
225247	Hardin-Simmons University
107044	Harding University
120537	Hope International University
191676	Houghton College
225399	Houston Baptist University
225548	Howard Payne University
150941	Huntington University
151801	Indiana Wesleyan University- Marion
107141	John Brown University
220473	Johnson University
101541	Judson College
146339	Judson University
157100	Kentucky Christian University
220516	King University
171881	Kuyper College
220613	Lee University
226231	LeTourneau University
117104	Life Pacific College
146667	Lincoln Christian University
219976	Lipscomb University
159568	Louisiana College

203775	Malone University
213996	Messiah College
199458	Mid-Atlantic Christian University
155520	MidAmerica Nazarene University
176053	Mississippi College
178244	Missouri Baptist University
199032	Montreat College
204194	Mount Vernon Nazarene University
209287	Multnomah University
174437	North Central University
218441	North Greenville University
147679	North Park University
209409	Northwest Christian University
142461	Northwest Nazarene University
236133	Northwest University
154101	Northwestern College
194161	Nyack College
201964	Ohio Christian University
207403	Oklahoma Baptist University
207324	Oklahoma Christian University
147828	Olivet Nazarene University
207582	Oral Roberts University
136330	Palm Beach Atlantic University
121150	Pepperdine University
121309	Point Loma Nazarene University
138868	Point University
231651	Regent University
194958	Roberts Wesleyan College
102049	Samford University
112084	San Diego Christian College
236577	Seattle Pacific University
123457	Simpson University
137564	Southeastern University
206862	Southern Nazarene University
217776	Southern Wesleyan University
179326	Southwest Baptist University
228325	Southwestern Assemblies of God University
207856	Southwestern Christian University

172334	Spring Arbor University
155937	Sterling College
155973	Tabor College
152530	Taylor University
454184	The King’s College
141185	Toccoa Falls College
221892	Trevecca Nazarene University
149505	Trinity Christian College
149514	Trinity International University
226471	University of Mary Hardin-Baylor
101693	University of Mobile
174491	University of Northwestern-St Paul
219383	University of Sioux Falls
188182	University of the Southwest
216542	University of Valley Forge
123651	Vanguard University of Southern California
236896	Walla Walla University
210304	Warner Pacific College
138275	Warner University
125727	Westmont College
149781	Wheaton College
237066	Whitworth University
122728	William Jessup University
107877	Williams Baptist College
240338	Wisconsin Lutheran College
181853	York College

Appendix B

Institutions Excluded from the Study

Unit ID	Institution Name
156222	Asbury Theological Seminary
178697	College of the Ozarks
224305	Dallas Theological Seminary
114840	Fuller Theological Seminary
165945	Gordon-Conwell Theological Seminary
N/A	Kilns College
486901	Milligan College
147369	Moody Bible Institute
440396	New Saint Andrews College
455770	Providence Christian College