2020

The Relationship Between Organizational Culture and Profitability of Small, Nonprofit, Private, Higher Education Institutions in Georgia

Walter V. Murray
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Walter V. Murray

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Tanya Brinkley, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Paul Rutledge, Committee Member,
Public Policy and Administration Faculty

Dr. Tanya Settles, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

The Relationship Between Organizational Culture and Profitability of Small, Nonprofit, Private, Higher Education Institutions in Georgia

by

Walter V. Murray

MA, Walden University, 2013

BS, Andrews University, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy & Administration

Walden University

March 2020

Abstract

Small, nonprofit, private, higher education institutions (SNPHEIs) are facing economic challenges that threaten their existence. This threat represents a public policy problem because 28% of all higher education in America is delivered by SNPHEIs. The purpose of this study was to investigate any correlational relationships that may exist between the organizational culture (OC) in SNPHEIs and their financial sustainability. Based on the competing values framework, a causal relationship between OC and organizational profitability within the SNPHEI was posited. In this study, both descriptive and comparative research questions were used; they focused on the OC types identified in the competing values framework and the financial sustainability of SNPHEIs as measured by profitability. A quantitative method with correlational ex post facto design and a census approach for data collection were used. OC data were collected using a survey and profitability data were collected from archival sources. Statistical analysis tools were used to analyze the data on 23 SNPHEIs in Georgia. Results indicated no statistical significance between the variables. While there was more of a relationship between the *clan* OC and profitability than between the *market* OC and profitability, the lack of significance indicated that the dominant OC may not provide a sufficient predictor of profitability. Implications for social change include providing SNPHEIs and policymakers with information about which factors, specifically OC, do not impact the profitability of SNPHEIs. With this information, SNPHEIs and policymakers can allocate time and resources to explore variables other than OC that drive financial sustainability in SNPHEIs.

The Relationship Between Organizational Culture and Profitability of Small, Nonprofit, Private, Higher Education Institutions in Georgia

by

Walter V. Murray

MA, Walden University, 2013

BS, Andrews University, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy & Administration

Walden University

March 2020

Dedication

I dedicate my dissertation to my wife, who has been my support system and motivator during this process. I also dedicate this to my three children who provide me with the inspiration needed to persist in this long and taxing process.

Acknowledgments

I acknowledge the support of Dr. Desmond Murray, my older brother, and Dr. Yvonne Larrier, my “little” sister. They both completed their doctoral studies years ago and their achievements were an inspiration to me. I appreciate their encouragement in those moments when the pursuit of my Ph.D. seemed like an unattainable goal.

I acknowledge my committee and chair at Walden University for their patience and academic guidance throughout this process.

Finally, I acknowledge my wife Rosemarie, who was my support and my cheerleader throughout this process.

Table of Contents

List of Tables vi

List of Figures vii

Chapter 1: Introduction to the Study 1

Higher Education and Public Policy 4

SNPHEI and Organization Culture 6

Background 8

Problem Statement 10

The Relationship of SNPHEIs to Public Policy 12

Framing the Problem to Build on Existing Research 13

Meaningful Gap in Literature 14

Purpose of the Study 14

Research Questions and Hypotheses 16

Research Questions 16

Research Hypotheses 16

Theoretical Foundation 17

Nature of the Study 18

Brief Summary of Method 19

Definitions 20

Assumptions 20

Scope and Delimitations 21

Limitations 22

Significance 23

Summary 24
Chapter 2: Literature Review 27
Introduction 27
Problem and Purpose of the Study 27
Synopsis of Current Literature to Establish the Relevance of the Problem 27
Preview of the Literature Review 29
Literature Search Strategy 30
Theoretical Foundation 32
Origin and Major Theoretical Propositions of the CVF Theory 32
Rationale for Choice of CVF Theory 35
Previous Applications of CVF Theory 35
Relating the CVF Theory to this Study 36
Literature Review Related to Key Variables 37
Key Constructs of Interest, Variables and Research Questions 37
Rationale for Selecting the Variables 38
Organizational Culture as a Solution to SNPHEI's Challenges 41
Relationship of Organizational Culture Relationship to Organizational Profitability and Economic Sustainability 42
Organizational Culture and Change in Higher Education 44
Readiness and Responsiveness to Organizational Culture in HEI 47
Resistance to Change in Academic Institutions 49
Financial Organizational Change in Higher Education vs. Organizational Culture 50

Defining “Small” Nonprofit Private Higher Education Institution..... 51
Public Policy Implications 52
Social Implications..... 56
Business Models and Organizational Cultures in SNPHEIs..... 59
Economic Conditions Currently Existing in the Sector..... 60
Repercussions of an Economic Decline of SNPHEI Subsector..... 66
Mitigating the Impact from the Decline of SNPHEIs..... 69
Underlying Contributing Factors to the Economic Decline of SNPHEI Subsector..... 71

Summary and Conclusions of Literature Review 81
Chapter 3: Research Method..... 85
Research Design and Rationale 85
Methods..... 89
Study Population..... 89
Sample and Sampling Procedures..... 89
Recruitment, Participation, and Data Collection 90
Informed Consent..... 90
Data Collection Procedures..... 92
Instrumentation and Operationalization of Constructs 94
Instrumentation 94
Instrumentation Reliability and Validity 96
Data Analysis Plan..... 98

Threats to Validity of the Study 100
Ethical Procedures 104
Summary 105
Chapter 4: Results and Findings 106
Introduction 106
Data Collection 107
Discrepancies in Data Collection 108
Baseline Descriptive and Demographic Characteristics of the Sample 109
Results 110
Statistical Assumptions 115
Common Assumptions 116
Linearity assumptions of the regression model 118
Linear Regression Results 118
Independent Sample *t* test Assumptions 120
Statistical Findings 122
Summary 123
Chapter 5: Discussion, Conclusions, and Recommendations 127
Introduction 127
Purpose 127
Key Findings 127
Interpretation of Findings 127
Theoretical Framework 129
Limitations of the Study 131

Recommendations 132

Implications 132

Conclusion 133

References 135

Appendix A: OCAI Instrument 161

Appendix B: Permission to use OCAI 163

List of Tables

Table 1. Data Collection Example 98

Table 2. Descriptive Statistics–Independent Variable–Dominant OC 110

Table 3. Nondominant Independent Variables: OC2 111

Table 4. Nondominant Independent Variables: OC3 112

Table 5. Nondominant Independent Variables: OC4 112

Table 6. Statistics 113

Table 7. Frequency Statistics of OC 1155

Table 8. Descriptive Statistics 1188

Table 9. Correlation 118

Table 10. Model Summary 119

Table 11. ANOVA 119

Table 12. Coefficients 1199

Table 13. Normality Test after the Transformation 1211

Table 14. Levene's Test Results 122

Table 15. Independent Sample *t* test 123

Table 16. Findings by SNPHEI/School 125

List of Figures

Figure 1. The four CVF quadrants. 33

Figure 2. Dominant organizational cultures..... 110

Figure 3. Box plot of percent profitability for the sample used. 114

Figure 4. Normal Q-Q plot of annual profitability percent after the removal of missing values. 121

Chapter 1: Introduction to the Study

In this study, I focused on the relationship between organizational culture (OC) in small, nonprofit, private, higher education institutions (SNPHEI) and the financial sustainability of those institutions. I used annual profitability percentages and, in some cases, annual profit stated in dollars, as a measure of a SNPHEI's financial sustainability. The SNPHEI industry subsector is made up of colleges and universities that enroll fewer than 5,000 students (CollegeData, 2013). This study was needed because if the SNPHEI subsector succumbs to economic pressures, it will leave a significant void in American higher education and have major public policy ramifications.

In this chapter, I outline the problem explored in the study and discuss the gap in the literature. I also lay out the purpose of the study and the relevant research questions and hypotheses. Next, I discuss the theoretical foundation, the competing values framework (CVF), which was developed by Quinn and Rohrbaugh (1981) and further developed by Cameron (1986) and Cameron and Quinn (2011). I then discuss the nature of the study and the research methodology. Finally, I review the study's definitions, assumptions, scope and delimitations, and limitations.

SNPHEIs are a significant subsector in higher education. Data from the National Center for Education Statistics (NCES, 2015a) indicated that there were 7,181 higher education institutions (HEI) in the United States with 1,736 having enrollments under 5,000, thus qualifying them as small. These data included both accredited and nonaccredited HEIs.

The SNPHEI subsector plays a significant role in the social and economic strength of the United States. (Woodhouse, 2015a). Recent economic pressures have

threatened, and continue to threaten, the economic sustainability of the higher education industry as a whole and of SNPHEIs in particular (Schwarz, 2013). If there was an economic decline in the SNPHEI subsector, it would leave a significant void in American higher education and have major public policy ramifications (Schwarz, 2013). Woodhouse (2015a) projected that by 2017 the rate of SNPHEIs closure would increase by 300%. I did not find any current data to confirm whether this prediction had came to pass. However, Gephardt (2015) supported Woodhouse's research, reporting that the 10-year annual average of small college closings from 2004 to 2014 was five per year.

By contrast, the closure rate for public HEIs is significantly lower. Selingo (2013) noted that while mass college closings are not imminent, the majority of college closings are small private institutions. This lower rate of closures among public HEIs is caused, in part, by the political challenges associated with closing publicly funded entities make them less likely to be closed (Woodhouse, 2015a).

In 2015, small nonprofit colleges and universities enrolled 28% of all students who pursued postsecondary education in an institution of higher education (NCES, 2016). Other researchers, such as Chingos (2017) of the Brookings Institute, validated the significance of the nonprofit higher education sector, indicating that these institutions enroll 3.4 million students per year which represents 30% of all enrollments in 4-year colleges. Chingos refers to 30% as "a substantial share." Not only do enrollment numbers show the significance of SNPHEIs in higher education, but the number of institutions also bears out the importance of SNPHEIs. Of the 7,181 HEIs reported on NCES (2016), 1,736 (24%) are nonprofit, with enrollments under 5,000, thus meeting the definition of an SNPHEI. In addition to significance based on the percentage of enrollments and

percentage of institutions, SNPHEIs are important for other key reasons, for example, SNPEHIs fill the need for consumers who prefer some of the characteristics of SNPHEIs, such as small size, minority focus, religious affiliation, or gender-specific education.

Data from NCES (2016) showed how SNPHEIs fill the needs in these three niches. For example, of the 1,736 SNPHEIs in the United States, 844 of them (49%) had a religious affiliation. Additionally, 50 of the 51 Historically Black Colleges and Universities (HBCUs) that were reported in the NCES (2016) data are considered SNPHEIs based on enrollment size. Of the 43 gender-based women's colleges listed on the Women's College Coalition website, all have enrollments under 5,000. The institutions of higher learning in these three niches experience certain underlying financial conditions that make them more susceptible to economic stagnation and potential closure. Schwarz (2013) posited two such critical underlying factors: rising tuition costs and declining enrollment. Schwarz also posited that small nonprofit colleges and universities were even more at risk of closure because of their tuition funding dependency and their lack of robust endowment funds. A confluence of economic conditions, such as declining enrollments and strong competition from online colleges, puts severe economic pressure on the private higher education industry sector as a whole, and in particular, on the SNPHEI subsector (Schwarz, 2013).

Economic pressure on SNPHEIs have debilitating consequences that threaten their economic existence. As a result of this economic threat, the ability of SNPHEIs to meet the specialized education needs of millions of students enrolled in gender-specific, minority-based or religion-affiliated SNPHEIs, is jeopardized. One direct consequence of this economic pressure was the 2012 downgrading of several small nonprofit colleges by

both Standard and Poor's and Moody's Investors Service (McClean, 2014). Both of these agencies report on the bond ratings of a corporation, which is a measure of a company's financial strength. Both agencies downgraded the entire higher education sector to a negative outlook rating and downgraded several colleges and universities from an A1 to an A3 bond rating (Selingo, 2013). A downgrade may occur if the institution has demonstrated financial weakness. According to Denneen and Dretler (2012), this downgrade implies that the institution is financially unsustainable and at great risk of going out of business.

Higher Education and Public Policy

The connection between public policy and higher education is well established. Wegner (2008) discussed this connection going as far back as 1862. Wegner argued that The Morrill Act of 1862, the 1944 GI Bill, and the Title IX Education Amendments of the 1970s were all examples of the interconnection between public policy and higher education. Zusman (2011) pointed out that higher education is the largest budget discretionary line item in most state budgets. The tightly knitted and historical bond between higher education and public policy, coupled with the recent economic threats to the higher education industry, has propelled higher education to a foremost place in the public policy arena.

In a report completed by researchers at the American Association of State Colleges and Universities, I found additional evidence of the interconnection between public policy and higher education. American Association of State Colleges and Universities (2005) researchers suggested that "elected officials, educators and the public" should place greater emphasis on higher education as a public policy priority. The

economic threat to SNPHEI is a critical public policy and social issue, and the survival and continued economic viability of the small nonprofit college and university has become a matter of investigative study and expert analysis.

One critical connection between higher education and public policy is by federal and state governmental funding. Although both federal and state governments provide funding for HEIs, the funding policy objectives of federal government differ from that of the states. While federal funding policymakers focus on direct assistance to students and research, state policymakers focus their policies on funding the general operations of public HEIs (The Pew Charitable Trusts, 2015). Thus, the funding of HEIs, specifically for state institutions, represents another intersect between public policy and higher education.

The federal government also supports higher education through tax policy. In 2014, the federal government provided $31 billion in tax credits, deductions, exemptions, and exclusions to help higher education enrollees offset tuition costs. These tax credits, deductions, and exemptions are considered indirect support to the HEIs. State governments also use tax policy to indirectly fund higher education in the same way as the federal government (The Pew Charitable Trusts, 2017). In addition, the tax code provides tax exemption for nonprofit HEIs and this tax exemption places these nonprofit HEIs in the realm of public policy and more specifically, in the realm of tax policy. There is a significant disparity between federal funding for HEIs, including funding through tax policies, when compared to funding received from state sources, including state tax policy.

The level of public funding for HEIs is currently higher from federal sources than from state sources. According to data from U.S. Department of Education's NCES (2015b), federal revenue to HEIs rose to just over $5,000 per full-time equivalent (FTE) student, while state revenue to HEIs fell to just over $4,000 per FTE student. Notwithstanding this disparity, both federal and state funding continue to be an essential intersection between public policy and higher education.

Even though HEI funding represents only about 2% of the total federal budget, higher education is nonetheless a top priority in federal policy as several federal government departments directly impact HEIs in America. Some of these federal departments include the U.S. Department of Education, which allocates about half of its budget to HEIs. Other departments include the U.S. Departments of Veterans Affairs and Health and Human Services, and the National Science Foundation, all three of which allocate significant percentages of their budgets to funding HEIs. At the state level, HEI funding represented the third-largest area of spending in 2013behind K-12 education and Medicaid (The Pew Charitable Trusts, 2015).

SNPHEI and Organization Culture

In this dissertation, I studied the impact of the OC within small colleges and universities on the economic viability of the institution. Scholarly work done by researchers such as Cameron and Quinn (2011) showed a link between OC and organizational profitability. Based on the work by Cameron and Quinn and other researchers, one can make a reasonable extrapolation that OC in SNPHEI organizations will have some impact on their organizational profitability and economic success. The OC within any organization directly impacts the effectiveness and ultimately the

economic success of that organization (Cameron & Quinn, 2011; Ouchi & Wilkins, 1985). More specifically, OC plays a major role in the effectiveness of educational institutions (Efeoglu & Ulum, 2017). At a time when SNPHEIs are facing severe economic threats, a study and analysis of the relationship between their OC and economic survival can have public policy benefit, both for the institutions and for society at large.

Researchers and scholars have proffered several definitions for the term organizational culture. For example,Schein, 2010 defined OC as a pattern of shared basic assumptions within an organization that is promulgated by the organization as the correct way within that organization to make operational decisions and to solve organizational challenges (p. 19). Lim (1995) defined OC as a set of shared beliefs and assumptions that drive organizational decisions and operations. Both definitions show that OC is a strong influence on the decision-making process within an organization. As SNPHEIs face economic challenges, the efficacy of their decisions will impact their economic survivability.

With the backdrop of the economic challenges facing small colleges and universities, and the repercussions on American society and public policy, the purpose of this study was to understand the relationship between the OC and the operations within a SNPHEI. I will look at how the operations of the SNPHEI, as driven by its OC, impact the ability of the SNPHEI to survive the prevailing economic pressures and thus allow the SNPHEI to continue playing a crucial role in America's higher education.

A positive social change implication of this study is that SNPHEIs will improve the management of their OC to foster more sustainable profitability, thus securing the future of the SNPHEI subsector.

Background

In this research I looked at literature in the fields of higher education, economics and industry characteristics. The foundation for this study was literature focusing on public policy and the social implication and the historical context of SNPHEI. In this study I explored the impact of the economic problems that threaten the SNPHEI subsector. As part of this I also looked at the impact on small private for-profit HEIs, the large HEI sector, and the public HEI sector. In the literature review I discuss the relationship of OC to the economic sustainability of the SNPHEI.

Several economists have corroborated the threat to the economic survival of small nonprofit colleges and universities. Schwarz (2013), writing in Moody's Investors Service, made the case that SNPHEI are in dire need of new revenue models if they are to survive economically. Additionally, the declining economic sustainability of the SNPHEI was reflected by the downgrade of their bond ratings by Moody's Investors Service and the Standard & Poor's Ratings Service. The declining financial strength of these small colleges is a result of declining revenues, major operating deficits, and anemic cash flows (Schwarz, 2013). However, this economic challenge is not unique to SNPHEIs, but extends to the entire higher education sector. In January 2013, both Moody's and Standard & Poor's downgraded the entire higher education industry sector to a negative outlook and simultaneously downgraded 13colleges and universities to a negative bond rating. Some of these larger colleges have the financial reserves and endowments to withstand the economic challenge. By contrast, smaller nonprofit colleges and universities generally lack the endowment or financial reserves to mitigate the impact of declining revenues and enrollments and the resultant operating deficits. Schwarz stated

that small nonprofit colleges and universities face a bleak economic outlook, which is made even bleaker without the substantial endowment funds many of the larger nonprofit institutions maintain. In addition to lacking the substantial endowments and reserves, Schwarz also discussed the business models that are prevalent in SNPHEIs as a critical contributing factor to the negative economic outlook facing SNPHEIs.

The business model a company adopts is influenced to a large degree by the OC of that company (Janicijevic, 2013). Much of the literature I found on analysis of, and remedies to, the financial uncertainty that face SNPHEIs is on the economics and business modeling aspects of the institutions. Denneen and Dretler (2012) discussed several key factors that exacerbate the economic decline of the small college and university. These factors included: (a) lack of capital to implement change, (b) opposition from key stakeholders, and (c) complex organizational hierarchy. While these are all valid factors that aggravate the financial decline suffered by many SNPHEIs, there is a gap in the literature regarding the nature and impact of OC on the financial decline pervasive within the SNPHEI subsector. In this research study, I sought to contribute to filling this gap by studying the relationship between the OC of a SNPHEI and its economic profitability and sustainability. The resulting public policy impact is clear; the economic extinction of these small colleges and universities could leave a void in the higher education of America.

Statistics compiled by the United States Department of Education NCES (2016) showed that in 2015 SNPHEIs enrolled 28% of all students enrolled in higher education. Additionally, the void created by the decline of SNPHEIs would likely create an

overburdening of other subsectors within higher education as students would be forced to select other subsectors of higher education.

The gap in knowledge that I looked at is the narrow but important relationship between OC and financial sustainability in SNPHEIs. This relationship could be important in helping SNPHEIs assess one of the causes and thus possibly one cure for their subpar financial profitability.

This study was needed because if the SNPHEI subsector succumbed to economic pressures, it would leave a significant void in American higher education and have major public policy ramifications. By looking at the impact of OC on the financial sustainability of SNPHEIs, this study was needed as a potential solution for SNPHEIs that are facing declining profitability in the face of challenging economic conditions.

Problem Statement

SNPHEIs are a significant subsector of higher education, enrolling 28% of all students in higher education (NCES, 2016). SNPHEIs are a niche for many students whose preference is for smaller schools. This niche is characterized by HEIs that have smaller class sizes, more interaction with professors, and strong liberal arts curricula. Historically, SNPHEIs have been important access points to education for minorities, women and religious communities. Today, they are strong centers of liberal arts education and many continue to allow for unique educational opportunities. Additionally, a survey of 318 C- levelexecutives indicated further evidence of the high value of SNPHEIs. This survey showed that 74% of these executives highly recommend a liberal arts education (Association of American Colleges and Universities, Hart Research Associates, 2013).

SNPHEIs are facing economic challenges that threaten their financial sustainability as an industry subsector. Gephardt (2015) and Woodhouse (2015a) found that SNPHEIs were closing at a faster rate than other HEIs, and the rate was increasing rapidly. These SNPHEI closings represent a contraction in the higher education options for students as well as the decline in access to a small private liberal arts education in the United States. There are external factors outside the control of HEIs, such as the declining enrollment of Americans between the ages of 25 and 34, the affordability of college for populations that would choose these types of institutions, and broader economic trends that contribute to the economic threat facing SNPHEIs. However, there are also internal and organizational issues that could be examined and mitigated to help increase the economic viability of SNPHEIs.

SNPHEIs are at greater risk of financial failure than their larger counterparts, public HEI or other sectors within higher education. This greater risk is in large part because the SNPHEI's are overly dependent on tuition and their organizational management style is not sufficiently entrepreneurial (Denneen & Dretler, 2012). Additionally, SNPHEIs are especially susceptible to economic decline because of their small enrollments and the demographics they serve (Chabotar, 2010; Dew, 2012). Schwarz (2013) posited that SNPHEIs could increase their chances of economic survival by adopting (a) nontuition-dependent funding business and revenue models and (b) more entrepreneurially driven organizational management.

Denneen and Dretler (2012) posited that adjusting their organization culture is a critical consideration SNPHEIs must make to enhance their chances of surviving the economic challenges. Yet, in the literature, there has not been an examination of the

interaction between SNPHEI's OC and economic situation. In this study, I focus on liberal arts SNPHEI's that are faith-based, minority-based or gender-specific institutions.

The Relationship of SNPHEIs to Public Policy

Higher education in general, and SNPHEIs in particular, are an integral part of the public policy and administration landscape, since at least the 1970s. Wegner (2008) cited the Title IX Education Amendments of the 1970s as "direct acts of public policy" (p. 1). Wegner also discussed the increasing privatization of higher education due to declining budgetary support for public higher education from the states. These two factors are strong support for placing higher education squarely in the realm of public policy and administration.

Another factor that provides support for placing this dissertation in the realm of public policy is the nonprofit tax-exempt nature of the SNPHEIs. Nonprofit entities exist under the 501(c)(3) tax code that exempts them from income tax. In essence, they are subsidized to a large extent by the American taxpaying public and, as such, they are a matter of public policy. The Internal Revenue Code 26 USC §501(c)(3) categorizes colleges and universities as "public charities" and grants them income tax exemption.

Another critical public policy consideration is the sustainability of SNPHEIs is the question of which higher education subsector is most likely to fill the void left when a SNPHEI goes out of business. The majority of HEI enrollments (73%) are in the public HEI subsector, with states like Wyoming and New Mexico at 96% and 94% public HEI enrollment, respectively (The Pew Charitable Trusts, 2015). Based on these HEI enrollment data, the HEI subsector is most likely to absorb students displaced in a pervasive economic decline of SNPHEIs is the public HEI subsector.

This displacement from SNPHEIs to public HEIs will create additional much needed revenue for public HEIs already suffering from declining state funding (Bell, 2016). State funding for higher education shrunk by 37% between 2000 through 2012 (The Pew Charitable Trusts, 2015). Not only would states feel the added economic pressures to support higher public HEI enrollments at a time when their funding to public HEIs shrinking. Over the same 12-year period between 2000 to 2012 that saw declining state funding to public HEIs, the federal government has been picking up the slack by increasing Federal funding by 32% (The Pew Charitable Trusts 2015). This shifting of enrollments from SNPHEIs to public HEIs will have public policy implications because higher enrollments in public HEIs represents an increased consumption of a publicly funded service. However, while the shifting of enrollments from a declining SNPHEI subsector to the public HEI represents increased consumption of a public service, this shift will likely also represent opportunities for public HEIs to grow revenues. Increased enrollment will increase tuition revenues for public HEIs.

Framing the Problem to Build onExisting Research

There is consensus among many scholars and industry experts on the need for significant organizational change in the funding and management models currently adopted by most PHEIs. For example, Denneen and Dretler (2012) studied 1,700 PHEIs and concluded that one key to economic survival of SNPHEIs is for PHEIs to make changes in their business models that are more market responsive. For this research, I posited that the OC of a SNPHEI is related to the business and revenue models implemented by that SNPHEI, which, in turn, impacts its economic viability.

Meaningful Gap in Literature

There are several possible barriers that prevent SNPHEIs from making changes to funding and management models and that, in turn, prevent sustainable profitability. Denneen and Dretler (2012) discussed several key barriers, including (a) lack of capital to implement change, (b) opposition from key stakeholders, and (c) complex organizational hierarchy. While these are all valid reasons that prevent many SNPHEIs from implementing changes to their funding and organizational management models, there is a lack of literature on the OC of a SNPHEI as a barrier to the implementation of business and revenue models that promote sustainable profitability.Ng'ang'a and Wesonga (2012) cited several scholars who looked at OC as integral to the organizational change process required to improve performance in schools. None of the citations specifically referred to school improvement in the context of financial sustainability specifically in SNPHEIs. Hence, this study is needed to look at the narrow but important relationship between OC and financial sustainability in SNPHEIs. This relationship could be important in helping SNPHEIs assess one of the causes, and thus possibly one cure, for their subpar financial profitability.

Purpose of the Study

The purpose of the study was to examine SNPHEIs in the state of Georgia. I examined the dominant OC that exists within the SNPHEI and the relationship between that OC and the economic sustainability of the SNPHEI. I measured economic sustainability as the SNPHEI's annual profitability. Additionally, my purpose was to conduct a quantitative study of the variables, with OC as the independent variable and profitability as the dependent variable.

In this quantitative study, the independent variable (IV) was the dominant OC in the SNPHEI and the dependent variable (DV) was the profitability of SNPHEIs. I did not use any covariates. The dominant OC was measured empirically using the OC Assessment Instrument (OCAI; Cameron & Quinn, 2011, pp. 27-33). The developers of the OCAI designed it so that it could characterize the OC using four conceptual quadrants: (a) adhocracy, (b) clan, (c) hierarchy, and (d) market. Cameron and Quinn (2011) defined each quadrant as follows. Firstly, Cameron and Quinn described the "adhocracy" OC as an OC in which innovativeness and adaptability are emphasized. Also the adhocracy OC is one in which centralized power or authority relationships are deemphasized. Secondly, in a "clan" OC, the emphasis is on teamwork and employee development, and customers are considered partners. In a clan OC, there is emphasis on promoting a humane work environment, and management seeks to empower employees by engaging their participation, commitment, and loyalty. Thirdly, the "hierarchy" OC is one in which uniformity in products, process, and services is highly valued, and management exercises significant control over these. Finally, the "market" OC is one in which competition in the external environment is highly valued. The focus tends to be on such external factors as suppliers, customers, contractors, licensees, unions, or regulators. In Chapter 3, the method sections, I provide further details on how I used the OCAI in my study.

The dependent variable, profitability, was measured by annual profits as reported on the SNPHEI's annual tax return on Form 990. These returns are publicly available documents that every nonprofit is required to file with the Internal Revenue Service.

Research Questions and Hypotheses

In this next section I outline the four research questions (three descriptive and one comparative) and the hypotheses.

Research Questions

The three descriptive research questions for the study were:

RQ1: What are the most predominant OC types existing within SNPHEI with enrollments under 5,000 students?

RQ2: Which OC occurs with greatest frequency in SNPHEIs reporting operating losses on most recent Form 990?

RQ3: Which OC occurs most frequently in SNPHEIs reporting operating profits on their most recent Form 990?

The comparative research question was:

RQ4: What is the predominant OC in SNPHEI's that report a loss on their most recent Form 990 compared to the predominant OC in SNPHEIs that report a profit on their most recent Form 990?

Research Hypotheses

The following hypotheses were the cornerstones of this study:

$H_{1:}$ there is a positive relationship between the existence of a market culture in an SNPHEI and the profitability of that SNPHEI compared to the other types of culture.

H_0: there is no relationship between the existence of a market culture within a SNPHEI and that SNPHEI's profitability.

The dominant OC in the SNPHEI is the IV and the profitability of the SNPHEIs is the DV. The relationship posited in the alternative hypotheses is that SNPHEIs, with a

dominant market will tend to have greater economic sustainability as measured by annual profits reported in their annual tax returns or their annual reports.

Theoretical Foundation

In this study I used the CVF as the theoretical foundation. Quinn and Rohrbaugh (1981) developed the CVF theory. Cameron (1986) and Cameron and Quinn (2011) developed it further. In the CVF theory, the authors explained that there is a causal relationship between OC and sustainable organizational change. Quinn and Rohrbaugh (1981) and the other developers of the theory identified four OC types: (a) adhocracy, (b) clan, (c) hierarchy, or (d) market. Each was found to have an identifiable and different impact on organizational performance and organizational change (Cameron & Quinn, 2011). It is a significant organizational change for a small nonprofit college or university to decide what type of revenue or business operation model it should adopt. A college or university's OC can have a significant impact on the revenue or business operation model it selects.

The major hypotheses of this study was that a positive relationship exists between the existence of a market culture (IV) in a SNPHEI and its profitability (DV). The null hypothesis was there is no relationship between the variables.

A more specific connection between the theoretical foundation and the major hypotheses could be made if the research indicated that a positive relationship exists between a market culture (IV) in a SNPHEI and its profitability (DV).

I used the CVF theory as a framework for the quantitative methodology of the study because the primary data collection instrument, the OCAI, was used to measure the dominant OC, and was developed based on the CVF theory. Using the OCAI, a

researcher could analyze the OC of an organization as one of the following cultures: (a) adhocracy, (b) clan, (c) hierarchy, or (d) market. I gathered the data using the OCAI instrument to provide quantitative measurements. I focused the research questions on the OC types identified in the CVF theory. In the research questions I made queries regarding profitability of the SNPHEI.

Nature of the Study

In this quantitative study I used a correlational design. Quantitative studies are effective for confirming or disconfirming a narrow hypothesis—as was the case in this study. The rationale for using a correlational design was that researchers can use correlational designs to investigate relationships between two or more variables without trying to ascertain causation (Ravich & Riggan, 2013). Unlike experimental designs, nonexperimental correlational designs do not manipulate the variables, and in most instances, the variables cannot be manipulated (Ravich & Riggan, 2013). In the study, neither of the variables; the OC of the SNPHEI nor the profitability of the SNPHEI could be manipulated.

In this study, I used an ex post facto design. It is ideally suited for studying relationships between variables after the phenomenon under investigation has already occurred (Knowlton & Phillips, 2013). The phenomenon in this study was the OC of the SNPHEI. Adoption of the OC would have already occurred in the SNPHEI at the time of the study. Correlational and ex post facto designs are well suited for studies where the manipulation of variables is either impossible or unethical, and the researcher must look at the subject matter after the relationship between variables has already occurred (Knowlton & Phillips, 2013).

Brief Summary of Methodology

This study was a quantitative, nonexperimental, correlational study that examined the relationship between OC and profitability of SNPHEIs. Secondary data were collected and analyzed to examine trends and to look for significant relationships. The data used for the independent variable of OC were the responses to the OCAI survey from faculty and staff of the SNPHEIs who participated in the study (see Appendix A). I used the OCAI's measurement rubrics to score the OCAI responses. Then I used these scores to determine which of the four CVF organizational cultures was dominant.

The DV was the annual profit of the SNPHEI reported on the Form 990 tax return or the SNPHEI's annual report. The Form 990 tax return is publicly available from the Internal Revenue Service. Where possible, I sought access to the Form 990s for the most recent 3 years filed by the selected SNPHEIs from the Internal Revenue Service or the SNPHEIs website. In some cases, the annual reports of some SNPHEIs were available on their websites.

Definitions

Both the independent and dependent variable was discussed in more detail in the "Nature of the Study" section of this study and again in Chapter 3. Other terms used in this study are defined below:*Competing values framework*: The competing values framework (CVF) is a theory of OC developed by Quinn and Rohrbaugh (1981) and further developed by Cameron (1986) and Cameron and Quinn (2011). The CVF theory indicated that there is a causal relationship between OC and sustainable organizational change.

Dependent variable is the annual profit of the SNPHEI.

HEI: higher education institution.

Independent variable of this study is the SNPHEI's organizational culture.

Organizational culture: the totality of the assumptions, beliefs, and values that the members of an organization share (Hofstede, Neuijen, Ohayv, & Sanders, 1990). This study uses the abbreviation "OC" to designate organizational culture.

PHEI: private higher education institution

SNPHEI: Small Nonprofit Private Higher Education Institution. **Small nonprofit private higher education institution (SNPHEI) is a term used in this study to denote colleges or universities that have enrollments under 5,000 enrollees. Additionally, these colleges and universities are described as "nonprofit" because they have been granted tax exempt status by the Internal Revenue Service**Assumptions

I made a key assumption that the most recent 3 years of annual profit margins reflected the SNPHEI's profitability trend. This assumption was necessary because it would not be feasible to compile data for the life of the SNPHEI. Koonce and Lipe (2010) indicated that a 3-year time frame was sufficient to identify trends in overall profitability of an organization.

I also assumed that a sufficient number of faculty and staff at the SNPHEI would have adequate knowledge about the OC. The participants did not require extensive knowledge of OC theory because the respondents were required to answer the OCAI questions based on their experience. This assumption was needed to ensure the reliability of the data collected on the OCAI. The participation of faculty and staff was necessary for the success of the data collection.

Another assumption I made was that the faculty and staff would provide responses without prompting or persuasion from other faculty and staff within the SNPHEI or from other individuals. The absence of prompting or persuasion was necessary to maintain the independence and integrity of the data collected regarding the SNPHEI's OC.

Confirmatory factor analysis (CFA) is a theory-based approach to model validation; it accounts for measurement error resulting in significantly more rigorous testing of validity (Li, 2016). I assumed that the conditions under which the OCAI were validated could be the same as those existing in SNPHEIs I used in this study.

Scope and Delimitations

The scope of this study includes an investigation of correlations that may exist between the OC within a SNPHEI and the SNPHEI's profitability. In the scope of this study, I covered SNPHEIs in the state of Georgia. The scope was selected because SNPHEIs with fewer than 5,000 students are facing severe threats to their economic survival (Woodhouse, 2015a). The scope was selected also because OC is a factor that can impact an organization's profitability and survivability (Hogan & Coote, 2014). Including institutions under a 5,000 enrollment was also done because in the literature SNPHEIs with fewer than 5,000 enrollments are defined as "small" (CollegeData, 2013; Zumeta & LaSota, 2010). HEIs that meet the definition of small are more susceptible to economic decline (Schwarz, 2013).

Another delimitation is that I did not include states other than Georgia because time and cost considerations limited the study to a population of approximately 60. Based on 2015 data from NCES, there were 59 SNPHEIs in Georgia. I live in Georgia which

made it easier to recruit SNPHEIs for face-to-face meetings with SNPHEI administration, as needed.

While individual differences exist between SNPHEIs in the state of Georgia and SNPHEIs in the United States the review of the extant literature shows that all SNPHEIs experience the same or at least similar financial performance issues and challenges (Schwarz, 2013). Therefore, the sample selection from a specific geographic locale (i.e., the state of Georgia) should still result in representative sample generalizable to the entire population of SNPHEIs in the U.S.

Generalizing across various measures for organizational financial performance was a significant threat to external validity. There are many different ways to measure organizational financial performance as a research construct. However, in this study, I did not rely on just one single measure for each unit of analysis, I relied on a multitude of reliable measures of financial performance most commonly used in the accounting and financial management disciplines. SNPHEIs typically publish these measures in their annual financial reports. These financial reports are required to comply with Generally Acceptable Accounting Principles (GAAP).

Limitations

A limitation of this study was that the OC data could be biased because the data were collected solely from faculty and staff of SNPHEIs in Georgia. There was a possibility that the responses to the self-administered online questionnaire could contain significant bias, depending on the respondent's relationship to the SNPHEI. For example, a respondent who does not enjoy working at the SNPHEI or who may have had recent disagreements with management may reflect this issue in their response. On the other

hand, a recently promoted faculty or staff who received a significant increase in compensation may respond in a more favorably biased manner. To address this limitation in this study, faculty and staff of the SNPHEIs were randomly selected.

A final limitation was the age of the data. The two types of data are aged differently. OC data collected through the OCAI represents contemporary data. The results of the OCAI indicate what the OC of the SNPHEI is at the time a researcher administered the OCAI. By contrast, the profitability data collected from the Form 990 of the SNPHEI reflect profitability of the preceding 3 years.

This timing or aging difference raised the question of whether the currently OC of a SNPHEI was in existence during the preceding 3 years and thus had any correlation with the profitability of the preceding 3 years. To address this limitation, I made a basic assumption. I assumed that the existing OC of an SNPHEI, as reflected in the OCAI results, was in existence during the preceding 3 years for which I collected profitability data. This assumption was reasonable because OC is a systemic characteristic that evolves and develops over many years (Cameron & Quinn, 2011).

Significance

SNPHEIs and policymakers could use the results of this study to make significant contributions in the area of SNPHEI sustainability, public policy relating to higher education, and ultimately contributing to positive societal changes derived from the continued sustainability of the SNPHEI subsector. Additionally, SNPHEI administrators could use the findings of this study in the area of SNPHEI sustainability and provide insight on the type of OC that is conducive to financial sustainability.

In terms of public policy, this study can make contributions by framing the problem of declining SNPHEIs in the context of the impact on social, economic and higher education. SNPHEIs differ from other higher education subsectors and, as such, would have different policy considerations and solutions to the economic challenges facing the entire industry. A better understanding of any contributing factors that would strengthen the SNPHEIs could, in turn, contribute to positive social change if SNPHEIs were more sustainable in the American education system.

One key implication for positive social change consistent with the scope of this study is that this study's findings could make contributions to how SNPHEIs could frame the problem of declining SNPHEIs in the context of their impact on social, economic and higher education. Additionally, as far as this study shows any correlation between OC and SNPHEI's profitability, this study has implications for the economic survivability of SNPHEIs as a critical industry subsector.

Summary

In the first chapter I outlined the problem explored in the study and discussed the gap in the literature that currently exists. In this chapter, I also laid out the purpose of the study and the relevant research questions and hypotheses. Next, I discussed the theoretical foundation, the CVF developed by Quinn and Rohrbaugh (1981) and later further developed by Cameron (1986) and Cameron and Quinn (2011). Following the discussion of theoretical framework, I discussed the nature of the study and the research methodology. I ended Chapter 1 with a look at definitions, assumptions and scope, delimitations and limitations to the study.

I began Chapter 2 with a restatement of the problem and purpose of my study. I explored the literature and scholarly research relevant to the problem statement and discussed pertinent gaps in the literature. I dedicated a section of Chapter 2 to my literature search strategy then discussed my theoretical foundation where I introduced the CVF as my theoretical foundation. In the remaining sections of Chapter 2 I provided a thematic synthesis of the key constructs related to the variables of my study.

In Chapter 3 I outlined the methodology and design of my study. I also specified the population, sampling procedures, recruitment procedures and steps I took to ensure informed consent, confidentiality and ethical considerations. The remaining sections of chapter 3 were dedicated to a discussion of the data collection and analysis, outlining my research questions and research hypothesis.

In Chapter 4 I presented my results and findings in the context of my research questions. I highlighted any differences between chapter 3 where I proposed my research methods and the actual implementation of the proposed plan. I presented both descriptive findingas as well as statistical findings. Prior to presenting my statistical findings I discussed at length the statistical assumptions that must be met.

Then finally in chapter 5, I summarized the key findings and interpreted the findings. After a brief review of the findings in relationship top the theoretical framework, I ended Chapter 5 by looking at key limitations to the study, recommendations and implications for future research that arose out of this study

Chapter 2: Literature Review

Introduction

Problem and Purpose of the Study

SNPHEIs are facing economic challenges that threaten their continued existence and sustainability as an industry subsector. The problem I addressed in this study was the declining profitability and economic survivability of SNPHEIs and the relationship that may exist between this decline and the OC within the SNPHEI. More specifically, I investigated SNPHEIs that were liberal arts, faith-based, minority-based or gender-specific institutions, in Georgia. For purposes of this research, "small" meant an enrollment of under 5,000 (CollegeData, 2013).

The purpose of this quantitative study was to investigate the relationship between OC in SNPHEI's and profitability in SNPHEI's in Georgia. I investigated the relationship between dominant OC (IV) and their economic sustainability as measured by profitability (DV) of SNPHEIs. I measured economic sustainability by the SNPHEI's profitability. I performed a literature review to identify and analyze extant knowledge, substantive findings and any theoretical and methodological contributions relevant to this study.

Synopsis of Current Literature to Establish the Relevance of the Problem

The underlying problem I investigated was the economic decline of SNPHEIs. This problem facing SNPHEIs is relevant to those decision makers reorganizing SNPHEI's policies to ensure that they can survive the adverse economic conditions. The economic decline is a relevant social issue that plagues public policy decision makers.

This problem is of particular significance to SNPHEIs because of all the HEI sub-sectors, SNPHEIS are most vulnerable under the current adverse economic conditions (Chabotar, 2010). This view was also echoed by Martin and Samels (2013) who went one step further and attributed this vulnerability of SNPHEIs to the inherent structural deficiencies in the dominant business revenue models prevalent in SNPHEIs (Martin & Samels, 2013; Selingo, 2015). SNPHEIs have limited business revenue options and these options are heavily dependent on enrollment. When SNPHEIs face substantial financial challenges such as reductions in student enrollment or decline in size of endowments, the impact on the SNPHEI is more adverse because there are no substantial alternate revenue sources to help them survive these challenges (Barr & Turner, 2013). Decision makers at SNPHEIs must focus on radical changes to their business and revenue models to models that are more likely to withstand the economic adverse conditions (Denneen & Dretler, 2012).

The problem of the economic decline of SNPHEIs is also relevant to public policy makers. The economic decline of SNPHEIs is particularly relevant in the area of federal and state policies relating to higher education funding. Conner and Rabovsky (2011) noted that the way higher education policymakers craft and implement policies will be impacted by the declining economic conditions that engulf the SNPHEI subsector. This point of view was also put forth by Heller (2011) who posited that even the objectives of higher education policies would change if the SNPHEI subsector suffers from significant sustained decline.

Social relevance stems from the close connection between the higher education sector and social issues. Researchers Mumper, Gladieux, King, and Corrigan (2016)

agreed with this connection between social issues and higher education. In a seminal work, Siegfried, Sanderson, and McHenry (2008) highlighted one way in which the SNPHEI's have relevancy to social issues. They made the case that the economic decline of SNPHEIs has a negative impact on institutional availability. Institutional availability is a social issue because it represents the quality and quantity of HEIs available for public consumption (Siegfried et al., 2008).

Preview of the Literature Review

I approached this literature review as a systematic, evidence-based method for identifying, analyzing and synthesizing existing research produced by researchers, scholars and practitioners in the disciplines relevant to the economic sustainability of the U.S. higher education and to the field of organizational culture. I further drilled down into the industry subsector of PHEIs and especially the subsector of SNPHEIs and the prevalent organizational cultures within the SNPHEI.

In this literature review, I provided a research synthesis to give the most reliable cross-section of the latest research findings on the topic of this dissertation. In preparing the literature review I pursued the following specific objectives. First, I explored scholarly research on the business models and the OC in the SNPHEI subsector of the American education industry. Second, I presented competing and concurring findings across multiple studies and evaluated the findings in context of this study's variables. Finally, I provided a context for this study by identifying the specific research gap that this study filled and identified remaining gaps in our understanding of the existing organizational and economic problems of the SNPHEIs that require further research.

I began with restating the problem and purpose of my study and a concise synopsis of literature to establish the relevance of the problem. In the next major section of the literature search strategy I detailed the sources and methods I used to select literature for review. Following the literature search strategy, I discussed my theoretical foundation exploring the origin, source and rationale for selection of the theoretical foundation. In the next section of Chapter 2, I provided an extensive review of literature related to organizational culture, the independent variable and profitability of SNPHEIs which is the dependent variable. Finally, I end Chapter 2 with a summary of the major themes in the literature and highlighted the gaps that I sought to fill with my study.

Literature Search Strategy

I used an aggregative thematic approach to the literature (Booth, Papaioannou, & Sutton, 2013). I started the relevant literature search with a scoping exploration, as recommended by Letherby and Williams (2013). I used a preliminary search that gave an estimate of the existing quantity and quality of primary studies. I performed the scoping search on a selection of core electronic databases with purposive sampling from a range of areas directly related to the topic of this research. Based on the outcomes of the scoping search, I identified key search terms and created a list of databases for a subsequent, deeper probe. Some of the specific terms I used included *organizational culture, small colleges decline, business models, small colleges and small nonprofit higher education.* I used Boolean proximity and adjacency operators, and a limit function to identify the most relevant sources.

In my search for digital peer reviewed publications, I looked both at open access and user access sources . I used the following databases: EBSCOhost, Google Scholar,

ProQuest, and the International Bibliography of Social Sciences (IBSS). In these initial searches, I found 2,000 relevant sources.

I then adopted selection criteria to further enhance the quality of my search. I used the selection criteria recommended by Knowlton and Phillips (2013). These criteria were (a) relative recency (within 5 years of publication) (b) direct relevance to the research topic, and (c) whether specific explanations of the phenomenon in question were provided. I discarded all but 218 of search results because they did not satisfy all three inclusion criteria.

In my literature review, I included several seminal works from public policy and organization studies and from management fields whose date of authorship exceeded the 5-year limit. The seminal sources I selected were critical for the literature review and contained information or findings that had not significantly changed with more recent studies or literature. I included works by Barney (1986), who looked at the relationship between OC and competitive advantage; Denison and Mishra (1995), who analyzed the performance of organizations in both private and public sectors, and concluded that OC and organizational effectiveness are linked directly.

In addition to the published peer-reviewed literature, I included grey or fugitive literature if it added valuable references to my study. Booth (2013) defined this literature as "information produced at all levels of government, academia, business and industry in electronic and print formats when publishing is not the primary activity of the producing body" (Booth et al., 2013, p. 77). The rationale for this additional step was that it allowed me to minimize publication bias because studies published for the primary activity of the producing body typically show larger effects of the policy intervention when compared

with grey literature; therefore, excluding the grey literature from this review could have led to exaggerated estimates of intervention effectiveness (Dane, 2013). I subjected the grey literature to the same sorting criteria as the peer-reviewed studies, the selected peer-reviewed and grey sources were analyzed. I synthesized the research findings using the critical evaluation approach recommended by Harris (2014). I gave special attention in the review to those studies that examined the organizational and economic challenges facing PHEIs.

Theoretical Foundation

Origin and Major Theoretical Propositions of the CVF Theory

In this study I used the CVF theory as the theoretical foundation. Quinn and Rohrbaugh (1981) developed the CVF theory which was then further developed by Cameron (1986) and Cameron and Quinn (2011). Quinn and Rohrbaugh (1981) and then later Cameron and Quinn (2011) developed the CVF theory as a way to empirically define indicators and measure an organization against these indicators of effectiveness. Cameron and Quinn theorized that a causal relationship exists between OC and effective organizational change. They developed four OC types with each OC type wielding a unique influence on organizational performance and change.

The CVF theory was developed by Quinn and Rohrbaug (1981) through statistical analysis of thirty-nine indicators. Quinn and Rohrbaug (1981) condensed these thirty-nine indicators into four clusters or clans which they further condensed into two main dimensions. The first dimension identified effectiveness criteria that embody flexibility, discretion, and dynamism while the second dimension highlighted effectiveness criteria that emphasize an internal orientation, integration, and unity. The four clusters or

quadrants that made up the two dimensions were (a) clan, (b) adhocracy, (c) hierarchy, and (d) market (see Figure 1).

The major theoretical proposition which forms the basis of the CVF theory is that most organizations can be characterized based on how they resolve operational challenges (Helfrich, Li, Mohr, Meterko, & Sales, 2007). The scholars who developed the CVF theory indicated that patterns of behavior emerge when organizations face challenges and that these patterns are reflective of the organization's dominant culture (Malbašić, Rey, & Potočan, 2015). The CVF theorists delineated the patterns of behavior in two dimensions (Cameron, 2009). According to Cameron, the focus of the first dimension is on organizational flexibility, discretion, and dynamism from an internal orientation. The focus of the second dimension is on integration, collaboration, and unity from an external orientation with a focus on differentiation, competition, and rivalry

The developers of the CVF theory further breakdown the two dimensions into four quadrants. The CVF is used to assess where an organization falls on the four quadrants and two dimensions. Where the organization falls on the four quadrants and two dimensions, indicates its proclivity for flexibility and innovativeness or its proclivity for stability and control. These four quadrants are the clan quadrant, adhocracy quadrant, hierarchy quadrant and the market quadrant are illustrated in Figure 1.

The clan culture is one in which shared values and common experiences are encouraged and where an atmosphere of collectivity, employee empowerment and engagement is promoted. On the other hand, the adhocracy culture is one where there is high degrees of fluidity and flexibility. In a market culture the focus is external stakeholders and how well the organization interacts with external stakeholders. The

hierarchy culture has its root in a seminal theory first posited by Weber (1947). Organizations in which a hierarchy culture is dominant have a strong emphasis on organizational structure, standardized rules and procedures, strict control, and well-defined responsibilities (Yu & Wu, 2009).

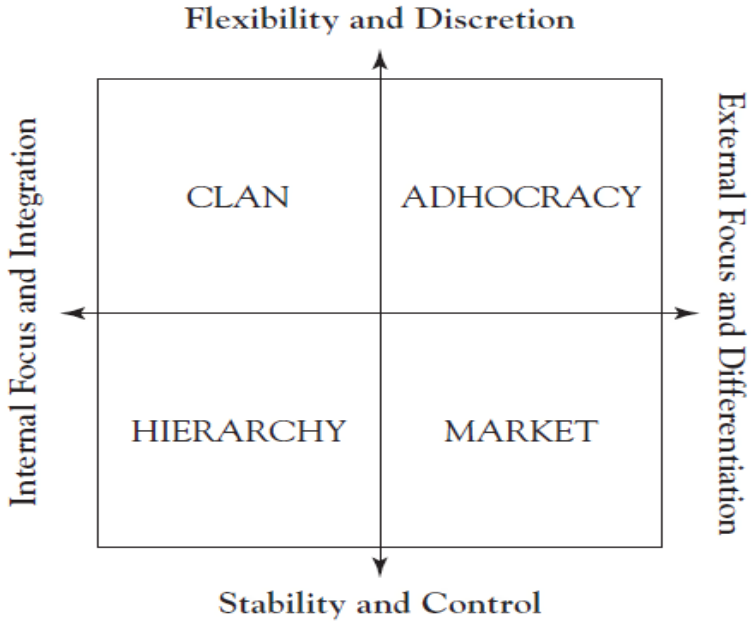

Figure 1. The four CVF quadrants.

Higher education researchers Denneen and Dretler (2012) posited that SNPHEIs would benefit if they measure well in the quadrants that foster change, flexibility and innovation, as these characteristics will help them develop innovative alternatives to their existing and failing revenue and business operation models. Denneen and Dretler (2012) based their proposition on the premise that SNPHEIs must implement sweeping organizational changes to survive the adverse economic conditions that are pervasive in the SNPHEI subsector. The CVF culture type most conducive to implementing radical change are the adhocracy and the market organizational cultures (Denneen & Dretler, 2012).

Rationale for Choice of CVF Theory

A theory selected as the theoretical foundation for a study must align with the methodology of that study. The CVF theory is in alignment with my study. One way in which the CVF theory is in alignment with this study is that the CVF theory is empirically based, thus conducive to a quantitative study where empirical data is essential (Cameron & Quinn, 2011). Additionally, the CVF theory was aligned with this study because the underlying proposition of the CVF theory is that a causal relationship exists between OC as an independent variable and organizational performance as a dependent variable (Cameron & Quinn, 2011). The purpose of my study was to analyze organizational performance which I measured in terms of organizational profitability.

While the CVF was the best fit for this study, to align the research method, research questions, hypotheses and variables, there were other theoretical foundations that I considered. One such theory posited by Cooke and Rousseau (1988), looked at the culture of organizations and their subunits in terms of behavioral norms and expectations. Ultimately, the CVF theory was selected because I was able to better align it with my study. Additionally, not only did I use the CVF theory to help diagnose the current organizational culture, but I used it prescriptively to suggest an OC type that could better allow SNPHEIs to achieve and sustain economic profitability.

Previous Applications of CVF Theory

The CVF theory is the most widely used model in quantitative research on OC (Kwan & Walker, 2004). Furthermore, the CVF model has been used to study the relationship of OC with variables other than financial performance. For example, Lund (2003) looked at the impact of OC types on job satisfaction. Berrio (2003) utilized the

CVF theory as its theoretical framework in a qualitative case study of the OC of the Ohio State University. Berrio's study showed that the dominant OC of the Ohio State University was the clan culture. Quinn and Rohrbaugh (1981) described the clan OC as one in which the organization places emphasis on shared values and common experiences and where a culture of collectivity, employee empowerment and engagement is promoted. The presence of shared vision and goals instead of strict rules and procedures is a hallmark of the clan OC. Unlike this dissertation study, Berrio's study was primarily descriptive and did not seek to explore the relationship of OC to organizational change or performance.

While the Lund (2003) and the Berrio (2003) used the CVF theory in their studies, both studies fall outside the 5-year limit I selected for my literature review and both studies were qualitative. In a more recent study Golden and Shriner (2019) used CVF theory as a theoretical foundation. In this study, the researchers investigated whether organizational cultures influenced relationships between leaders in an organization and employee performance. Golden and Shriner concluded that the adhocracy culture type does have the greatest impact on relationships between leadership and employees.

Relating the CVF Theory to this Study

The essential theoretical proposition that connected the CVF theory to this study was that the SNPHEI's ability to survive the economic challenges facing higher education lies to a large degree on their ability to adopt fundamental organizational changes. Denneen and Dretler (2012) and Schwarz (2013) agreed that the SNPHEI must implement fundamental changes to their business operation models if they are to survive

the economic challenges. Clark (2015) posited that there is a close link between an organization's OC and their economic viability. Certain types of organizational culture, such as the market culture, maybe more responsive to changing market conditions and thus more likely to survive market and economic challenges. It is because of this need for change in SNPHEIs that I found CVF to be applicable my study. In the following sections I looked at literature that further established the connection between organizational culture, organizational performance and SNPHEIs. This linkage is the primary way in which the CVF theory, which is a theory on OC and performance, was in alignment with my study.

Literature Review Related to Key Variables

In this section I compared various literature and studies in which I found both contrasting and concurring perspectives on the constructs of interest to my study. In selecting these literature and studies I looked for studies that were consistent with the scope oy my study both in terms of methodology, subject matter and variables. I selected literature and looked at studies relevant to the two variables of my study: (a) the OC of the SNPHEI which was the IV, and (b) profitability of SNPHEI, which was the DV. Additionally, the literature and studies cited in the following sections were in alignment with my research questions which queried the relationship between the variables.

Key Constructs of Interest, Variables and Research Questions

The key constructs of interest to my study were the IV of OC and the DV variable of SNPHEI profitability. My research questions were connected to the variables so that my exploration of the variables simultaneously explored the research questions. Beyond the interest reflected in my two variables, I explored related areas of interest to bolster my

knowledge of the subject matter. Such areas of interest included a discussion of the term "small" as I applied it in my study, a look at how the problem facing SNPHEI's impacted the field of public policy and the social implications of SNPHEIs. Additionally I explored the relationships between OC and business models within the SNPHEIs and economic implications of declining SNPHEI subsector. In the section on economic implications I subdivided this discussion into (a) the impact of the decline of SNPHEIs, (b) mitigating the economic decline, and (c) underlying contributing factors to the decline of SNPHEIs.

Rationale for Selecting the Variables

The variables selected for my study were the OC of SNPHEIs and the profitability of SNPHEIs. In this section of my literature review I explored literature and I cited studies and statistics to validate the importance of the SNPHEI subsector and why a study to look at how the relationship between the variables was warranted. SNPHEIs are an important segment of the HEI industry according to many scholarly researchers such as Denneen and Dretler (2012). However, in the following section of my study I have supported this general assumption from several scholarly sources and statistical data.

SNPHEIs are an essential subsector compared to all the other HEI subsectors discussed earlier. Several unique benefits make SNPHEIs essential and advantageous to students who choose to enroll in an SNPHEI. Pallais (2015) made a case for the benefits of SNPHEIs. Pallais cited scholarly research that indicated faculty at smaller private, four-year colleges show a higher than average commitment to their students, their co-workers and their institution. Researchers at the University of California at Los Angeles Higher Education Research Institute conducted the study to look at faculty attitudes in

both public and private universities, four-year and two-year colleges and small liberal arts colleges.

Another factor that emphasized the importance of SNPHEIs is the higher graduation rates found in SNPHEIs. According to scholarly research conducted by Vasquez Urias and Wood (2014) *very small* colleges had graduation rates that exceeded graduation rates in both medium and larger colleges. Black male graduation rates was the primary focus of this research by Vasquez Urias and Wood (2014). Statistics from NCES (2016) showed further support for the study done by Vasquez Urias and Wood. These statistics from NCES (2016) showed that SNHPEIs had a higher graduation rate of 65% compared to a graduation rate of 57% for other HEIs (NCES, 2015b). Additionally, researchers at the National Student Clearinghouse Research Center (NSCRC, 2015) researched completion rates among all subsectors of HEI. The researchers found that four-year private nonprofit HEIs had the highest completion rate of 71.50%, almost 10% higher than the next closest subsector; two-year for profit HEIs at 61.8% and the US overall completion rate at 60.57% (NSCRC, 2015).

Another unique benefit that highlighted the importance of SNPHEIs is the economic contribution a SNPHEI makes to its state. Noted scholars in the field, Denneen and Dretler (2012), estimated that SNPHEIs contributed over $15 billion to the Massachusetts economy. This data from this study quantified the impact on local economies of small college closure.

Research done by Economic Modeling Specialist International (EMSI, 2015) showed further evidence of the economic benefit SNPHEIs have on local economies. The researchers at EMSI conducted a case study of an SNPHEI; Davidson College, which

showed that in fiscal year 2012-2013 Davidson College contributed $148.5 million to the North Carolina state economy. This additional income to a state is generally referred to as a “contribution to the Gross State Product.” In this study, the researchers indicated that the $148.5 million contribution to North Carolina’s Gross State Product by Davidson College, equated to 2,180 new jobs. The researchers in this study found that the benefits from Davidson College also came in the form of increased consumer spending and by providing workers in the labor force. Benefits to North Carolina also included increased tax receipts, increased consumer savings and reduced demand for public services (EMSI, 2015). This economic contribution to North Carolina by Davidson College was typical of many other SNPHEIs in other states.

The importance of SNPHEIs goes beyond higher graduation rates or economic contribution to local economies. SNPHEIs have historically been important for three groups: minorities (African Americans in particular), women, and religiously affiliated or controlled groups. Historically, colleges targeting these populations were necessary because of their exclusion from public colleges or, in the case of religiously affiliated SNPHEIS, the desire to pursue a religious focused higher education (Levy, 2011).

Another factor supporting the importance of SNPHEIs is the size of the SNPHEI subsector. Statistical data compiled by the NCES (2015a) showed that of the 4,127,833 students enrolled in private HEIs in 2013, 66% of them (2,757,447) enrolled in private nonprofit institutions and 28% of enrollees were in SNPHEIs. SNPHEIs comprised 80% of all private nonprofit HEIs. The average private nonprofit college qualifies as a small private higher education institution (Ginder & Kelly-Reid, 2013). Additionally, NCES (2015a) data showed that 28% of all students enrolled in higher education enrolled in an

SNPHEI. This 28% is a significant percentage of students which further bolsters the importance of SNPHEIs to the broader HEI industry sector.

Another illustration of the importance of SNPHEIs is the role SNPHEIs play in vocational and technical education. SNPHEIs enroll an estimated 30% of vocational and technical education students pursuing a vocational or technical degree. Additionally, 100% of vocational and technical colleges qualify as SNPHEIs because their enrollments are under 5,000 (NCES, 2015a). Vocational jobs like construction or vocational nursing are expected to experience a 21.4% and 24.8% increase in demand respectively by the year 2022, compared to only a 10.8% increase in overall job demand (Bureau of Labor Statistics [BLS], 2015). This increase makes the role of SNPHEIs important.

Yet another benefit of SNPHEIs is in the high valued model of undergraduate education. Baker, Baldwin, and Makker (2012) concluded that liberal arts colleges, which are predominantly SNPHEIs, play an important role in US higher education, in large part because of the "distinct and highly valued model of undergraduate education." This model includes distinctive characteristics such as small class sizes, close student–faculty interaction and flexible curriculums (Baker et al., 2012).

Organizational Culture as a Solution to SNPHEI's Challenges

In this study I focused on OC changes as an underlying remedy for the negative economic trends within the SNPHEI subsector. In the literature, I found several definitions of OC (OC). For example, Hofstede et al., 1990 defined OC as the totality of the assumptions, beliefs, and values that the members of an organization share (Hofstede et al., 1990). Another definition of OC is a "system of shared norms, customs,

assumptions, values, and beliefs, which govern how people behave in organizations" (Hatch, 1993, p. 641).

Similarly, Needle (2004) described OC as an amalgamation of values, principles and beliefs of the members of that organization, while Ravasi and Schultz (2006) suggested that OC is a set of assumptions shared within the organization that gives direction to organizational decisions and action. Some researchers identified more than twenty operational definitions of OC in the extant literature (Büschgens, Bausch, & Balkin, 2013).

However, for definitional clarity, in this literature review I have relied on the most dominant definition of OC given by Schein (2010). Schein, in particular, defined OC as "a pattern of basic shared assumptions learned by a group as it solved its problems of external adaptation and internal integration, this is a product of joint learning" (pp. 21-22).

According to Schein (2010), a leading theorist on the role of OC in organizational effectiveness, there are four categories of culture: macro cultures (nations and occupations that exist globally), organization cultures proper, subcultures (*i.e.* interest groups within organizations), and micro cultures (small groups of agents within organizations). Schein (1996) further identified three levels of OC: artifacts (visible), espoused beliefs and values (implicit), and basic underlying assumptions (invisible, often unconscious, taken for granted). Building on this typology of OC, Schein viewed external adaptation and internal integration as core problems organizations face. More specifically, Schein (2010) discussed external adaptation as the survival and adaptation to the external environment and Schein's discussion of internal integration referred to the

integration of internal processes to ensure the organizational capacity to continue to survive, adapt and effectively perform its core functions. Then, with Schein's definition and typology in mind, the OC-based solution to the existing organizational problems of SNPHEIs can be reconceptualized as a process of organizational change mitigated by specific components of OC unique to academic organizations. Consequently, the positive organization change process in any higher education institution, including SNPHEIs, should effectively address several issues associated with OC. Readiness for and responsiveness to organizational change are two of these issues that SNPHEI's should address.

Relationship of Organizational Culture to Organizational Profitability and Economic Sustainability

The underlying proposition of the CVF theory is that OC has a causal relationship to organizational performance. Organizational performance can be measured by various metrics including financial metrics such as profitability. Several researchers have established the link between OC and financial effectiveness in organizations. For instance, Cameron and Quinn (2011) defined the market OC as the OC that is more likely to thrive financially under strenuous market conditions because of its proclivity for innovation and adaptability. Kotter and Heskett (2011) contrasted adaptive and unadaptive OCs and concluded that adaptive OCs are associated with higher likelihood of organizational success and long-term organizational sustainability. Kotter and Heskett (2011) as well as Guerrero and Urbano (2012) support the position taken by Flanagan (2012). Flanagan posited that there is an association between organizational effectiveness and long-term sustainability. In this context, these researchers (Flanagan, 2012; Guerrero

& Urbano, 2012; Kotter & Heskett, 2011) viewed organizational effectiveness as the desired objective which is achievable through the process of organizational change moderated by OC. Guerrero and Urbano developed an entrepreneurial university framework in which they identified a flexible organizational structure as the number one characteristic of what they referred to as an *entrepreneurial university.*

A static inflexible business model is a prevalent characteristic of SNPHEI's. In contrast to the adaptive and entrepreneurial culture, which are requirements for organizational success and sustainability, researchers have agreed that one of the hallmarks of HEIs as a whole, and SNPHEIs in particular, is their lack of change as it relates to business models. For example, studies done by Commonfund Institute (2014) and Hayes (2014) concluded that business models and revenue models within PHEIs have not changed in several decades. However, changing their business model to optimize organizational performance is a critical step PHEIs must take to survive financially (Bogaty, 2013; Denneen & Dretler, 2012). Cameron and Quinn (2011) identified the market OC as one such OC paradigm because the market culture, like the entrepreneurial university framework posited by Guerrero and Urbano (2012) makes for a more flexible and innovative organization. The absence of this type of OC is a major contributing factor to the economic decline facing SNPHEIs. Many SNPHEIs could benefit in terms of their organizational effectiveness from a close investigation of their OC, and the relationship of their prevailing OC to economic success (Clark, 2015).

Organizational Culture and Change in Higher Education

Historically, in the HEI industry, there are examples of the connection between OC and positive change in the industry. Since the beginning of the 21st century there

have been several attempts at institutional and organizational reforms within the HEI industry in the United States (Zusman, 2011). The latest reforms are based on the underlying assumption that preemptive, intentional change efforts in colleges and universities can succeed despite the organizational pressures to maintain collegiate tradition and dominant academic culture (Etzkowitz & Viale, 2010; Rowley, Lujan, & Dolence, 2001). The SNPHEIs are not an exception in this process, and there have been several reform efforts undertaken in this subsector because of organizational pressures to maintain collegiate tradition and dominant academic culture (McGuinness, 2016; Mumper et al., 2016). In the broader context of higher education reform efforts, OC moved to the forefront in understanding and implementing the process of organizational change as one of the solutions to the current organizational effectiveness problems in colleges and universities, and especially in SNPHEIs (Bonvillian & Murphy, 2014). The critical significance of OC becomes even more evident as the institutional change moves from design to operationalization and eventual execution in the actual organizational settings. The concept of organizational change, through alteration of OC for the explicit purposes of enhanced organizational efficiency and effectiveness, was initially posited by Pettigrew (1979), and subsequently conceptualized by Ouchi and Wilkins (1985).

Without addressing OC, it is unlikely that an organization can successfully implement sustainable organizational change. Ouchi and Wilkins (1985) treated OC as one of the requisite elements of successful organizational change. The management and policy research communities greeted the ideas of Ouchi and Wilkins on the role of OC with increasing enthusiasm in the management and policy research communities. Several authors, building on the original ideas of Pettigrew (1979) and Ouchi and Wilkins

extended their analytical and normative frameworks to address other pertinent issues of institutional change in higher education. Another scholarly author, Barney (1986), in his seminal study, looked at the relationship between OC and competitive advantage and concluded that only those organizations that have an OC that is adaptive to organizational change can achieve long-term organizational sustainability. In support of Barney's (1986) position, Denison and Mishra (1995) conducted detailed analysis of high-performance organizations in both private and public sectors and concluded that there is a direct relationship between OC and organizational effectiveness. They also found that organizational effectiveness can and must be achieved or increased through interventions altering OC (Denison, 1997).

I found additional support for the linkage between OC and organizational change. For example, Hofstede et al. (1990), in a mixed research case study, posited that OC is a strategic asset in organizational transformation. They further found that unique task, structure and control characteristics in all organizations in the research sample were significantly affected by the dominant OC modes practiced by organizations' members. Based on their findings Hofstede et al. suggested that any organizational change should first address the cultural modes of organizational functioning. Other researchers like Bozeman (1998) working within the same OC research paradigm suggested that certain OCs may be responsible for bad organizational practices, such as excessive risk taking and lack of organizational accountability.

Organizations can reap other key benefits from a close analysis of their OC. For example, organizations can use OC analysis as an effective analytical tool to diagnose explicit and implicit organizational problems (Smircich, 1983). OC can be a source of

organizational sustainability (Lim, 1995). Finally, organizational learning is the necessary part of any successful organizational change and that OC is the main instrument of organizational learning (Yanow, 2000). The body of extant research on the role of OC in organizational effectiveness, sustainability and organizational change is active, extensive and growing.

Notwithstanding the exhaustive review of literature I conducted on OC, the purpose of this literature review was not to survey all developments and findings on this topic. My purpose of the literature review was to identify and summarize those studies that examined the relationship between OC and organizational change as it relates to higher education in general and SNPHEIs in particular. In this context, I focused on three streams of OC literature. The three streams of OC literature I focused on revolved around three primary aspects of the positive organizational change process in higher education as a vehicle to improve organizational effectiveness. These three streams were: 1) readiness for and responsiveness to organizational change; 2) resistance to organizational change in academia; and 3) the outcomes of the organizational change in higher education.

Readiness and Responsiveness to Organizational Culture in HEI

Researchers have extensively documented the role of OC specific to nonfinancial organizational change in HEIs. For example, research conducted by Bergquist (2007) found that the type of OC (e.g.: collegial, meritocratic, elite, or leadership) is closely associated with perceptions of change in the organization. Similar to Bergquist, Hartley (2014) emphasizes the importance of OC in change initiatives in colleges and universities.

According to Hartley (2014), academic organizations with strong collegial values (i.e.: cooperation, engagement, commitment, and high levels of attachment) looked at change more enthusiastically and in more positive terms compared to academic organizations characterized by elite, meritocratic, or leadership-style value structures, which were more likely to view change negatively. Although Hartley found characteristics of all four value structures in all HEIs, Hartley contended that the majority of colleges and universities can be classified as collegial organizations and, therefore, viewed change overall positively.

The way academic organizations perceive organizational change is impacted by their OC (Philpott, Dooley, O'Reilly, & Lupton, 2011). However those who implement change in academic institutions often take unspoken tenets of OC for granted. According to some researchers and scholars, to utilize OC as a driver of organizational change in colleges and universities, the tacit components of OC should not be overlooked (Simsek & Louis, 1994; Smart & St. John, 1996).

Two tacit components of OC are trust and transparency. Research on organizational change in academia indicated that one such tacit component, and an important cultural condition for change, is the existence of trust among the various members of the academic community (Kezar & Eckel, 2002). While open communication between various subcultures on campus (Johnson, 2011), maintains trust, another way to build is through collective decisions, including decisions regarding organizational change (Stuber, 2012). Another tacit component of OC and a requisite condition for an effective change environment is the use of change planning strategies that are transparent, inclusive, and closely aligned with OC (Cameron & Quinn, 2011).

Change strategies defined by these values also facilitate the development of trust and reflect the proper scope for inventive and transformative change efforts (Clark, 2015).

Understanding the relationship between OC and organizational change is critical if HEI leaders are to employ OC analysis to promote organizational change. According to Kotter and Heskett (2011), failure to understand how OC will interact with various change strategies may negate an organization's efforts to create change. Several researchers supported this position taken by Kotter and Heskett. For example, case studies of corporations undergoing organizational change, performed by Denison (1997), Kirby, Guerrero, and Urbano (2011), Schwartz and Davis (1981), showed that OC can either enable or constrain organizational makeover, depending on the fit between existing OC and the planned change. Similarly, case studies of public agencies undergoing organizational change (Abernethy & Brownwell, 1999; Ashworth, Boyne, & Delbridge, 2009; Robertson & Seneviratne, 1996) also showed that organizational change can be impeded or facilitated by OC.

Resistance to Change in Academic Institutions

Resistance is an important component of organizational change. It is especially relevant to colleges and universities in light of their enduring tradition of critical objectivity and a wide variety of subcultures or countercultures on campus (Johnson, 2011). Subcultures such as HEIs, are usually grounded in explicit organizational roles (Dahlgren & Pramling, 1985), institutional position (Becher & Trowler, 2001), and access to resources for research or disciplinary affiliation (Barnett, 2014). Subcultures that display these characteristics (explicit organizational roles, institutional position and access to resources for affiliation) tend to thrive within academia because academia

frequently possess their own set of customs, beliefs, and practices that may be distinct from the larger OC (Dill, 2012).

These conflicting priorities and values among academic subcultures (e.g.: administrators vs. faculty) often contribute to resistance to organizational change (Becher & Trowler, 2001). Some studies indicate that the greatest clash has occurred between administrators, who often initiate organizational change, and the faculty, who are most frequently responsible for implementing organizational change (Johnson, 2011; Kezar, 2014). This collision happens because the average faculty tenure is usually far longer than that of most administrators and faculty are often perceived, rightly or wrongly, as the gatekeepers of OC in academia (Tagg, 2012). When change efforts challenge ingrained cultural beliefs, faculty, as studies done by Johnson (2011) and Kezar (2014) have shown, sometimes perceive the change as hostile. Thus, unless these elements of academic OC are part of an overall change strategy, resistance will be the usual response (Lane, 2007).

Resistance to change in academia is pervasive. So much so, that some researchers have included opposition, conflict, and internal organizational politics as key elements to address strategies of institutional change involving OC (Bercovitz & Feldman, 2008; Clark, 2003; Gioia & Thomas, 1996; Gumport, 2000). Some studies of organizational change in academia indicated that higher education institution's readiness for change is inversely related to the resistance experienced during the organizational change (Bergquist, 2007; Chaffee, 1984; Kezar, 2014).

If resistance to change signals that the organizational change has reached the cultural level of the institution under transformation, a shift in OC signifies that organizational change has occurred in earnest. In his seminal work, Levine (1980)

identified incompatibility (defined as the degree of congruence between the innovation and the cultural norms, values, and goals of the institution) and lack of profitability (defined as the measure of the effectiveness of an innovation in satisfying the adopter's needs) as the two primary obstacles to positive organizational change, and hence, the main reasons behind failure of organizational innovation and organizational change in colleges and universities. Based on qualitative evidence Levine concluded that implementers of transformative organizational change in colleges and universities may avoid failure by maximizing profitability and congruence.

In turn, Simsek and Louis (1994) proposed a model of organizational change that essentially built upon the model put forth by Levine (1980). In their model, Simsek and Louis (1994) defined the successful outcome of organizational change as a structural and lasting change of OC. To operationalize their model, the authors suggested that a successful strategy of organizational change in higher education should include five phases of change: normalcy, confronting anomalies, crisis, selection, and renewed normalcy (Simsek & Louis, 1994). Simsek and Louis recognized the importance of OC as the key to organizational change. The authors suggested that their model of organizational change is a good fit for HEIs because it acknowledges aspects of the old OC, while incorporating it into the implementation of the preferred OC.

Financial Organizational Change in Higher Education vs. Organizational Culture

There is not much in the literature regarding OC and its impact on profitability and economic sustainability specifically in HEIs. I did unearth significant, mostly seminal, literature on the relationship of OC to nonfinancial organizational change in HEIs, however, the literature that addressed financial organizational change was sparse.

One study I found, in which the researchers studied OC and financial organizational change was a study conducted by Guerrero and Urbano (2012). Guerrero and Urbano identified an OC they referred to as the entrepreneurial university framework, which is conducive to implementing significant organizational changes. Berrio (2003) conducted another study which looked at OC from a nonfinancial perspective. Berrio studied OC in a public higher education institution from a qualitative descriptive perspective without looking at the variable of profitability or economic sustainability of the institution.

Organizations can also use OC as a means of preparing an environment for organizational change, as a measure for assessing whether or not an organizational change has occurred, and a means of attaining the preferred outcomes. Finally, the success of any organizational change effort may be contingent upon the extent to which implementers of change can effectively address issues of OC in their strategic planning.

Defining "Small" Nonprofit Private Higher Education Institution

The extant literature contains quantifiable and statistical definitions of an SNPHEI. One such literature source is CollegeData. CollegeData is a reliable industry expert in nonpeer-reviewed sources, because it is one of the major higher education industry repositories of college and university statistics. CollegeData (2013) defines the term *small* as having under 5,000 students. Other sources set the range at under 4,000 students (NCES, 2015c). At least one peer reviewed source, Zumeta and LaSota (2010) concurred with using an enrollment of 5,000 as an upper delimiter for a SNPHEI. Zumeta and LaSota further subdivided PHEIs into a *medium* category ranging from 5,000 to 9,999 students, and a *large* category with over 10,000 students. In light of the concurrence between the two major sources; CollegeData and Zumeta and LaSota, for

this study, I adopted CollegeData's range of 5,000 or fewer as a benchmark definition of a SNPHEI.

Most nonprofit institutions of higher education would meet the criteria of *small.* The National Association of Independent Colleges and Universities reported in 2011 that there were 1,600 private nonprofit institutions of higher education in the U.S., with the average enrollment in these schools of 2,300 students, thus qualifying the average private nonprofit higher education institution as an SNPHEI. In more specific and recent data from NCES (2015a), I found that there were 1,736 private nonprofit HEIs with enrollments under 5,000, thus qualifying as small for my study.

Public Policy Implications

The state of affairs in the SNPHEI subsector has implications of public policy. The present organizational challenges of SNPHEIs are not just the parochial internal matters of these institutions, but they intersect and impact public policy issues. In the following sections I have discussed three public policy implications stemming from the SNPHEI subsector.

The first public policy implication is the impact that the potential demise of SNPHEI's could have on federal and state policies relating to higher education funding. Conner and Rabovsky (2011) as well as Heller (2011) have posited that both the objectives and the mode of implementation for higher education policies would change if the SNPHEI subsector suffers from significant sustained decline.

If the organizational problems in the SNPHEI subsector are not resolved or significantly addressed in the medium term, and if the failure rate of SNPHEIs does not improve, HEI policymakers will have to substantially adjust their policy objectives. In

addition to adjusting existing their policy objectives, Conner and Rabovsky (2011) and Heller (2011) suggested that policymakers will also have to adjust the way they implement federal and state education policies. Industry researchers such as Woodhouse (2015a) have predicted that, as an industry subsector, SNPHEI's face significant risk to their long-term survival. If these predictions come true, the demise of SNPHEIs, which represent 28% of all HEI enrollments, it will significantly change the higher education industry as a whole. For example, federal and state policymakers in the area of higher education will have to make substantial changes to address potential increased enrollments and the associated costs that would occur as state funded HEIs absorb the displaced SNPHEI enrollments (Conner & Rabovsky, 2011; Heller, 2011).

Another public policy implication is the impact on the national workforce education and training. The Bureau of Labor Statistics provides a repository of workforce public policy issues. A reduction in the number of SNPHEIs could also impact the U.S. workforce because by the year 2024, 35% of all jobs in the US will require fewer than a bachelor's degree but more than a high school diploma (BLS, 2015). This market niche is called the *sub baccalaureate* and *certificates higher education niche*. SNPHEIs provide approximately 30% of the total education market in this higher education niche, and their decline will create severe shortages in certificates and sub-baccalaureate education already being experienced by the U.S. workforce (BLS, 2015).

Another policy implication is specific to tax policy implications. The tax-exempt status granted to SNPHEIs is another public policy linkage between SNPHEIs and public policy. The vast majority of SNPHEIs are tax-exempt organizations (Hopkins, 2015). By providing tax exemption status to SNPHEIs, what specific policy objectives does the U.S.

government seek to accomplish? Firstly, as pointed out by public policy scholars, tax exemption status to SNPHEIs is merely the means of the public policy implementation, while its ends are functional (Dunn, 2011). Although a particular tax, or the absence of a tax, affect the economy in various ways, a tax policy serves a variety of interrelated purposes, and several distinct policy objectives. Thus, by granting tax exemption to this specific class of institutions of higher education, the U.S. government aims: (a) to improve allocation in this subsector of the economy; (b) to achieve desirable levels of the distribution of higher education for specific demographic groups of population; and (c) to make a significant contribution to the stabilization function (Dunn, 2011)

Tax exemptions granted to SNPHEIs also serve the policy objectives of the stabilization function. According to Blanchard, Cerruti, and Summers (2015), the key stabilization function policy objective involves macroeconomic policies that are strategically implemented by governments to achieve and sustain desired levels of economic growth. The optimal levels of employment is a significant economic growth indicator. One of the ways that the U.S. government attempts to achieve optimal levels of employment within the higher education sector is by granting tax exemptions. Tax exemptions impact levels of employment because without tax exemptions SNPHEIs may not be able to hire as many faculty and staff because funds for personnel expenses otherwise would be used to pay tax liabilities.

SNPHEI issues also connect to public tax policy in the area of *"tax provisions"* (The Pew Charitable Trusts, 2017). Tax provisions are special deductions, tax credits, exclusions, and exemptions that allow taxpayers to lower their federal or state income tax liability. According to research conducted by researchers at the Pew Charitable Trusts

(2017), the effect of these tax provisions is the same as if the government directly funded the SNPHEI because taxpayers benefit from these tax provisions, and taxpayers in turn are incentivized to spend money to purchase higher education.

Social Implications

There are significant social issues that intersect with the state of affairs in the SNPHEI industry. Researchers in the field of SNPHEI and social issues such as McGuinness (2016) supported the existence of this linkage between SNPHEIs and social issues. In addition to the important public policy implications of SNPHEIs discussed in the previous section on public policy implications, the current institutional crisis in the SNPHEI subsector of U.S. higher education may also have far-reaching and significant social implications (McGuinness, 2016; Mumper et al., 2016; Zusman, 2011). Although it is impossible to identify and evaluate all social implications of the negative trends associated with the demise of SNPHEIs, several such undesirable social consequences have already pinpointed and assessed from the extant research. Next, I discussed three social implications (a) institutional availability, (b) reduced affordability, and (c) institutional diversity.

One such social consequence is the issue of institutional availability. Institutional availability is a significant social issue that loomed large in the literature on SNPHEIs. Scholars like Siegfried, Sanderson, and McHenry (2007) and Steinacker (2005) posited that if public policy changes to benefit SNPHEIs are not adopted or if SNPHEIs do not implement effective organizational changes designed to increase their organizational efficiency and productivity, many SNPHEIs will fail and disappear from the social landscape as a viable option for higher education.

Institutional attrition is the decline in the number of institutions within an industry subsector. As the number of SNPHEIs decline, the institutional availability of SNPHEIs will contract. The impact of attrition of SNPHEI availability will mean that many potential students from the specific socio-demographic backgrounds who are currently served predominantly by SNPHEIs, will see their choices significantly diminished (Green & Celkan, 2014; Maramba, Palmer, Yull, & Ozuna, 2015).

The decline of HBCUs is one factor that contributes to reduced institutional availability for racial and ethnic minorities. (Gaddis, 2014; Gasman & Commodore, 2014). Additionally, Gilliard, 2015, posited from his research, that certain low-income demographics in large metropolitan areas are also disproportionately affected by reduced institutional availability (Gilliard, 2015). Filpin, Saunders & Stoddard, 2015 also looked at the impacts of reduced institutional availability. They found that those students who select majors that are offered mostly by the liberal arts colleges and those who will be seeking certificate and associate degrees are also disproportionately affected by reduced institutional availability (Gilpin, Saunders, & Stoddard, 2015). The demand for such niche specific educational choices will continue to exist and quite likely increase, but the supply of those choices will be greatly diminished if the problem of contracting small PHEI availability remains largely unaddressed (Panigrahi, 2015).

Closely related to the issue of institutional availability is the problem of reduced affordability. The scarcity principle of economics is another key factor that has an impact on affordability. The principle of scarcity as discussed by Burke (2019) is when the price for goods and services increases as the good or service becomes scarcer. The ability of students to afford a SNPHEI education goes down because the pricing (tuition) for

SNPHEIs trends upward as a result of the decline of SNPHEIs (Heller, 2011; Hersh & Merrow, 2015). SNPHEIs fill a specific need for certain consumers of higher education. These are the consumers who cannot afford the tuition charged by large private universities such as the Ivy League universities, or do not qualify for any tuition assistance at state funded public universities (Department of Treasury, 2015).

SNPHEIs offer a great cost-benefit value to their target demographics groups. The reduction in the number of institutional choices in this subsector of the U.S. higher education will more than likely create financial affordability problems for many future students and their parents (Department of Treasury, 2015; Hersh & Merrow, 2015). With student debt mounting rapidly (Dwyer, McCloud, & Hodson, 2012) and the rising inability of many graduates to pay off their debt, especially in a sluggish economy, the issue of student affordability requires immediate policy attention (Akers & Chingos, 2014). Akers and Chingos, 2014 recommend that student affordability considerations should be included in any practical plan to revive small nonprofit PHEIs.

The third important social implication of the current crisis of the SNPHEI is associated with institutional diversity (Hout, 2012; Smith, 2016). The demise of SNPHEIs as an institution of higher learning with deep historical roots, close ties to their geographic and alumni communities, and serving specific demographics of students, will likely lead to overall increase in the homogenization of the entire landscape of the U.S. higher education. However, institutional diversity plays an important role in the general institutional sustainability, institutional effectiveness and allocative efficiency (Ostrom, 2005, 2010). Institutional diversity allows flexibility to address the demands of

international competition (Erickson, 2012), and increased access and affordability (Hartley, 2014).

Business Models and Organizational Cultures in SNPHEIs

Beyond the industry wide economic debility, SNPHEIs appear to be most vulnerable under the current adverse economic conditions (Chabotar, 2010). Some scholars, economists and experts have attributed the documented vulnerability of SNPHEIs to the inherent structural deficiencies in the dominant revenue models on which many SNPHEIs have been relying for decades (Martin & Samels, 2013; Selingo, 2015). SNPHEIs depend on two cash flow incomes per year (fall and spring tuition payments), and these are completely dependent on enrollment as the dominant source of revenue. Thus, when SNPHEIs face substantial financial challenges such as reductions in student enrollment or decline in size of endowments, the impact on the SNPHEI is more adverse because there are no substantial alternate revenue sources to help them survive these challenges (Barr & Turner, 2013).

To survive economic challenges, organizations of any kind must have a business model that maximizes profitability and sustainability. The abnormally high rate of economic failure among SNPHEIs is one indicator that the prevailing business models in the SNPHEI subsector are not well suited to withstand the new economic and financial challenges brought about by the aftershocks of the Great Recession of 2008 (Chabotar, 2010; Zumeta, 2010). The models on which the SNPHEIs have been relying in the past were not conducive to allowing SNPHEIs to be sufficiently flexible in their financial choices and ensure both the required buoyancy and the multiple elasticities of their revenues. Several financial statistics have indicated that the revenue mixes in many

PHEIs, especially in SNPHEIs, have remained constant for many decades (Commonfund Institute, 2014; Hayes, 2014). This constancy is not conducive for the general institutional stability in this subsector of the education industry.

Denneen and Dretler (2012) posited that SNPHEIs could increase their chances of economic survival by changing their business models. Denneen and Dretler recommended that by adopting nontuition dependent revenue models and more entrepreneurial business operations models, SNPHEIs could increase their chances for economic survival.

There is a consensus among scholars and industry experts about the need for significant organizational change in both the revenue mixes and the business models currently adopted by most PHEIs (Schwarz, 2013). Having an OC that is conducive to adopting significant organizational change is a prerequisite to making any significant organizational changes. In their research study, Guerrero and Urbano (2012) identified an OC they referred to as the entrepreneurial university framework which is conducive to implementing significant organizational changes.

Economic Conditions Currently Existing in the Sector

Weisbrod and Asch (2010) posited that the U.S. higher education industry is in a real fiscal crisis. Another researcher expanded the financial debility in higher education beyond the United States and noted that higher education in many other countries is facing similar financial and economic challenges (Erickson, 2012). The education industry economist Bogaty (2013) conducted a study in which he supported the positions of Erickson (2012) and Weisbrod and Asch; that the entire U.S. higher education industry was performing at a subpar economic level with prospects of continuing economic

decline. Bogaty's conclusions were based primarily on the economic data collected by Moody's Investors Service. The economists at Moody's Investors Service measure and report on higher education industry general economic performance. Similarly, McClean (2014), in his study of select economic data on higher education, supported Bogaty's forecast of economic deterioration. McClean wrote that while 2013 was a volatile year for the nonprofit higher education, and in spite of the relative economic stability of the ten years between 1999 and 2008, he expects the U.S. higher education sector as a whole, to be under economic pressure in the foreseeable future (McClean, 2014).

Not all researchers and scholars agree that the economic outlook for SNPHEIs is negative. In contrast to experts previously cited in this study (e.g. Barringer, 2013; Schwarz, 2013; Woodhouse, 2015b) who gave a dire economic diagnosis of the higher education sector, other experts, like Breneman (2011) gave an opposing view. Taken as a whole, the higher education sector of the U.S. economy is thriving according to the general economic and industry indicators (Breneman, 2011). In particular, Breneman posited that the industry as a whole is economically sound as key indicators such as student enrollment levels pointed to economic buoyancy within higher education. As further evidence of a robust higher education economy, Breneman pointed out that enrollment levels were at an all-time high even with tuition levels rising sharply. This unlikely combination of trends; growing enrollment levels and rising tuition, underscored what Breneman highlighted as continued robust demand for higher education. A study by Hemelt and Marcotte (2011) investigating data from 1991 to 2006, empirically confirmed the price inelasticity between enrollment and tuition.

The *tuition discount rate* is a significant factor when analyzing tuition rates versus enrollments. The apparent anomaly presented in the price inelasticity between increasing enrollments in the face of higher tuitions can be explained in part, particularly in the broader PHEIs sector, by the tuition discount rate. The National Association of College and University Business Officers (NACUBO, 2014) defined the tuition discount rate as the rate at which colleges and universities discount their tuition by offering their students need based or merit grant aid. The NACUBO (2014) further reported that the tuition discount rate increased to a record high of 45% in the fall of 2012. Additionally in support of the rising tuition discount rates, Woodhouse (2015b) citing the results of the 2014 Tuition Discount Study, which compiled data from 411 private colleges and universities, found that private colleges and universities discounted their tuition to 48%, which was up from a rate of 46.4% in 2013. One of the significant repercussions of an increasing tuition discount rate is that even as tuition rates rise, which would normally be a deterrent to enrollment, prospective college enrollees receive lower net tuition cost because they receive higher amounts of aid (NACUBO, 2014).

Even though Breneman's (2011) data regarding the optimistic economic outlook of the HEI industry goes only through 2007, other researchers took a longer look and concurred with Breneman's prognostications. For example, Snyder and Dillow (2015) conducted research that analyzed the data through 2013. Snyder and Dillow (2015) reported a 33% increase in enrollment from 2001 through 2013 in degree granting institutions. In support of this positive enrollment outlook, Levy 2009, cited several scholars who forecasted that the higher education industry, specifically private higher education, was vibrant and was poised for economic growth (Levy, 2009). Some of the

scholars Levy (2009) cited included Kinser, Levy, Silas, Bernasconi, and Slantcheva-Durst, 2010; Zumeta and LaSota, 2010). This positive outlook was also supported by taken by Breneman (2011) and Snyder and Dillow (2015).

How should one reconcile the opposing views regarding the economic outlook in the HEI? The opposing prognoses; economic decline on the one hand versus economic buoyancy on the other; are best understood in context of specific subsectors within the higher education industry. Therefore neither the broad picture of either a robust and healthy higher education sector (Snyder & Dillow, 2015) nor the picture of pervasive economic decline in higher education (Erickson, 2012; McClean, 2014) may be completely objective. Researchers and policymakers should interpret both perspectives should in close connection to specific subsectors within the higher education industry.

Levy (2011) posited a reconciliation between the two opposing economic outlooks. Addressing the issue of apparent conflicting economic prognosis of the higher education industry, Levy described the U.S. higher education industry as multi-sectored. Echoing the multi-sectored makeup of the higher education industry, the U.S. Department of Treasury in a joint report with the U.S. Department of Education divided the higher education industry into three broad categories or subsectors: a) public; b) private nonprofit; and c) private for-profit (Department of Treasury, 2015). Berry and Worthen, 2012, classified these three categories or subsectors (Berry & Worthen, 2012). They made their classifications based on how these HEI are financed and controlled (Department of Treasury, 2015).

Other researchers subdivided the HEI industry differently compared to the three categories posited by the Department of Treasury (2015). Researchers such as Zumeta

and LaSota (2010) offered more nuanced classifications. For instance, Zumeta and LaSota expanded the number of subsectors to six more narrowly defined categories: (a) four-year private nonprofit; (b) two-year private nonprofit; (c) four-year private for-profit; (d) two-year private for-profit; (e) four-year public; and (f) two-year public. Economic performance across these various sectors reflected significantly different trends and unique economic pressure points. For example, public institutions, according to the research done by Zusman (2011), face significantly declining funding from states.

There was additional support for the diversity of economic characteristics across different subsectors. Following the same line of research that different subsectors display varied economic fundamentals and hence economic outlooks, Mitchell, Palacios, and Leachman (2014) have noted that the level of state funding to public institutions is still below the funding levels prior to the Great Recession. Specifically, Mitchell et al. found that current funding in 2014 was 23% lower than the funding prior to 2008. This funding shrinkage, particularly when coupled with spiraling operating costs, according to a study by Tandberg leads to higher tuition rates at public institutions, and this, consecutively, puts strong downward pressures on student enrollments (Tandberg & Hillman, 2014).

One subsector within the broader HEI industry does showed strong economic trending. Oseguera and Malagon (2011) identified for-profit private institutions of higher education as the fastest growing segment of the U.S. higher education industry. The for-profit PHEIs' ability to adapt to market conditions, their greater access to investment capital and their better control over operational costs are some of the characteristics that have spurred the growth in the for-profit private higher education sector (Tierney & Hentschke, 2007).

By contrast to the for-profit private institutions of higher education, one HEI industry subsector shows distinctly negative trends. Zumeta and LaSota (2010) reported that of the six subsectors they identified, only the nonprofit private higher education sector showed a net negative growth rate between 1996 and 2007. Additionally, the nonprofit private higher education sector, particularly those PHEIs classified as *small,* that is, having under 5,000 students (Zumeta & LaSota, 2010), as being most susceptible to the economic and market declines (Bogaty, 2013).

The HEI industry is not an economic monolith. Using the findings of this body of research taken as a whole, I can support the idea that the U.S. higher education industry is comprised of distinctive subsectors, and each subsector responds to market and economic changes in distinctively unique ways (Dew, 2012). I took a closer look at the SNPHEI subsector in the following next section.

In the existing literature, I found possible barriers that prevent SNPHEIs from making changes to funding and management models that in turn prevents sustainable profitability. Denneen and Dretler (2012) discussed several key potential barriers including: (a) lack of capital to implement change, (b) opposition from key stakeholders, and (c) complex organizational hierarchy. While these are all valid reasons that prevent many SNPHEIs from implementing changes to their funding and organizational management models, there is little or no literature on the OC of a SNPHEI as a barrier to the implementation of business and revenue models that promote sustainable profitability. In the International Journal of Business and Science Ng'ang'a and Wesonga (2012) cited several scholars that looked at OC as integral to the organizational change process required to improve performance in "schools." None of the citations specifically

referred to school improvement in the context of financial sustainability specifically in SNPHEIs. Hence, in this study I looked at the narrow but important relationship between OC and financial sustainability in SNPHEIs.

Repercussions of an Economic Decline of SNPHEI Subsector

Significant repercussions can come from a continuance of the economic stresses on the SNPHEI subsector. A continuing of the decline in SNPHEIs threatens to rob US higher education of the unique and distinctive benefits provided by SNPHEIs as discussed in this study. Some of these benefits discussed in the previous section subtitled "Importance of SNPHEIs'," included higher graduation rates, economic contributions to local communities and states, small class sizes and close faculty–student interactions. Additionally, approximately 28% of students who sought higher education looked to the SNPHEI subsector according to statistics from the NCES (2015). The demise of the SNPHEI subsector could result in this 28% having to seek higher education in a sector that is not their first choice for higher education. Any decline in one higher education subsector weakens the entire higher education industry sector. America's higher education can ill afford to be weakened because such weakening has significant negative repercussions.

One specific repercussion of the SNPHEI's declining economic viability is the lower earning potential of individuals without a higher education degree (Zaback, Carlson, & Crellin, 2012). In particular, during economic downturns, especially the severe ones like the Great Recession, the lack of a college degree creates a greater disparity between individuals with and without college degrees (Carnevale, Rose, & Cheah, 2011). According to researchers at the National Center on Public Policy and

Higher Education (NCPPHE), a prominent higher education policy think tank; the economic decline in the SNPHEIs, the concurrent drop in the rate of Americans with college degrees, as well as the general shift to a knowledge-based economy are more than likely to create a measurable skills deficiency in America's workforce (Wegner, 2008). The continued decline in the SNPHEI subsector could leave a large void in the U.S. higher education system, because according to the aggregated data compiled by researchers at the NCES (2015a), in 2015 SNPHEIs enrolled approximately one quarter (25%) of all higher education students. Taken together, the potential loss in income earning ability and the declining workforce efficiency that stems from the declining SNPHEI subsector represent a major socioeconomic challenge, which warrants innovative strategies on the part of the SNPHEIs in the business and operation models they currently employ (Denneen & Dretler, 2012).

Furthermore, the decline of the SNPHEIs will weaken the broader higher education sector which in turn weakens the global competitiveness of US higher education. Data compiled by the researchers at the Organization for Economic Co-operation and Development (2013) ranked the United States as 12th in number of individuals possessing a college degree, placing it behind Korea, Japan and Canada. The Spelling Report, commissioned by then the U.S. Secretary of Education Margaret Spelling in 2006, indicated a direct linked between the economic competitiveness of the United States and the educational level of individuals who completed college degrees. The researchers of the Spelling Report also reiterated the case for ensuring that SNPHEIs; as part of the entire higher education sector, find sustainable strategies to survive the current economic pressures (United States Department of Education, 2006).

The evidence is staggering and the threat to the financial survival of the SNPHEI subsector is real. The importance of this subsector necessitates strong measures and pioneering strategies to mitigate the devastating impact of the economic pressures that have come to bear upon this important subsector (Denneen & Dretler, 2012).

There is also a potential impact to the quality of the US labor force. Two critical statistics indicated the public policy impact as it relates to labor force quality. Firstly, by the year 2024 approximately 35% of all jobs in America will require less than a bachelor's degree but more than a high school diploma (BLS, 2015). Secondly, SNPHEIs currently educate and graduate 28% of individuals who graduate with less than a bachelor's degree but higher than a high school diploma (Ginder & Kelly-Reid, 2013). These two statistics taken together indicate that SNPHEIs make a significant contribution to America's labor force and that the decline of the SNPHEI in America can have a negative impact on labor force quality which in turn impacts commerce and America's national economy.

Finally, the decline in SNPHEIs could have negative impact in the areas of science, technology and math. SNPHEIs in particular play an important role in preparing students for future STEM related careers (Rask, 2010; Watkins & Mazur, 2013). However, the goals and objectives of the national science and technology policy could be undermined if the negative trends in the SNPHEI subsector of U.S. higher education continues. Additionally, should these negative trends persist, it would ultimately jeopardize the U.S. competitiveness in science and technology education.

Mitigating the Impact from the Decline of SNPHEIs

A decline of the SNPHEI subsector can have trickle down policy, social and economic implications on the HEI industry sector as a whole. I discussed these implications in three previous sections: "Public Policy Implications," "Social Implications" and "Economic Implications." However, there are some options available to the HEI sector as a whole that can mitigate the negative impact that would come from a continued decline in the SNPHEI subsector. These counter measure options are available to the broader HEI industry at a macro industry-wide level.

Public higher education, large private HEI and online HEIs like Walden University are possible options. With the availability of public institutions, especially large state funded university systems, such as University of California, Ohio State or University System of Georgia and large private colleges like Harvard University, or the recent explosion in online education institutions (Guerrero & Urbano, 2012; Panigrahi, 2015) prospective college enrollees have numerous choices for higher education. The availability of these options should, one can reason, fill the void left by the demise of the SNPHEIs. This reasoning is not entirely convincing, however, because each of these options themselves have significant barriers or risks.

Firstly, I looked at public HEIs as an option to mitigate SNPHEI decline. While the state funded public higher education sector may be the most affordable and available alternative to SNPHEIs, it is also on tenuous financial ground (Maskooki & Maskooki, 2012). Furthermore, Mitchell et al. (2014) pointed out that state funding for higher education remains significantly below the funding levels that existed before the Great

Recession. This does not rhyme well with financial survivability of state publicly funded HEIs; whose business model depends heavily on state funding for their existence.

Academic output is another variable by which researchers should evaluate alternatives to SNPHEIs. Not only does the underfunding of public institutions of higher education make them a less than sure and long-term option to the SNPHEI, but the academic output as measured by graduation rates also makes state funded public institutions less likely to fill the void left, should the demise of the SNPHEIs not be averted. The NCES (2015b) recent data showed a disparity in graduation rates, with public institutions graduating 52% of enrolled students with a four-year college degree. By comparison, SNPHEIs graduated 61% of enrolled students, thus making a strong case that attending a SNPHEI increases the likelihood of completing a four-year college degree (Dwyer et al., 2012).

Secondly the large private PHEI could be offered as an alternative to fill the void left by a potential collapse or decline of the SNPHEI subsector. However, it should be noted that the larger PHEIs have one significant limitation–their affordability (Delaney, 2014), which to a large extent undermines their chances of filling the void that may be left by a possible demise of the SNPHEIs (Vedder, 2012). Even with tuition discounting as high as 49.9% on average according to the NACUBO (2014), the tuition in larger PHEIs is still higher. Tuition in larger PHEIs is still higher even in spite of tuition discounting because, as reported in the NACUBO study, students are more likely to receive bigger discounts from SNPHEIs compared to discounts available in large PHEIs. This higher pricing in large PHEIs does not make the large PHEI a favorable option to the SNPHEI.

Another important limitation of the larger PHEI is the higher selectiveness of these larger PHEIs compared to the selectiveness of SNPHEIS (Gaddis, 2014). The more stringent entrance requirements in larger PHEIs may exclude many potential students who would otherwise meet the entrance requirements of the SNPHEIs (Smith, Pender, & Howell, 2013). Hence the larger PHEIs may not be an available option to students who would otherwise gain acceptance into an SNPHEI.

On a micro level, individual SNPHEIs have at their disposal some effective counter measures against the adverse economic conditions that threaten their survival. In the previous section I discussed macro level countermeasures that the HEI industry as a whole could deploy to withstand the adverse economic conditions. Here in this section I looked at micro level counter measures available to individual SNPHEIs.

Scholars and industry experts pointed out certain strategic shifts SNPHEIs can make to mitigate the extant economic challenges. For example Denneen and Dretler (2012) recommended a shift to a more entrepreneurial revenue model. Driscoll, Comm, and Mathaisel (2013) have posited five core "abilities" a higher education institution should include in any change strategy designed to develop and boost economic and organizational sustainability. These core abilities are: (a) availability, (b) dependability, (c) capability, (d) affordability, and (e) marketability.

Taking a slightly more radical perspective, others suggested that disruptive innovation in higher education can be a viable basis for a change in business model (Meyer, 2010; Sheets, Crawford, & Soares, 2012). Markides (2006) defined disruptive innovation in terms of business model innovation where organizations discover innovative ways of enlarging their market share. These innovative ways of market share

enlargement tend to be unconventional and may even create chaotic operations as the organization transitions from conventional to unconventional strategies (Markides, 2006).

Underlying Contributing Factors to the Economic Decline of SNPHEI Subsector

Several factors contributed to the decline in the SNPHEI subsector. Many of these factors fall into a broad discussion of whether the SNPHEI business model is sustainable or not. Some experts, such as Bentes, Carneiro, da Silva, and Kimura (2012), identified as many as twenty organizational performance indicators that reliably described a business model and business performance. Lyken-Segosebe and Shepherd (2013) have distilled the list of contributing factors down to as few as ten. Lyken-Segosebe and Shepherd analyzed the financial data on 57 SNPHEIs between 2004 and 2013 from the Integrated Postsecondary Education Data System (IPEDS). They identified ten commonly occurring risk factors present in defunct SNPHEIs. Lyken-Segosebe and Shepherd (2013) further summarized the ten risk factors into three broad categories that represent the underlying economic risk factors facing the SNPHEIs. These three broad categories were: (a) relatively high dependence on tuition; (b) limited or decreasing enrollments; and (c) abnormally high capital expenditures and debt service (Lyken-Segosebe & Shepherd, 2013). Denneen and Dretler (2012), Bogaty (2013) and Levy (2011) concurred with the conclusions drawn by Lyken-Segosebe and Shepherd.

Certain operational characteristics in an organization such as a SNPHEI, could exacerbate the negative impact of existing negative economic conditions. Guerrero and Urbano (2012) posited that the absence of an entrepreneurial business model can amplify the negative economic impact on a college or university. In support of Guerrero and Urbano's (2012) position, Denneen and Dretler (2012) called for radical changes in the

business and revenue models of the SNPHEI as a countermeasure to the declining economic strength plaguing the SNPHEI.

In this study I focused on those contributing factors that align with the economic or business profitability and sustainability of the SNPHEI. More specifically, I looked at factors that contributed to an SNPHEIs financial performance and how those factors related to the SNPHEI's organizational culture. These contributing factors were (a) enrollment size of student body, (b) limited or declining endowment funds, (c) tuition dependency, (d) limited access to capital, (e) social changes, and (f) OC versus business operation model.

Enrollment size. Small enrollment is a significant contributing factor to the economic decline in SNPHEI. Dew (2012) specifically identified HEIs that he described as *"small"* as HEIs that may find it difficult to survive the economic adversity. Furthermore, Bogaty (2013) indicated that of the nonprofit HEIs that are failing, that those defined as *"small"* are most likely to be failing. Zumeta and LaSota (2010) provided enrollment numbers of 5,000 students or fewer as a definition of *small.* Martin and Samuels (2013) listed enrollments under 1,000 students as one of their 20 at-risk indicators, further supporting the idea that SNPHEIs are inherently more susceptible to financial distress.

Not only does a small enrollment present an economic challenge to the SNPHEI, but enrollment numbers per SNPHEI are also declining in the SNPHEI subsector. According to the NSCRC (2015), enrollment in SNPHEIs with fewer than 3,000 students declined by 2.4% in Spring 2015. In the same period, PHEIs with 10,000 or more students saw enrollment increase by 2.0%. The 2.4% decline was greater than the overall

decline over the entire of higher education industry which measured at 1.9%. The decline was more severe in community colleges where enrollment dropped 3.9% and in for-profit HEIs where enrollment fell 4.9% (NSCRC, 2015). These trends of declining enrollments in the SNPHEI subsector only serve to exacerbate the risk factor of enrollment size for an SNPHEI.

Another related risk factor facing SNPHEIs is declining tuition. The risk factor of declining tuition when coupled with declining enrollments create a significant barrier to the economic growth of SNPHEIs (Chabotar, 2010). This coupling of declining tuition and declining enrollments is particularly fiscally debilitating to the SNPHEIs because of the SNPHEIs' overdependence on tuition (Chabotar, 2010).

Within the HEI industry, an HEI's endowment fund income can offset the negative impact of declining tuition revenue. Endowment funds are used to attract more students by offering either full or partial tuition support, hence boosting the enrollment numbers to more sustainable levels. However, the current endowments of many, if not all, SNPHEIs cannot be such an ameliorating force because at least 75% of SNPHEIs tend to have comparatively smaller endowments (Commonfund Institute, 2014). Once again, the adverse financial outlooks for SNPHEIs is made worst by an inherent characteristic of an SNPHEIs i.e. their lower than average endowment fund amounts.

A key factor contributing to declining enrollments in SNPHEIs is the declining demand for colleges for targeted subcultures. SNPHEIs have historically been important for three groups: minorities (African Americans in particular), women, and religiously affiliated or controlled. Historically, colleges targeting these populations were necessary because of their exclusion from public colleges or, in the case of religious affiliated

subcultures, the subculture was self-excluded in their desire to ensure their children have a religious focused higher education. Levy (2011) identified that at least in the case of religiously affiliated SNPHEIs the need for religiously affiliated SNPHEIs maybe declining. Levy pointed to the decreasing enrollments and a decaying financial viability of Catholic colleges and universities, which paralleled the declining number of Catholics per capita in America.

Female enrollees are another targeted subculture where societal changes maybe causing an enrollment decline in some SNPHEIs. Levy (2011) discussed the increasing acceptance of women enrolling in higher education as a factor contributing to the decline in a need for gender-based women colleges and universities (Levy, 2011). Other scholars like Palmer and Zajonk (2010) have also attributed the decline of SNPHEIs to social or socio-political reasons. Palmer and Zajonk contended that, for example, historically black colleges and universities (HBCUs), which represent a significant subset of SNPHEIs, came into existence pursuant to a social contract between emancipated African Americans and America. However, HBCUs' enrollments declined with the passage of the landmark Civil Rights Act of 1964, and the U.S. Supreme Court rulings in such milestone cases as *Brown v. Board of Education* (1954) and *Adams v. Richardson* (1972). The implementation of the federal financial aid programs in the 1960s and 1970s, and the comprehensive federal affirmative action policies also contributed to the decline in HBCUs' student enrollments (Palmer & Zajonk, 2010).

Another indicator of an unsustainable business model in the SNPHEI subsector of U.S. higher education is the heavy dependence on tuition and fees as a revenue source. This heavy dependency on tuition and fees is a common characteristic of the SNPHEIs,

which makes them much more susceptible to the current economic challenges. In this regard, the United States Government Accountability Office (GAO) in its 2014 report to the U.S. Senate, indicated that for the ten years between 1999 and 2009 both public and private HEIs saw a sharp increase in their dependence on tuition and fees as a major revenue stream. The GAO (2014) also reported that while public institutions saw an increase from 17% to 24% of total revenues coming from tuition and fees, the PHEIs demonstrate significantly higher reliance on tuition and fees, with their share increasing from 29% to 41%. This growing trend towards *tuition-dependent* institutions, while is concerning to all PHEIs, is more economically debilitating to SNPHEIs.

Tuition-dependent institutions are specifically and narrowly defined. Kirstein and Hurlburt (2012) defined a tuition dependent institution as one that receives 60% or more of its revenues directly from tuition (Kirstein & Hurlburt, 2012). The U.S. Department of Treasury (2015) used a more extreme scale to measure tuition dependency. The researchers at the U.S. Department of Treasury (2015) established that a SNHPEI that generates 70% or more of revenues from tuition as a "heavily tuition dependent" SNPHEI. From a study of over 500 colleges and universities, Moody's Investor Service found that PHEIs as a whole derived approximately 67% of their revenues from tuition and auxiliary fees (Bogaty, 2013). Synthesizing a range from these three sources, 60%-85% tuition dependency rates would render a SNPHEI as overly tuition dependent and thus more financially susceptible to the negative economic outlook facing the entire HEI industry.

State appropriations for HEI also impact tuition dependence in SNPHEIs. The increased dependence on tuition and fees has been driven, in the public institutions of

higher education, by declining direct state appropriations for higher education (Hemelt & Marcotte, 2011). Additionally, even PHEIs were affected by this negative trend and saw decreases of between 60% and 65% in revenues coming from state and locally supported tuition appropriations (GAO, 2014). On the other hand, one of the primary contributing factors to the increasing dependence on tuition and fees in SNPHEIs stems from declining endowment funding (NACUBO, 2016; Weisbrod & Asch, 2010).

Limited or declining endowments. Another indicator of an unsustainable business model is low endowment funds. Endowment funds provide economic stability, sound basis for long-term planning, and also provide operating income to supplement tuition and fees (American Council on Education [ACE], 2014). The SNPHEI's lack of sufficient endowment funds or their lack of any endowment funds at all, is a major contributing factor to the SNPHEI's economic vulnerability (Chabotar, 2010). Lower endowment funds, when coupled with higher tuition dependency does not bode well for SNPHEIs.

Among HEIs as a whole, endowment fund levels have grown. However notwithstanding a phenomenal growth in overall size of total dollars held by all college and university endowments from $103 billion in 1991 to $529 billion in 2015 (Milton & Ehrenberg, 2014; NACUBO, 2016), the SNPHEIs have not benefited from this phenomenal growth. Any growth in average endowment funds among SNPHEI's pales by comparison to the average endowment fund growth rate among the top 1-2% of private colleges and universities like Stanford University, Yale or Harvard. These HEIs have endowment funds in excess of one billion dollars each (ACE, 2014; NACUBO, 2015; Weisbrod & Asch, 2010). While the $529 billion in endowments is spread out over

812 colleges and universities, $395 billion of the $529 billion (or 74.7%) was held by (NACUBO, 2016). This 11.6% of the colleges and universities that hold the lion share of the 529 billion dollars in endowment are the larger universities. The SNPHEI share of this endowment pool is approximately between 15–20%, which is significantly lower than the 74.7% share held by the large private institutions and in many cases SNPHEIs have little or no dollars in endowment funds.

As of 2014, only 62 of the approximately 4,500 accredited colleges and universities had endowment funds over one billion dollars, while 54% had endowments under $10 million with the median endowment at private colleges and universities at $7.9 million (ACE, 2014).

One meaningful way to measure endowment funds is the average endowment dollars per full time equivalent (FTE) student. Seventy-five percent of SNPHEIs have an average endowment of $15,588 per FTE student (NACUBO, 2015). Furthermore, in 2015, the median endowment for a typical SNPHEI was $13,017 per FTE student, while in comparison, large well-endowed private universities as a group, commanded a median endowment of $34,876 per FTE student, according to the latest study (NACUBO, 2016). Many smaller nonprofit private liberal arts colleges, which make up the larger share of the SNPHEI subsector, have limited endowment funds, and according to Weisbrod and Asch (2010), 11% have no endowment funds at all.

Endowment funds provide economic stability, sound basis for long-term planning, and also provide operating income to supplement tuition and fees (ACE, 2014). The SNPHEI's lack of sufficient endowment funds or their lack of any endowment funds at all is a major contributing factor to the SNPHEI's economic vulnerability (Chabotar,

2010). Listing “imperiled endowments” as one of the indicators of the broken business model in SNPHEIs subsector, Grajek (2011) noted that the imperiled endowments present a challenge to rebuilding a sustainable and profitable business model. Researchers at the ACE (2014) have well documented the correlation between SNPHEIs’ endowment levels and their economic stability. According to this report, there were three key benefits of endowments: (a) investment earnings from endowments tend to be more consistent, even given market fluctuations, than other revenue sources such as tuition or donor gifts; (b) endowments allow an institution to keep tuition pricing lower, which is a significant competitive advantage over other HEIs that raise tuition and fees to cover rising costs; and finally, (c) endowments enhance reliability of long-term organizational planning (ACE, 2014). College endowments are managed to preserve the principal and only use investment earnings from the endowment. This endowment management model makes it easier for colleges and universities to engage in long-term planning and forecasting of the investment earnings from their endowment funds. Long term planning also gives the endowment managers the ability to adjust their forecasts for economic and market conditions such as fluctuating interest rates or projected core inflation (ACE, 2014).

While the SNPHEI typically is under-endowed, even the large nonprofit private institutions of higher education with large endowment funds have their unique endowment challenges. These challenges stemmed from the significant economic challenges in the wake of the stock market declines between July 2008 and March 2009; with endowment funds losing on average 23% of their values (Weisbrod & Asch, 2010). This market loss in endowment values had negative effects on those SNPHEIs with

already meagre endowment funds, even more so than the larger nonprofit PHEIs (Chabotar, 2010).

A fourth critical relationship between endowments and the economics of a SNPHEI is the relationship to operating budget support (Goetzman & Oster, 2012). The Commonfund Institute (2014) looked into the operating budgets of 629 nonprofit PHEIs and their analysts found that SNPHEIs with large endowments derive an average of 17% of their operating budget from endowments compared to only 10% as the average for all universities. In comparison, Yale University, whose endowment is in the top 3% in terms of endowment size, derived 42% of its operating budget support from endowment (Commonfund Institute, 2014). Thus, as can be seen from these financial data, the limited endowments of many, if not all, SNPHEIs makes many benefits available to PHEIs with large endowments, unavailable to SNPHEIs with small endowments. Consequently being deprived of these benefits renders SNPHEIs more susceptible than their larger PHEI counterparts, to the adverse effects of economic downturns and possible organizational demise.

Another factor that is relevant to the financial sustainability outlook for SNPHEIs is the factor of social changes. While researchers like Schwarz (2013) and Denneen and Dretler (2012), highlighted financial reasons for the negative outlook facing SNPHEIs, other researchers like Levy (2011) or Palmer and Zajonk (2010) have identified several social factors that may have contributed to the financial uncertainty facing SNPHEIs. For instance, Levy identified two significant social developments that he considered as contributing to the threat to SNPHEIs. In particular, Levy posited that the decline of social subcultures that created the need for a specific type of SNPHEI in the first place

has had a negative impact on SNPHEIs. In this case, Levy was referring to parochial schools whose existence depended on a religious following. In support of this point Levy cited the decline of enrollment and financial viability of Catholic colleges and universities, which mirrored the decreasing percentage of Catholics per capita in America.

Secondly, changing social norms, even positive changes, have contributed to the decline of SNPHEIs. According to Levy (2011), the change in society's acceptance of women enrolling in higher education as a positive change in social reality that has precipitated the decline in a need for gender-based women colleges and universities. Levy summarized his scholarly position stressing the notion that most declines in private higher education can be attributed to sociological or political rather than to economic reasons alone.

Levy's position, however, stood in sharp contrast with many other researchers. Many researchers placed the root cause of the decline in private higher education on the economic stresses affecting this subsector of higher education industry brought about by rising tuition rates and declining enrollments (Barr & Turner, 2015; Barringer, 2013; Hansmann, 2012; Sheets et al., 2012). The contrarian view of Levy may be attributed in part to the fact that study was more global in its scope. Levy looked at private education not only in the U.S., but also in several other regions of the world.

Other scholars like Palmer and Zajonk (2010) also attributed the decline of SNPHEIs to social or socio-political reasons. Palmer and Zajonk cited the advent of historically black colleges and universities (HBCUs), as an example of how socio-political factors impact the strength of SNPHEIs. HBCUs represent a significant subset of

SNPHEIs, and they came into existence as a result of social contract between emancipated African Americans and America (Palmer & Zajonk, 2010). However, HBCUs' enrollments had declined with the passage of the landmark Civil Rights Act of 1964, and the U.S. Supreme Court rulings in such milestone cases as *Brown v. Board of Education* (1954) and *Adams v. Richardson* (1972). The implementation of the federal financial aid programs in the 1960s and 1970s, and the comprehensive federal affirmative action policies also contributed to the decline in HBCUs' student enrollments (Palmer & Zajonk, 2010).

Summary and Conclusions

In the literature review I identified and analyzed the body of completed and ongoing research produced by scholars and practitioners in the field of U.S. higher education and especially SNPHEIs, their existing problems, and their public policy, economic, social implications and historical context. I looked at possible contributing factors to the economic plight facing the SNPHEI. One such possible contributing factor I focused on was the OC within the SNPHEI. The literature I cited and discussed in the literature review have directly and explicitly focused on the two variables (SNPHEI profitability and organizational culture) while simultaneously focused on themes related to these variables. The variables of this study were the OC (independent variable) and the economic sustainability of the SNPHEI measured by annual profit (dependent variable).

From the literature search I found that the U.S. higher education receives substantial research attention. I found substantial research attention in the large number of policy studies on various aspects of this sector of the HEI industry sector. Yet, there exists a relative scarcity of well-designed policy studies that specifically examined

SNPHEIs and the relationship between an SNPHEI's OC and their economic sustainability and profitability.

The findings of the sources reviewed in this literature review can be summarized in five key points. Firstly, the literature showed that SNPHEIs are an important component of the U.S. higher education sector. They serve specific target populations and have deep roots in their respective communities. These institutions have long history of providing a high value education and they remain popular choice for prospective students.

Secondly, available empirical evidence showed that serious organizational challenges currently exist in many SNPHEIs. These challenges are brought about by factors including declining revenues, small enrollment sizes, tuition dependent revenue mixes, insolvency, and limited access to capital. These factors are the primary factors that are contributory to organizational challenges in SNPHEIs. Implementation of organizational cultures that facilitate change and market responsiveness is one effective way to address these organizational challenges.

Thirdly, the challenges SNPHEIs face have far-reaching negative effects on the U.S. education policy, labor and employment policies, and social policy implications (reduced institutional availability, compromised student affordability, diminished educational opportunity and undermined institutional diversity). These effects and implications are felt at all levels of public policy such as local government, federal, state and even impacting US global competitiveness which impacts global policy.

Fourthly, a change in their dominant business model of an SNPHEI can make a positive impact on the organizational sustainability of SNPHEIs as an institutional type.

In the literature I reviewed, I found some consensus that within HEI as a whole and more so within SNPHEIs, current business practices, processes and outcomes appear obsolete. This obsolescence, according to the literature by scholars such as Denneen and Dretler (2012) is a barrier to SNPHEIs successfully adapting to new economic and policy realities.

Fifthly, a viable change in the prevailing business model of SNPHEIs is possible through radical and purposeful organizational transformation mediated by organizational culture. However, to achieve such successful transformative organizational change such factors as organizational readiness, responsiveness and resistance to change have to be addressed, which will require that the SNPHEI diagnose and change OC paradigms.

The review of the literature showed an abundance of literature on the economic strain the higher education industry as a whole and among SNPHEIs in particular which are more adversely affected by this economic strain. The literature also showed that OC can impact organizational performance including organizational financial performance.

What is not well established in the literature was the narrower scope of how OC affects financial organizational performance in SNPHEIs in particular. It is in this narrower scope of organizational performance within SNPHEs that the scope of my study will be focusing in an attempt to extend the knowledge in the field of study.

In Chapter 3 I discuss the methodology that aligns with the theoretical foundation, the research questions, hypotheses and variables discussed in Chapter 2.

Chapter 3: Research Method

The purpose of the study was to investigate the OCs prevalent within SNPHEIs and to explore any correlations that may exist between OC and the financial sustainability profitability of the SNPHEIs as measured by the SNPHEIs profitability. I used a quantitative methodology, because I sought to confirm or disprove a narrow hypothesis, that is, whether there was a relationship between the OC of a SNPHEI and its profitability.

In this chapter I discuss the following areas: (a) research design and rationale; (b) the methodology including the target population and population size, the sampling procedure, procedures for recruitment, participation and data collection and instrumentation considerations for the research; and (c) threats to validity and ethical procedures.

Research Design and Rationale

One key factor that impacts the research design is the variables. Creswell and Creswell (2017) recommended that, for sound research design, the selected design should align with the research variables. In this study, the dominant OC in the SNPHEI was the IV) and the profitability of the SNPHEIs was the DV). I also controlled for other variables of enrollment size and endowment size.

The research design was correlational. It was well suited for this study because it is ideal for exploring the relationships between two or more variables.

I looked at other research designs for compatibility with this study and found the ex post facto design. This design was compatible with my study because in this study I looked at data on phenomena that had already occurred (i.e., the profit earned by

SNPHEIs). Knowlton and Phillips (2013) indicated that ex post facto designs are well suited for studies of variables after the phenomenon under investigation has already occurred. The ex post facto research designs were also in alignment with the research questions. One critical point of alignment was that the variables cannot be manipulated by the investigator (Ravich & Riggan, 2013). The variables, OC of the SNPHEI and profitability of the SNPHEI, were both preexisting and could not be manipulated as they would be in an experimental or quasi-experimental methodology.

I used an ex post facto design, a research design in which phenomena being studied has already occurred or is already in existence. For example, I used my research questions to inquire about a SNPHEI's predominant OC type. The OC of an SNPHEI is a phenomenon that is already in existence. According to Knowlton and Phillips (2013), ex post facto research designs are well suited for variables, and therefore for research questions based on those variables, where the information being queried already exists.

Secondly, time and resource constraints are important considerations in selecting the research design. Every research study inherently has certain constraints that impact the success of the study. The theory of constraints (TOC) defined a constraint as "an important limiting factor that stands in the way of successfully achieving a goal" (Goldratt, 1998, p. 23). Most quantitative research designs, including correlational and ex post facto cross-sectional designs, are based on a project approach to implementation, and therefore, they have a specific pragmatic aspect–the research purpose. However, to achieve the stated research purpose, the utilized research design should factor in several time and resource constraints. Rand (2000) posited that researchers can systematically address time and resource constraints to reduce their negative influence on project

outcomes. Researchers should always consider time and resources constraints; particularly because they are the most challenging constraints; when deciding on the specific choice of research design (Black, 1999).

In this study, time was not a significant constraint. The topic of this research is OC and its relationship to the financial sustainability of the SNPHEIs. OCs do not change rapidly (Hatch, 1993; Schein, 2010), and also have a strong tendency for institutional isomorphism, i.e. relative homogeneity in OC types across institutions (Ashworth et al., 2009; DiMaggio & Powell, 1983; Frumkin & Galaskiewicz, 2004). Due to the limited scope of the study the research design, I anticipated variation cross-sectionally but no variation temporally over time. The selected research design properly addressed the majority of resource constraints. These resource constraints are: (a) the design choice is not resource intensive, (b) the target population of research participants will not be difficult to identify and recruit, (c) the data collection and analysis methods will be inexpensive (most financial data was available from public sources, access for a fee will not be required, etc.), and finally (d) the selected design is not associated with excessive analytic complexity.

Thirdly, when designing a study, the researcher should consider how the study would advance knowledge in the field of study. This study is in the field of public policy and more specifically in the field of public policy as it relates to policy choices SNPHEIs might consider that help them maintain economic sustainability. According to Dunn (2011) the field of public policy studies policy choices. For SNPHEIs, the choice of an operating business model represents a policy choice, within which organizational

decision-makers execute smaller, routine policy choices. The OC has a direct effect on what policy choices to select both strategically and tactically (Clark, 2015).

Public policy scholars have long recognized that individual and collective policymakers can produce better outcomes if they are consistent in relying on rigorous evidence to inform specific policy options and choices (Dilnot, 2012; Dunn, 2011). Such an approach, known as evidenced-based policymaking (Patton, Sawicki, & Clark, 2015), fosters greater efficiency and effectiveness in identifying, analyzing, selecting, funding and implementing policy options. In this study I have provided evidence-based insights into SNPHEIs, the extant economic challenges they face and the public policy environment in which SNPHEI's exist. These insights would advance knowledge in the field of public policy by informing both public policy makers and HEI policy makers of choices they can make to improve the financial sustainability of the SNPHEI subsector.

My focus in this study was to explore the relationship between the dominant OC and the financial sustainability of the SNPHEIs. More specifically, in this study I sought to explore: (a) the effects of OC on the economic choices key policy decision-makers select and implement, (b) the effects of such policy choices on the long-term survival of the SNPHEIs, and (c) on feasible policy options available to key policy-decision makers to prevent organizational collapse of these unique institutions of higher education. Given this focus, the selected research design is consistent with research designs needed to advance knowledge in the fields of education policy and analysis for the following two reasons. First, I used the selected design to reach objective conclusions, which form the basis for evidence-based policy making and research. Second, because the data for my study was collected using a validated instrument (OCAI) from a subset (Georgia only) of

all SNPHEIs representative of the entire population of these institutions of higher education, the selected research design allowed for making broad policy generalizations and suggesting viable policy options.

Methods

Study Population

The population of the study are nonprofit private colleges and universities in the state of Georgia with student enrollment under 5,000. CollegeData (2013), referred to these private colleges and universities with fewer than 5,000 enrollees as small colleges. According to the 2016 statistical data, there are 59 small private nonprofit colleges and universities in Georgia (NCES, 2016).

Sample and Sampling Procedures

The population for the study was small enough, therefore a census was performed. As such, because I used a census approach to data collection, there was not a need for sampling at the institutional level. The key advantage of a census approach is that the results are more accurate when compared to a sampling method. In a census method the sampling variance is zero.

Within each institution surveyed, I asked the entire faculty and staff to participate in the study. However, a minimum response rate of 51% of the total number of faculty and staff at a SNPHEI was set as a threshold to accept the results from that SNPHEI as representative of the SNPHEI.

One key disadvantage of the census method is that the census method requires more time compared to a sampling method. However, because the data collection instrument and data sources are easily accessible, the additional time required to

administer a census method is considered a beneficial cost in light of the higher degree of accuracy to be gained by a census method. Additionally, with the census approach, there might be issues of selection bias, if those who choose to participate are not representative of the population.

I selected the SNPHEIs for this study from a NCES (2016) national database listing of all HEIs. From this national list I further selected HEIs in the state of Georgia, which have enrollments under 5,000. I found 59 SNPHEIs in Georgia based on this list. Considerations such as sample size, sampling frame, power analysis are not relevant because in this study I am using a census rather than a sample. These considerations are not relevant when using a census method (Baffour, King, & Valente, 2013).

Recruitment, Participation, and Data Collection

As part of this recruiting process, I secured the permission of the SNPHEI to send the OCAI to all SNPHEI staff and faculty. After securing permission, I sent the OCAI to all the selected SNPHEI staff and faculty. To protect the privacy of the selected staff and faculty, I provided an email link to the web based OCAI to the respondents. I also gave complete instructions to the respondents. The respondents responded confidentially, and I maintained all results in strict privacy.

The faculty and staff respondents were given a choice of one of three free eBooks as an incentive for their participation. No one claimed the free eBook but several of the SNPHEIs requested copy of completed published dissertation.

Informed Consent

Federal regulations mandate that researchers ensure that they obtain legally effective informed consent before the recruited individual's participation in a study. In

the following paragraphs I have outlined below the process I used to obtain informed consent. There were three guiding principles that I followed that ensured the informed consent was legally effective.

Informed consent is legally effective if: (a) it is obtained from the subject or the subject's legally authorized representative; (b) it is documented in a manner that is consistent with the federal regulations on protection of human subjects (DHHS, FDA) and with the applicable laws of the jurisdiction in which the researcher conducts the research; and (c) the researcher obtained it under circumstances that: (a) provide the prospective subject or the legally authorized representative sufficient opportunity to consider whether to participate in the research, (b) minimize the possibility of coercion or undue influence, and (c) respects the privacy of the potential participant by taking place in a setting that is not open to the public.

In this research I implemented the following steps to ensure that a legally effective informed consent was received. These steps incorporated the three guiding principles discussed previously.

Step 1: Determining who may obtain informed consent. As the principal researcher, I was responsible for obtaining the informed consent. Because this was a web-based survey, the respondents provided informed consent as the first step of the web survey prior to them beginning the survey responses.

Step 2: Determine when and where I will obtain the informed consent. I obtained the informed consent at the time the respondent began the OCAI. I acquired the informed consent by using a consent e-form on the front page of the OCAI prior to the respondent beginning the survey.

Step 3: Determining from whom I could obtain consent. I obtained the informed consent from each respondent. I provided a copy of an informed consent request document to the SNPHEI representative for their records.

Ethical treatment of research participants. All research participants of the study were provided with a consent e-form before they agreed to participate in the current research. I used the consent e-forms to communicate to the participants all expectations expected of them as a participant in this research. The completed consent e-forms were collected, and I asked the subjects to select the "I consent to take this survey" button before starting the survey. I designed the online survey to ensure that I did not collect any personal identification information on the survey. To ensure full protection of research participants' identity and privacy, I was the only person that had password-protected access to the electronic repository.

I took steps that ensured that the research participants were informed about all research protocols, data collection and data analysis procedures, and applicable research ethics standards as recommended by Sieber and Tolich (2013). One such step was that the participants were able to download from the survey site an e-copy of their rights as a research participant (Department of Health, Education & Welfare, 1979; United States Congress, 1974; World Medical Association, 1964).

Data Collection Procedures

Four distinct sets of data were collected: (a) OC type, (b) profitability data, (c) endowment fund size, and (d) enrollment size. I collected data on OC of the SNPHEI through the OCAI instrument via an online survey. I retrieved data on annual profitability from archival data from publicly available tax returns (Form 990) which SNPHEIs are

required to file annually. I also compiled additional profitability data from the SNPHEI's annual reports. I compiled endowment data from data compiled by the NACUBO and Commonfund Institute (NACUBO, 2016) in their report on endowment funds of colleges and universities. Enrollment size data was collected from annual reports of the SNPHEI and also from archival data repositories such as the NCES, which is a department within the US Department of Education and the Institute of Education Sciences. The NCES is the primary federal entity for collecting and analyzing data related to education in the U.S. and fulfills a Congressional mandate to collect, collate, analyze, and report complete statistics on the condition of American education.

Data collection process–OCAI. Collecting OC data was done using the OCAI instrument. The respondent completed the OCAI survey questions that I used to assess six key characteristics of their SNPHEI's organizational culture. These six characteristics are: (a) dominant characteristics (b) organizational leadership (c) management of employees (d) organization glue (e) strategic emphases and (f) criteria of success. By averaging all individual OCAI scores using the OCAI methodology, I was able to ascertain the OC profile of the SNPHEI.

No personal demographic information, other than the SNPHEI where the respondent is employed by, was collected from the respondents and I administered the study anonymously.

Archival data collection–profitability, enrollment and endowment. In addition to OCAI data on organizational culture, I collected archival data on profitability, enrollment and endowment size. I collected these data archival from reliable attested sources such as the Internal Revenue Service, audited financial annual reports, the US

Dept. of Education National Center of Education Statistics and the NACUBO and Commonfund Institute (NACUBO). The NACUBO is an organization of 2,100 HEIs whose mission is to promote and support the economic viability of HEIs in fulfillment of their missions.

Archival data were publicly available through such sources as such as the Internal Revenue Service, audited financial annual reports, the U.S. Department of Education National Center of Education Statistics and the NACUBO and Commonfund Institute (NACUBO). No special permissions were needed to access this data.

These sources were the best sources for this data because information filed on tax returns are certified to be true by the filer, who is the SNPHEI. In audited financial information, the auditor certifies information to be accurate. Data from the U.S. Department of Education National Center of Education Statistics and the NACUBO and Commonfund Institute (NACUBO) are also reliable because the data undergo several levels of vetting before it is published.

Archival data were compiled into an Excel spreadsheet for further analysis and further analyzed using SPSS.

Instrumentation and Operationalization of Constructs

Instrumentation

The data collection instrument used in this study was the OCAI (Cameron & Quinn, 2011, pp. 27-33). A copy of the OCAI is in Appendix B of this study. Cameron and Quinn developed the OCAI in 2006 as a psychometric tool to study organizational cultures (Suderman, 2012) using four conceptual quadrants: (a) adhocracy, (b) clan, (c)

hierarchy, or (d) market. In this study I adopted the OCAI as a whole and used the questions that make up the OCAI instrument.

I selected the OCAI because it directly operationalizes the CVF theory, which formed the basis for the theoretical framework of this study. Other reasons I selected the OCAI were because of its wide use and high credibility. The OCAI is widely used among researchers in the field of OC (Fralinger & Olson, 2007), and has gained high credibility within the OC scholarly and practice communities (Berrio, 2003; Suderman, 2012; Yu & Wu, 2009). Furthermore, researchers have used the OCAI instrument extensively to assess OC. The OCAI is also credible because two leading scholars in the OC field, Cameron and Quinn (2011) developed the OCAI. Cameron and Quinn (2011) were also the authors of the CVF theory.

Ease of use for the respondents was another factor that I considered in the choice of an instrument. The OCAI can be self-administered and it is web-based. Both factors make the OCAI easy to implement for practical research purposes. Over the last few years web based self-administered surveys have become increasingly utilized by scholars and researchers (Burnett, 2016). Furthermore, Burnett conducted a study that showed that online respondents were more likely to give correct answers than traditional pen and paper respondents.

Permission to use OCAI. The permission to use the OCAI was secured from Cameron and Quinn. I adapted the OCAI instrument questions to a Survey Monkey web platform. Additionally, I ensured that access to the OCAI on Survey Monkey was encrypted and secure.

Instrumentation Reliability and Validity

Reliability is a measure of the consistency of results over time and the replicability of results using similar research methods (Letherby & Williams, 2013). Reliability also measures how well the sample results reflect the characteristics of the population. In light of this definition, using the survey method presents some reliability issues a researcher must consider.

Firstly, the research participants may respond differently to the same survey administered at different times. To address this issue, Golafshani (2003) suggested that research participants taking a survey for the second time may have been sensitized to the issue, and thus their second responses could be informed by their new sensitivity or awareness of the issue. However, the likelihood of a respondent in this study having previously taken the OCAI is low because as the literature review showed, there have been few studies done on OC in SNPHEIs and I found no studies done in the state of Georgia.

Secondly, survey methods present instrument reliability issues, which reflect the effectiveness of the survey instrument itself. The OCAI has been widely used in extant research on similar topics, and it is one of the most frequently used data collection instruments in OC studies. Thus, the effectiveness of the OCAI has been extensively tested and it is generally considered a reliable data collection instrument (Fralinger & Olson, 2007; Suderman, 2012).

Several researchers performed studies for the sole purpose of testing the validity of the OCAI as a tool to assess organizational culture. Heritage, Pollock, and Roberts (2014) found that the psychometric properties and validity of the OCAI rendered it a

viable instrument in measuring organizational culture. They found that the OCAI showed predictive validity and that the OCAI is a sound instrument in the study of organizational cultures.

In this study, validity was determined by how well I was able to use my research to measure the relationship between the OC in SNPHEIs and the SNPHEI's. Construct validity, as discussed by Frankfort-Nachmias and Nachmias (2014), assesses how well the measuring instrument complements the theoretical framework of the study. In my research study, I selected the OCAI as my data collection instrument. The same theorists who developed the CVF theory also developed the OCAI. One form of content validity known as face validity looks at how well the survey method is suited to yield empirical results on the issue under study (Letherby & Williams, 2013).

Face validity was also an important consideration for me in selecting an instrument. The same reasons cited for construct validity also make the OCAI a face valid instrument. Face validity is a superficial assessment as to the validity of an instrument or whether the instrument appears to be valid (Nevo, 1985). The widespread usage of the OCAI also contributes to the face validity of the OCAI. Over 10,000 companies and 100,000 respondents worldwide have used the OCAI (Suderman, 2012).

In the current research, content validity is relevant to whether the OCAI covers the concept of OC. Sampling validity, which is the other form of content validity, is of concern because of the data collection instrument utilized in this study. Sampling validity is relevant in determining whether the questions on a survey effectively characterized the concept that the researcher is studying (Frankfort-Nachmias & Nachmias, 2014, p. 150).

In the context of the current research, this means that sampling validity indicated whether the questions on the OCAI were applicable to OC in SNPHEIs.

Data Analysis Plan

The four distinct sets of data I collected from the sources and instruments outlined thus far in this study were compiled into a single data set and analyzed through statistical analytical techniques. These analytical techniques included the use of Excel tables and SPSS.

The research questions are essential to the data analysis plan and will be restated here in the data analysis plan even though I stated them earlier in the study:

Descriptive questions:

RQ1: What are the most predominant OC types existing within SNPHEI with enrollments under 5,000 students?

RQ2: Which OC occurs with greatest frequency in SNPHEIs reporting operating losses on most recent Form 990?

RQ3: Which OC occurs most frequently in SNPHEIs reporting operating profits on their most recent Form 990?

Comparative questions:

RQ4: What is the predominant OC in SNPHEI's that report a profit on their most recent Form 990 compared to the predominant OC in SNPHEIs that report a profit on their most recent Form 990?

The study hypotheses were**:**

$H_{1:}$ There is a positive relationship between an SNPHEI's profitability and the presence of a market culture, compared to other types of organizational cultures.

H_0: There is no relationship between the existence of a market culture within an SNPHEI and its profitability.

The analytical procedures I used in the data analysis of the independent variable hinged in large part on the nature of the independent variable of my study. The independent variable I used in this study is a polytomous categorical variable, also referred to as a nominal variable, because it has more than two or more categories but there is no intrinsic ordering to the categories. I scored and compiled the data I collected from the OCAI using the OCAI's scoring system designed to identify the dominant OC and rank all the OCs based on the OC's level of dominance within the SNPHEI. In this research study, I posited that the market OC would be the OC that is likely to yield greater profitability. In light of this, I dichotomized the OCAI scores after the initial ANOVA analysis examining the differences between the categories. I established the market OC as a binary choice of 0 = for nonmarket OCs and 1 = market OCs.

Additionally, I collected data on the other nondominant OCs that exist in each SNPHEI and ranked them based on their level of dominance. The OCAI results showed all OCs and their level of dominance within the SNPHEI. See example of data collection in Table 1.

Table 1

Data Collection Example

University	Dichotomized variable: 0 = Nonmarket, 1 = Market	The four index variables - levels of OC ranked by level of prevalence in the SNPHEI			
		Market	Clan	Adhocracy	Hierarchy
XYZ University	1	1	4	3	2
ABC College	0	2	1	2	3

I performed a linear regression to investigate the relationship between the independent and dependent variables. I used the linear regression analysis because it aligns well with research studies that seek to assess the extent of a relationship between a predictor variable, which is the independent variable, and a criterion variable which is the dependent variable. In this study, the market OC of the SNPHEI was the independent variable and the profitability of the SNPHEI was the dependent variable. In this study I controlled for enrollment and endowment size.

I used the following regression equation: $y = b1*x + \alpha$; where y = SNPHEI profitability, α = constant, b = regression coefficient and x = organizational culture of SNPHEI. In order to determine if the organizational culture (IV) had a predictive relationship towards profitability (DV) I used the F test and the *R*-squared was reported and utilized to determine how much variance in the profit of SNPHEI (DV) can be accounted for by the independent variable of organizational culture.

In this study I used the *t test* in the regression to determine the significance of the predictor and beta coefficients to determine the magnitude and direction of the relationship. For statistically significant models, for every one unit increase in the predictor, the dependent variable will increase or decrease by the number of unstandardized beta coefficients. The assumptions of a linear regression—linearity, multicollinearity, and homoscedasticity—were evaluated. Linearity assumes a straight-line relationship between the predictor variables and the criterion variable and homoscedasticity assumes that scores are normally distributed about the regression line. Multicollinearity is tested to make sure that two variables are not measuring the same thing.

Threats to Validity of the Study

Booth et al (2013) defined validity as "the degree to which a result of a study is likely to be true and free of bias, i.e. systematic errors" (Booth et al., 2013, p. 272). In this study, validity was determined by how well I utilized my research to measure the relationship between the OC in SNPHEIs and the SNPHEI's profitability is. Construct validity, as discussed by Frankfort-Nachmias and Nachmias (2014), assesses how well the measuring instrument complements the theoretical framework of the study.

Validity as a "measure of quality control" has two interconnected aspects: external validity and internal validity. The concept of external validity is where the researcher looks at the external question of whether the results remain truthful if subsequently applied to other analytical contexts, populations or objects different from the original investigation (Locke, Silverman, & Spirduso, 2012). Internal validity issues are internal to a study and focuses on whether the research has been designed in such a way so that it truly investigates what is being examined (Locke et al., 2012). Internal validity consists of face validity, content validity and construct validity (Rea & Parker, 1992). Carmines and Zeller (1979) defined construct validity as "the degree to which a research instrument measures what it is supposed to be measuring" (Carmines & Zeller, 1979). In this study, I used the OCAI as the research instrument. I discussed its construct validity of the OCAI below.

Threats to external validity. Any factors that undermine the generalizability of research results constitute threats to external validity (Brinberg & McGrath, 1988). The extant methodology literature identifies a wide range of most common threats to external validity: numerous selection biases, confounding issues, approximation concerns and

imprecise modeling, and finally maturation effects (Campbell & Fiske, 1959; Campbell & Stanley, 1963; Cook & Campbell, 1973). Based on my review of various external validity threats, I determined that only two factors were significant threats to external validity to my study.

Although differences may exist between SNPHEIs operating in Georgia compared to SNPHEIs in the rest of the U.S., my review of the extant literature suggested that all SNPHEIs experience the same or at least similar financial performance issues and challenges (Schwarz, 2013). Therefore, the sample selection from a specific geographic locale (i.e. state of Georgia) should still result in representative sample generalizable to the entire population of SNPHEIs in the U.S.

Generalizing across various measures for organizational financial performance was another significant threat to external validity. While there many different ways in which organizational financial performance (as a research construct) is measurable, in this study, I relied not on a single measure for each unit of analysis but on a multitude of reliable measures of financial performance most commonly used in the accounting and financial management disciplines. These measures are typically contained in annual financial reports of an SNPHEI, which have to be compliant with the Generally Accepted Accounting Principles (GAAP).

Threats to internal validity. Internal validity is concerned with the investigative rigor and the appropriateness of the selected research design (Brinberg & McGrath, 1988). The extant methodology literature identifies eight main threats to internal validity: maturation, history, testing, instrumentation, statistical techniques used, selection, sample

depletion, and interaction of threats (Carmines & Zeller, 1979; Reichardt & Gollob, 1989).

Some research scholars define “threats to internal validity” as events occurring in the research environment that substantially change the conditions of the study, affecting its outcome (Carmines & Zeller, 1979). In this study I researched SNPHEIs which; as the literature has shown are slow to make changes in their OC (Hayes, 2014). This slowness in adopting OC change removes any maturation risk in this study. Similarly, because the unit of analysis of the current study was an organization, statistical techniques and specific tests employed during the analyses were appropriate for the selected unit of analysis (Agresi & Finlay, 2011) and the relationships under investigation (Krzanowski, 2014; Newton & Rudestam, 2013).

I selected the OCAI as the data collection instrument for this study. The OCAI was developed by the same theorists who developed the CVF theory which makes it more likely that the survey method is well suited to yield empirical results in this study. One criteria for assessing of content validity, also known as face validity, is how well the survey method is suited to yield empirical results on the issue under study (Letherby & Williams, 2013).

Face validity was also an important consideration for me in selecting an instrument. The same reasons cited for construct validity also make the OCAI a face valid instrument. Face validity is a superficial assessment as to the validity of an instrument or whether the instrument appears to be valid (Nevo, 1985). The widespread usage of the OCAI also contributes to the face validity of the OCAI. Ten thousand

companies and 100,000 respondents worldwide have used the OCAI to assess and improve their OC (Suderman, 2012).

In the current research, content validity is relevant to whether the OCAI covers the concept of OC. Sampling validity, which is the other form of content validity, is of concern given the data collection instrument utilized in this study. Sampling validity is relevant in determining whether the questions on a survey effectively characterized the concept under study (Frankfort-Nachmias & Nachmias, 2014, p. 150). In the context of the current research, this means that sampling validity indicated whether the questions on the OCAI were applicable to OC in SNPHEIs.

Threats to construct validity. Construct validity is an integral part of internal validity concerns (Onwuegbuzie & Johnson, 2006). In this study, the main threat to construct validity was its instrumentation. In this study I utilized the OCAI to identify and describe dominant OC in a specific organization of the research sample, and then assigned it to one of the four main instrumentation constructs: adhocracy, clan, hierarchy or market (Cameron & Quinn, 2011). Researchers using the earlier versions of the OCAI found several threats to construct validity. Some of these threats included threats such as inexact definitions of constructs, imprecise boundaries between the utilized OC domains, and construct confounding (Papoutsakis, 2008). However, in its most current version, which I used in this study, the authors of the OCAI addressed these threats to construct validity of the OCAI as a measurement instrument (Jung et al., 2009). In addition to the authors' addressing previous deficiencies, the OCAI has been used extensively in research on OC (Fralinger & Olson, 2007; Suderman, 2012) and researchers are

continuously assessing its construct validity and the latest analyses support a four construct structure for both ideal and current OC perspectives (Heritage et al., 2014).

Ethical Procedures

Institutional review board approval is an essential part of completing a Walden dissertation. Approval from Walden's Institutional Review Board (IRB) was secured before conducting the study (Walden IRB approval# is 10-02-17-0313537). I used the IRB approval as additional source to vet the ethical impact of the study, and to evaluate the benefits and risks that I to which I could be subjecting my research participants. Additionally, IRB approval ensured (a) minimization of risk to research participants (b) equitable selection of participants and (c) that participants give informed consent. A significant part of my study included a web-based survey about organizational culture. Seeking and acquiring, the IRB approval was an important step in minimizing any confidentiality risks to participants. Additionally, I took steps to minimize confidentiality issues. One such step was I gained consent from participants on the web survey program, ensuring confidentiality.

Confidentiality. One critical ethical concern is confidentiality of research respondents. The complete and unconditional confidentiality of all research participants was assured for the entire duration of the study, and particularly during the process of data collection on OC. All data collected from the research participants were thoroughly and completely depersonalized, and specific identities of research participants cannot in any way or form be inferred from the final data sets.

Summary

I began Chapter 3 with a restatement of the purpose of my study and a recap of the nature of the study. I reiterated my rationale for selecting the quantitative method. The quantitaive method is well suited to studies that seek to confirm or disconfirm a narrow hypothesis, as was the case in my study. I then elaborated on the research design. I described my study as a correlational and an ex post facto design and provided the rationale for the selection of these two design elements. Aligning a study to a research design is an important consideration for sound research (Cresswell and Cresswell, 2017).

My data collection plan identified OC type (the IV), and profitability data (DV) as the two critical data that I used in my study. OC data was collected using the OCAI which is an instrument developed by the researchers who posited the CVF. Profitabilikty data was secondary data collected from the tax returns or annual repoerts of the SNPHEI.

In the data analysis plan I introduced my research questions and research hypotheses. I used four research questions, with the first three being descriptive questions and the fourth being a comparative question. My analysis included linear regression to investigate the relationship between the IV data (OC) and the DV data (Profitability).

I considered both internal and external validity and also the threats to both types of validity that could impact my study. I was able to establish the construct validity of the OCAI. This was important because the OCAI was the survey instrument used to collect the primary data for my study. I took steps to ensure that ethical rights and confidentiality were preserved for the particpants and IRB approval was secured.

In Chapter 4, I delve into greater depth and specificity regarding the actual data collection process, data analysis and reporting of the results.

Chapter 4: Results and Findings

Introduction

The purpose of this study was to analyze the dominant organizational cultures (IV) of SNPHEIs located in Georgia in relation to their profitability (DV). In the theoretical framework, I provided an understanding of OC within the context of the CVF, which was first posited by Quinn and Rohrbaugh (1981) and further developed by Cameron (1986), and Cameron and Quinn (2011).

The descriptive research questions for the study were:

RQ1: What are the dominant OC types existing within SNPHEIs with enrollments under 5,000 students?

RQ2: Which OC occurs with greatest frequency (i.e., dominant) in SNPHEIs reporting operating losses on their most recent Form 990?

RQ3: Which OC occurs most frequently in SNPHEIs reporting operating profits on their most recent Form 990?

The comparative research question for the study was:

RQ4: What is the dominant OC in SNPHEIs reporting a profit on their most recent Form 990 compared to the dominant OC in SNPHEIs reporting a loss on their most recent Form 990?

The study hypotheses were**:**

H_1: There is a positive relationship between an SNPHEI's profitability and the presence of a market culture, compared to other types of organizational cultures.

H_0: There is no relationship between the existence of a market culture within an SNPHEI and its profitability.

In my study, the dominant OC of SNPHEIs was the (IV) and the profitability of SNPHEIs was the (DV). The null hypothesis posited that no relationship existed between the market OC and the profitability of an SNPHEI. The alternative hypothesis posited that SNPHEIs with a dominant market or entrepreneurial OC would tend to have greater economic sustainability as measured by annual profitability reported on their annual tax returns. In this study, "annual profitability" was used interchangeably with "profitability," "percentage profitability," "% profits," and other similar terms.

In Chapter 4 I address the data collection process, including time frame for data collection, recruitment, response rates, and sampling. I include the results of the data collection and a statistical report of the findings. I conclude Chapter 4 with a summary response to the research questions and a transition to Chapter 5.

Data Collection

For this study I collected two distinct sets of data over a 3-month period, between October 2018 and December 2018. Firstly, I collected data on the OC of SNPHEIs using an online survey, known as the OCAI. Using the OCAI, I assigned an OC score based on responses and ranked the OC with the highest score as the dominant OC for that SNPHEI. Secondly, I collected annual profitability data from archival sources, such as publicly available tax returns (Form 990), or publicly available annual or financial reports of the SNPHEIs.

I recruited 23 SNPHEIs for the study. I requested participation to each SNPHEI by seeking permission from the appropriate SNPHEI representative to allow its faculty and staff members to complete the OCAI online survey. While the role of this representative varied from SNPHEI to SNPHEI, it was typically the Dean of Academic

Affairs, the IRB Officer at the SNPHEI, the Provost's office, or the President's Office. The first step in securing approval was to provide the SNPHEI's representative with a secure encrypted link to the survey, which they then forwarded to faculty and staff members. In other cases, the SNPHEI gave me access and authorization to send the encrypted link directly to the SNPHEI's faculty and staff. In both cases, faculty and staff responses were sent directly to the cloud-based secure platform (SurveyMonkey) which was only accessible by me. The information provided by the respondents did not include any personal identifying information.

Of the 23 SNPHEIs invited to participate in the study, 13 SNPHEIs responded and ten did not respond for a response rate of 56%. In light of the low number of research participants (23 SNPHEIs), it was important to achieve a high response rate. Response rates were essential to the generalizability of the findings of this study. According to Fincham (2008), an acceptable response rate for survey-based studies is a rate *approximating 60%.* Hence, the response rate of 56% that I achieved in this study was considered an acceptable rate to allow for generalizability in the findings of this study only in relation to the state of Georgia.

Discrepancies in Data Collection

There were several differences between the data collection plan and the actual data collection process. Firstly, as part of my data collection plan I proposed to collect data on organizational culture, profitability, enrollment and endowment.

Secondly, in the data collection plan I included the identification of 59 SNPHEIs in the state of Georgia. However, only 23 SNPHEIs met the selection criteria for the study. Of the schools that were originally selected, six were no longer in operation when

the data were collected and 11 of the schools originally identified as private were state-run institutions. Three other schools had increased their enrollments to over 5,000 enrollees, and, for 16 schools, no financial data were accessible. As some private schools operated as part of a church or religious organization, under Internal Revenue Code section 6033, they are exempt from filing Form 990, which reports financial information (Montague, 2013). The reduction in the number of schools selected was significant because, if I used the original 59 schools, the data would have included research participants that did not meet the criteria of this study. This would have resulted in findings with no generalizability.

Baseline Descriptive and Demographic Characteristics of the Sample

I did not use a sample because the number of research participants (i.e., SNPHEIs) was small enough for me to employ a census approach. The key advantage of this approach was that the results were more accurate compared to a sampling method. My choice to use a census rather than a sample prevented the risk of a nonrepresentative sample, which could negatively impact external validity. The baseline descriptive and demographic characteristics of the SNPHEIs selected for this study were: (a) enrollment of fewer than 5,000 students, (b) located in state of Georgia, (c) privately owned, and (d) nonprofit organization. The research respondents for the OCAI survey were the faculty and staff of the selected SNPHEIs. Even though I performed univariate analysis, I did not use the results of those analyses to select covariates, and I did not include any covariates in the study.

Results

In this section, I report on the statistical findings in the context of the research questions and the hypotheses. I presented these statistical findings by making use of graphical analysis, probability values and confidence intervals, and other statistical metrics. As a foundation for the statistical findings, I begin this section with a report on the descriptive statistics to describe the essential and relevant characteristics of the data. I reported the descriptive statistics below in Table 2.

Table 2

Descriptive Statistics–Independent Variable–Dominant OC

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Clan	6	46.2	46.2	46.2
Adhocracy	1	7.7	7.7	53.9
Market	3	23.0	23.0	76.9
Hierarchy	3	23.1	23.1	100.0
Total	**13**	**100.0**	**100.0**	

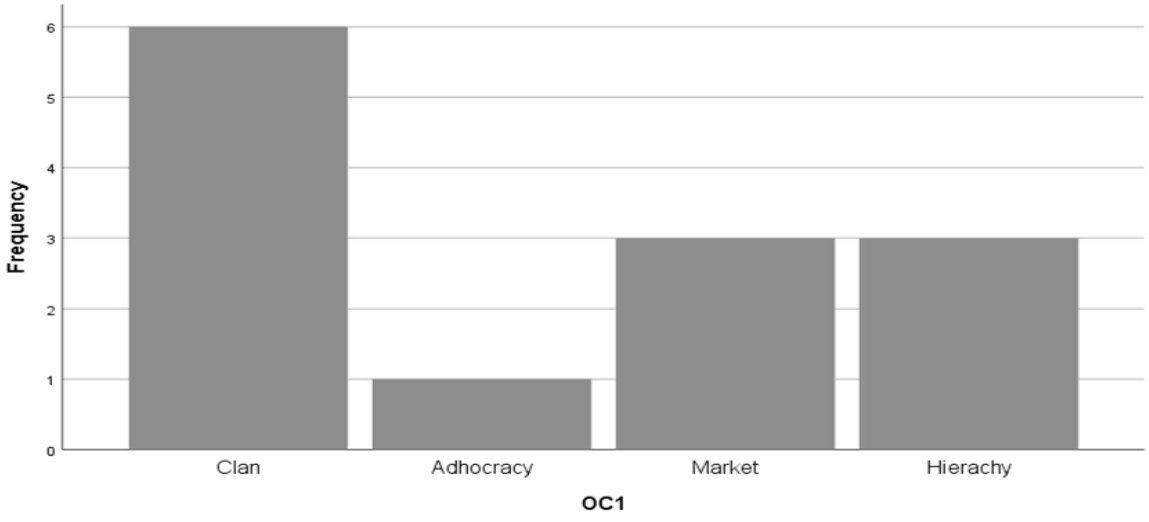

Figure 2. Dominant organizational cultures.

Table 2 and Figure 2 show descriptive statistics indicating that *clan* OC was the OC that ranked as most dominant most frequently in the SNPHEIs that responded to the survey. The results indicated that *clan* OC was dominant in 46.2% of the SNPHEIs that responded to the OCAI. While the dominant OC was the focus of the hypotheses of this study, data for the other nondominant OCs (OC2, OC3, and OC4) were presented in the following Tables, as some of these descriptive statistics were relevant to the relationship between OC and profitability.

OC1, OC2, OC3 and OC4 represent levels of dominance with OC1 being the most dominant, OC2 the second most dominant, OC3 the third most dominant and OC4 being the least dominant. The data collected in the OCAI showed how the four OCs (Clan, Adhocracy, Market or Hierarchy) ranked in terms of dominance. The table 7 is a report on each OC and how frequently the OC ranked in each of the dominance levels.

Table 2 shows the results for OC1 which is dominance level 1. This table indicated that the clan OC ranked most dominant (i.e. OC1) most frequently.

In Tables 3-5 I report on the other 3 OCs which I referred to as the nondominant OCs. In these Tables 3-5 I report on the dominance levels 2, 3 and 4 as follows: Table 3 shows findings for dominance level 2 which is indicated by OC2, Table 4 shows findings for dominance level 3 which is indicated by OC3 and Table 4 indicates findings on dominance level 4 which I labeled as OC4.

Table 3 below shows that for dominance level OC2, the clan OC is most frequently occurring (8 times for 61.5%) and hierarchy is the least frequently occurring (5 times for 38.5%) as the second most dominant OCs of the 13 SNPHEIs surveyed.

Table 3

Nondominant Independent Variables: OC2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Clan	8	61.5	61.5	61.5
Hierarchy	5	38.5	38.5	100.0
Total	**13**	**100.0**	**100.0**	

Table 4 below shows that for dominance level OC3, the Adhocracy OC is most frequently occurring (12 times for 92.3%) and hierarchy is the least frequently occurring (1 time for 7.7%) as the third most dominant OCs of the 13 SNPHEIs surveyed.

Table 4

Nondominant Independent Variables: OC3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Adhocracy	12	92.3	92.3	92.3
Hierarchy	1	7.7	7.7	100.0
Total	**13**	**100.0**	**100.0**	

Table 5 shows that for dominance level OC4, the market OC is most frequently occurring (10 times for 76.9%) and hierarchy is the least frequently occurring (3 times for 23.1%) as the fourth most dominant OCs of the 13 SNPHEIs surveyed. The fourth most dominant is the same as saying the least dominant OC.

Table 5

Nondominant Independent Variables: OC4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Market	10	76.9	76.9	76.9
Hierarchy	3	23.1	23.1	100.0
Total	**13**	**100.0**	**100.0**	

The results in Table 5 show that the *market OC* ranked least dominant most frequently (10 times or 76.9% of the time) of all the OC's. This was consistent with the suggestion of Denneen and Dretler (2012), from their study of 1,700 colleges and universities, that SNPHEIs may not have an OC that is sufficiently *market* in nature to help them survive economic declines. However, the relationship to profitability, as the results of the following statistical analyses showed, did not reflect a positive relationship between this absence of *market OC* and profitability.

Table 6

Statistics on dominance levels

	%Profit	OC1	OC2	OC3	OC4
N Valid	13	13	13	13	13
Mean	.62	2.23	2.15	2.15	3.23
Std. Deviation	12.692	1.301	1.519	.555	.439

The independent variable, percent Profit, showed a standard deviation of 12.692, which was significantly higher than the mean of .62. This could suggest the presence of outliers in the data set.

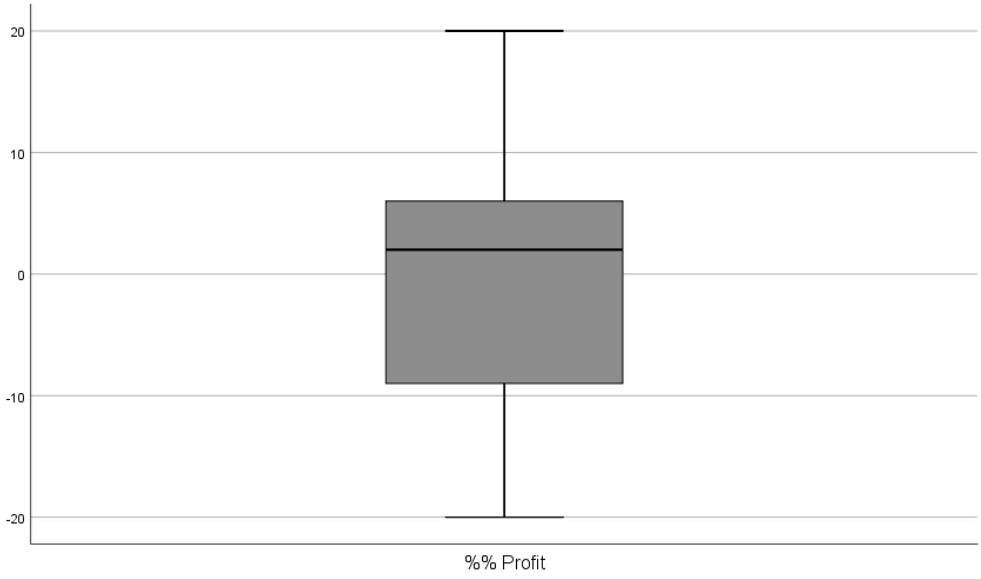

Figure 3. Box plot of percent profitability for the sample used.

The box plot of profitability indicated that the maximum percentage profitability of the SNPHEIs in this study was 20% and the lowest percent profitability was a loss of 20% (i.e., negative profitability). There were no outliers in this data set. The median percentage profitability was approximately two percent, which was represented by the bold black line in Figure 3.

The box plot also indicated that profitability tends to skew to the left with more SNPHEIs showing a negative percentage profitability or loss. This indication was significant because, as indicated earlier, the *market OC* was least likely to be dominant. Earlier in this study, (Chapter 3), drawing from research conducted by Denneen and Dretler (2012), I posited the alternative hypothesis that a positive relationship may exist between the presence of a dominant *market OC* and an SNPHEI's profitability. The inverse of this hypothesis would suggest that SNPHEIs that do not show a dominant *market OC* have a profitability percentage that tends downward towards loss. This could

also suggest that there was no relationship between the variables, which would confirm the null hypothesis.

I reported the frequency descriptive statistics in Table 7. These statistics showed the frequency with which each OC occurred among the 13 SNPHEIs that responded to the OCAI survey. It also ranked the OCs in terms of which OC ranked as most dominant most frequently.

Table 7

Frequency Statistics of OC

	Frequency count (N)				Percentages %			
	1	2	3	4	1	2	3	4
A: Clan	6	8	-	-	46	62	0	0
B: Adhocracy	1	-	12	-	8	0	92	0
C: Market	3	-	-	10	23	0	0	77
D: Hierarchy	3	5	1	3	23	38	8	23
Total	**13**	**13**	**13**	**13**	**100**	**100**	**100**	**100**

Table 6 shows that, among the 13 SNPHEIs that responded to the OCAI, the *clan* OC ranked as dominant (i.e., in the "1" position) most frequently (six times or 46% of the time). The *adhocracy* OC ranked as dominant least frequently (one time or 8% of the time). Additionally, the *market OC* type ranked as least dominant (i.e., in the fourth position) most frequently (10 times or 76.9% of the time).

Statistical Assumptions

Several assumptions must be met for estimates to be valid. First, the model must have linear parameters. Similar to the analysis of variance (ANOVA) model, the ordinary least squares (OLS) model assumes that the errors are normally and independently

distributed with a mean of 0 and a constant variance. Finally, the independent variable must have minimal measurement error and not be strongly collinear.

In inferential statistics, it is standard practice, prior to conducting an analysis, to assess assumptions such as (a) independent observations, (b) normality, (c) linearity, and (d) homogeneity, also referred to as equality of variance (homoscedasticity). The type of analysis the researcher selects, will determine which of these assumptions the researcher will test.

Common Assumptions

The assumption of independent observations means that observations in the data are independent from each other so that the measurements for each sample subject are not influenced by or related to the measurements of other subjects. In this study, each response to the OCAI represented a single independent observation; the respondents—the faculty and staff of each SNPHEI—all completed the survey independently.

The assumption of normality means that the distribution of the test is normally distributed (or bell-shaped) with 0 mean, with 1 standard deviation and a symmetric bell-shaped curve. The analyses used in this study—*t* tests, analyses of variance (ANOVA), and linear regression analyses—require that the assumption of normality be met by the data. For the purposes of the present study, I used the Shapiro-Wilk normality test to test the assumption of normality of the study's data.

The assumption of linearity assumes that a linear, or straight-line, relationship exists between the independent variable(s) and the dependent variable. When this assumption of linearity does not prove true, predictions may be inaccurate. In instances when the assumption of linearity is not met, the introduction of another independent

variable may explain or correct for the nonlinear pattern or interactions among variables. For this study, I used the Pearson correlation coefficient and regression analyses to test the assumption of linearity. Alternatively, I could use the examination of scatter plots to assess the assumption of linearity.

Linearity assumptions of the regression model. To meet this assumption, predictors, or independent variables, should have a linear relationship with the dependent variable. The presence of a linear relationship with the dependent variable was checked by calculating the Pearson correlation coefficient *r*, which falls between -1 and 1, where a positive *r* indicates a positive association between the variables and a negative *r* indicates a negative association. An absolute value $|r| < .2$ indicates no relationship; $.2 \leq |r| <$ .3 indicates a weak relationship; $.3 \leq |r| < .4$ indicates a moderate relationship; and $|r| \geq .4$ indicates a strong relationship. A significant level of correlation indicates a linear relationship between the independent variable (in this case, OC) and the dependent variable (in this case, profitability).

In terms of the results of the Pearson correlation, 13 SNPHEIs were surveyed regarding their dominant OC ($M = 2.23$; SD = 1.30) and their profitability ($M = 0.62$; $SD = 12.69$). The Pearson's correlation coefficient ($r = -.28$) evidenced a weak negative association between the two variables, suggesting that the dominant OC might not be a significant predictor of profitability. I presented the results in Tables 8 and 9:

Table 8

Descriptive Statistics

	Mean	Std. Deviation	N
% Profit	.62	12.692	13
OC1	2.23	1.301	13

Table 9

Correlation

	% Profit	OC1
Pearson Correlation		
%% Profit	1.000	-.277
OC1	-.277	1.000
Sig. (1-tailed)		
%% Profit	-	.180
OC1	.180	-
N		
%% Profit	13	13
OC1	13	13

These results indicated that the model violated the assumption of linearity.

Linear Regression Results

I used simple linear regression to assess whether the dominant OC of an SNPHEI predicts profitability of the SNPHEI. Regression analysis results—$F(1,11) = 0.91$, $p = .18$, $R^2 = 0.08$—did not provide statistically significant evidence that dominant OC predicts profitability. Therefore, in this case, I found insufficient evidence to support the alternative hypothesis that there was a positive association between the dominant OC of a SNPHEI and its profitability. However, using the evidence, I was able to support the null hypothesis that there was no relationship between the market OC of a SNPHEI and its

level of profitability. As shown in Tables 10, 11, and 12, the results indicated that only 8% of the variability in profitability is attributable to organizational culture.

Table 10

Model Summary[a]

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.277[b]	.077	-.007	12.738

Note. a. Dependent Variable: percent Profit. b. Predictors: (Constant), OC1.

Table 11

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	148.126	1	148.126	.913	.360[b]
Residual	1784.951	11	162.268		
Total	1933.077	12			

Note. a. Dependent Variable: percent Profit. b. Predictors: (Constant), OC1.

Table 12

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1							
(Constant)	6.640	7.228		.919	.378	-9.269	22.549
OC1	-2.701	2.827	-.277	-.955	.360	-8.922	3.521

Note. a. Dependent Variable: percent Profit.

To assess whether the difference between means was statistically significant or whether the difference is due to sampling error, I addressed the question of equality of variance. Equality of variance is also referred to as the assumption of homogeneity or homoscedasticity. According to this assumption, the variances within the different groups being compared are equal. The assumption of homogeneity of variances is a requirement

that must be met when comparing means using analysis of variance (ANOVA) or *t* test procedures. To verify or test the assumption of the equality of variances, I employed Levene's test. In this study, I tested the distribution of the dependent variable (profitability) using Levene's test, which utilizes an *F* test. The null hypothesis that the groups have equal variances is rejected when the *p*-value associated with the Levene's statistic is less than the specified level of significance.

Independent Sample *t* test Assumptions

Important assumptions specific to the unpaired *t* test used in this study were: (a) the independent observations assumption, and (b) the assumption of normality. First, the two groups considered in this study—SNPHEIs with a dominant *market OC* and the SNPHEIs with a dominant nonmarket OC—met the assumption of independent observation. I constructed the administering of the OCAI survey to ensure that it met the assumption of independent observations. I provided the OCAI in a secure private link, which I forwarded to each faculty and staff member of the SNPHEIs. The respondents (i.e., faculty and staff) completed the survey and their results were sent anonymously and directly to my secure Survey Monkey online survey account. The respondents were instructed in the OCAI to complete the survey independently. Despite these measures designed to ensure independent responses, there was no guarantee that respondents did not collude in their responses. However, I did not observe any duplicate responses, which further suggests that procedures and test met the independence of observations assumption.

Secondly, I tested the assumption of normality. Before inferentially analyzing the data to test the study's null hypothesis, I checked the normality of the dependent variable.

As addressed in the methodology section, after removing the ten nonresponsive SNPHEIs, I tested normality of SNPHEI percentage profitability for the remaining 13. The results were positive, meaning that the variable "percentage profitability" was distributed normally after the removal of the ten nonresponsive SNPHEIs.

Table 13

Normality Test After the Transformation

	Statistic	*df*	*Sig.*
Kolmogorov–Smirnov % profitability (after removal of cases)	.202	13	.153
Shapiro-Wilk % profitability (after removal of cases)	.891	213	.101

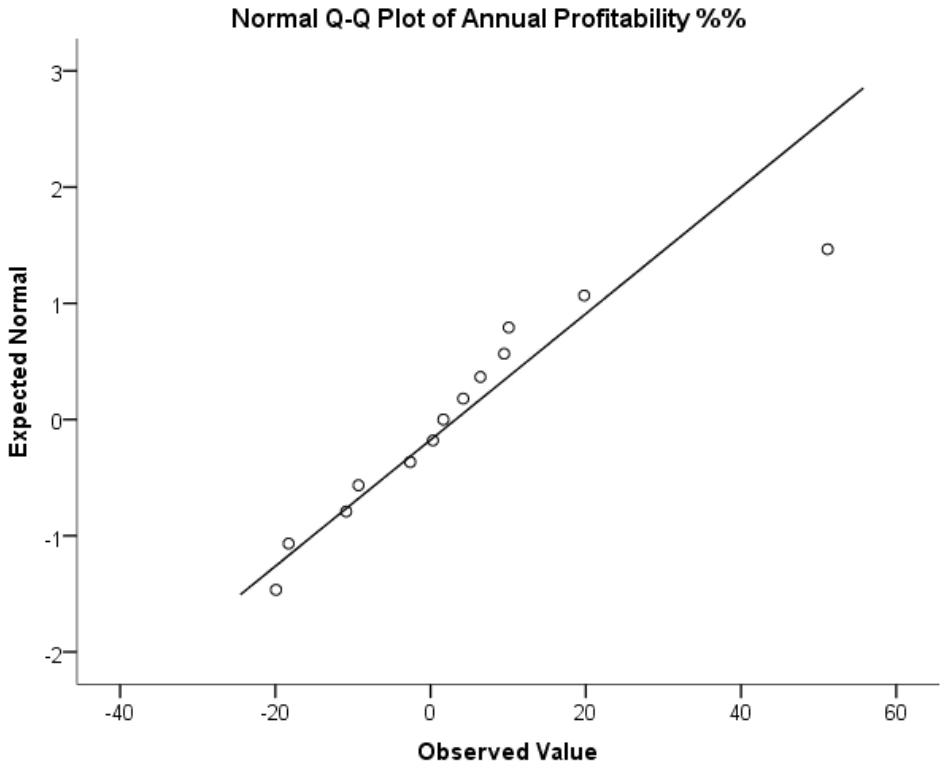

Figure 4. Normal Q-Q plot of annual profitability percent after the removal of missing values.

The Shapiro-Wilk test presented in Table 12 and the Q-Q plot in Figure 4 show that, after removing the ten nonresponsive SNPHEIs, the profitability variable satisfies the normality assumption. In the rest of the analysis, I included the normally distributed percentage annual profitability variable.

The results of Levene's test for equality of variances, as shown in Table 14, indicated that the variances of the two groups were statistically equal: $F = .162$; $p = 0.695$.

Table 14

Levene's Test Results

	Levene's Test for Equality of Variances	
	F	*Sig.*
Annual Profitability %		
Equal variances assumed	.162	.695

Statistical Findings

One of the critical statistical analyses performed was to determine the mean difference in profitability between market and nonmarket OC groups. I was able to use Levene's results (F = 0.162; p = 0.695) to support the use of the *t* test with equal variances assumed, because the difference in variances was not significant. I used an independent sample *t* test to compare mean profitability percent between the nonmarket OC ($M = 0.30$; $SD = 13.66$; $N = 10$) group and the *market OC* group ($M = 1.67$; $SD = 11.15$; $N = 3$). The results did not indicate a statistically significant difference in the mean profitability percent between the two groups at the 5% level of significance, $t(11) = -0.16$, $p = .878$. Although the OC group has a larger mean, the differences between the two

means were not significant. The smaller sample size of the second group could be as a result of this lack of significance.

Table 15

Independent Sample t Test

	Levene's Test for Equality of Variances		*t* test for Equality of Means						
	F	*Sig.*	*t*	*df*	*Sig.* (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Profitability %									
Equal variances assumed	.162	.695	-.157	11	.878	-1.367	8.717	-20.552	17.819
Equal variances not assumed			-.176	4.026	.869	-1.367	7.753	-22.838	20.105

Summary

In this section, I addressed the research questions used to guide this study, alongside the findings presented throughout Chapter 4.

Descriptive questions:

RQ1: What are the most dominant OC types existing within SNPHEI with enrollments under 5,000 students?

The *clan* OC ranked most frequently as the dominant OC in six of the 13 SNPHEIs that responded to the OCAI survey. Of these six SNPHEIs with the Clan OC, two reported operating losses and four reported a profit. These results indicated the absence of a relationship between the *market OC* and profitability, evidencing the null hypothesis. Both the *hierarchy* OC and the *market OC* ranked as most dominant in three of the 13 SNPHEIs.

RQ2: Which OC occurs with greatest frequency as the dominant OC in SNPHEIs reporting operating losses on most recent Form 990?

Of the 13 SNPHEIs which responded to the OC survey, five showed operating losses. Of these five, the OCs that were ranked as dominant most frequently were the *hierarchy* OC and the *clan* OC, both of which scored as dominant two times each. The *market OC* was present in one of the five SNPHEIs reporting a loss.

RQ3: Which OC is most frequently ranked as most dominant in SNPHEIs reporting operating profits on their most recent Form 990?

Of the 13 SNPHEIs which responded to the OCAI survey, eight showed operating profits. Of these eight SNPHEIs, the *clan* OC ranked most frequently (four times) as dominant.

Another critical finding from the study regarding the null hypothesis was that, of the eight SNPHEIs that showed a profit, two (25%) had a *market* OC, one had a *hierarchy* OC, one had an *adhocracy* OC, and four (50%) SNPHEIs had a *clan* OC. The absence of a relationship between the existence of a *market* culture within an SNPHEI and that SNPHEI's profitability is posited by the null hypothesis. The findings indicated that only one of the 13 SNPHEIs surveyed in the present study (eight percent) reported a profit. The *clan* OC was present in six of the 13 SNPHEIs, a rate of 46%. Of the SNPHEIs showing a profit, four (50%), had the *clan* OC. These findings indicated that there was more of a relationship between the *clan* OC and profitability than there was between the *market OC* and profitability.

Comparative questions:

RQ4: What is the dominant OC in SNPHEIs that report a profit on their most recent Form 990 compared to the dominant OC in SNPHEIs that report a loss on their most recent Form 990?

Based on the results of the study, eight SNPHEIs showed a profit. Of these eight profitable SNPHEIs, four (50%) showed *clan* as the dominant OC. By contrast, the study showed that among SNPHEIs that reported a loss, the most frequently occurring OCs were the *clan* and *hierarchy* OCs (two times each, at a rate of 40%). I presented these findings in Table 16.

Table 16

Findings by SNPHEI/School

School #	Annual Profitability	Profitability%	OC 1	OC 2	OC 3	OC 4	1 = Market OC
1	68,163,117	6	1	4	2	3	0
2	(192,834)	-4	1	4	2	3	0
3	117,690	2	1	4	2	3	0
4	11,756,438	20	2	1	4	3	0
5	26,605,029	20	1	1	2	3	0
6	4,716,565	10	3	1	2	4	1
7	(4,699,790)	-11	3	1	2	4	1
8	(4,245,591)	-18	1	4	2	3	0
9	970,148	6	3	1	2	4	1
10	890,950	4	4	1	2	3	0
11	276,076	2	1	4	2	3	0
12	(3,123,436)	-20	4	1	2	3	0
13	(4,473,393)	-9	4	1	2	3	0

Note. Amounts without brackets = profitable SNPHEIs; amounts in brackets = SNPHEIs with losses.

The OC's were coded as follows: 1 = *clan*, 2 = *adhocracy*, 3 = *market,* and 4 = *hierarchy*. For example, in the first row of Table 15, column "School #" shows the number "1" in the OC1 column, indicating that the *clan* OC (clan = 1) is the dominant

OC for School #1. In the next chapter, Chapter 5, I will present a discussion of prescriptive measures gleaned from the findings of the study and responses to each research question.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Purpose

The purpose of this study was to analyze the relationship between the dominant OC (IV) of SNPHEIs in Georgia and their profitability (DV). I addressed OC in the context of CVF theory (Quinn & Rohrbaugh, 1981).

Key Findings

The results indicated that the *clan* OC occurred the most frequently, among 46.2% of the 13 SNPHEIs surveyed. The *market OC* ranked most frequently as the least dominant OC at 76.9% of the 13 SNPHEIs surveyed. In the OCAI results, I ranked the OCs from most dominant as OC1, to least dominant, as OC4. Among the SNPHEIs that responded to the survey, I reported the standard deviation and the mean of the dominant OC as follows: $M = 2.23$ and SD = 1.30. For profitability, $M = 0.62$ and $SD = 12.69$. The Pearson's correlation coefficient of $r = -.28$ indicated a weak negative association between the two variables, suggesting that dominant OC may not provide a sufficient predictor of profitability. There was no statistical significance between the two variables of this study as indicated by the $P > .05$ finding in the data.

Interpretation of Findings

Organizational performance and financial sustainability were measured by annual profitability as indicated by SNPHEIs on their annual tax returns or financial reports. For an organization to thrive financially and achieve sustainable profitability, especially in the face of a challenging economic environment, that organization must be highly adaptable (Flanagan, 2012; Guerrero & Urbano, 2012). Such adaptability implies

financial effectiveness. Several researchers have posited a link between OC and financial effectiveness in organizations. For instance, Cameron and Quinn (2011) suggested that organizations with *market OC* are more likely to thrive financially under strenuous market conditions. Clark (2015) supported Cameron and Quinn's (2011) position when they suggested that SNPHEIs could enhance their organizational effectiveness by closely investigating their OC and its relationship to economic success.

However, I was unable to use the findings of my study to confirm the position of Cameron and Quinn (2011), whose position regarding a positive relationship between the *market OC* and an organization's financial sutainability reflected a consensus of the literature I reviewed on this matter.

My inability to confirm the positive relationship between OC and profitability was supported by the results of my regression analysis. The results of my regression analysis did not account for the variability within the data to a statistically significant extent ($F(1,11) = 0.91$; $p = 0.18$; $R^2 = 0.08$). It also did not constitute sufficient evidence to suggest that dominant OC significantly predicts profitability. Therefore, I was unable to support the notion that there was a positive association between the dominant OC of an SNPHEI and profitability. By contrast, I was able to use these results to provide more support for the null hypothesis: that no positive relationship existed between the *market OC* and profitability in SNPHEIs. The results indicated that OC was a contributing factor to only 8% of the variability in profitability shown in the results.

Instead, the findings of this study indicated no statistically significant relationship between OC and economic success as measured by profitability. Furthermore, I calculated a Pearson's correlation coefficient of $r = -.28$, which indicated a weak negative

association between OC and organizational performance as measured by profitability. Based on this weak association between the two variables, OC (IV) and profitability (DV), I suggest that dominant OC may not provide a sufficient predictor of profitability.

Theoretical Framework

In this section, I addressed the findings as they relate to the theoretical framework of this study. I used the CVF as the theoretical foundation for this study. The premise of the CVF theory is that there is a causal relationship between OC and sustainable organizational change. Moreover, in an extension of CVF theory, Cameron and Quinn (2011) found each of the four OC types (Adhocracy, Clan, Hierarchy, and Market) to have an identifiable and different impact on organizational performance and organizational change. Furthermore, Cameron and Quinn (2011) posited that organizations with a market OC were more likely to exhibit higher levels of organizational performance, even in economically challenging times.

While the CVF framework applies to all organizations, I narrowed its scope for the present study to only SNPHEIs in Georgia. While the theorist who posited the CVF theory compared OC to sustainable organizational change, I used the SNPHEIs' profitability as an indicator of sustainability. I used profitability as the dependent variable in this study. The independent variable was OC type, which I measured based on which of the four OC types identified in CVF theory was most dominant.

I tested the null hypothesis of this study: That a relationship does not exist between the OC of an organization and its organizational sustainability. In contrast to Cameron and Quinn's (2011) position, the null hypothesis of this study indicated that no relationship exists between a market OC and profitability (profitability being a measure

of organizational sustainability) within an SNPHEI. The theoretical framework was more in alignment with this study's alternative hypothesis: That a positive relationship exists between the market OC and the profitability in an SNPHEI.

As indicated in Chapter 4, the findings showed more support that the clan OC rather than the market OC, could have a relationship to profitability in an SNPHEI. The findings from my study showed that 50% of SNPHEIs that showed a profit, had the clan OC as their dominant OC. By contrast, only 25% of SNPHEIs that showed a profit had the market OC as their dominant OC.

If I posited the hypotheses in a broader context of a relationship between OCs and profitability, rather than the narrower context of market OC and profitability, then the findings may have showed support for a relationship between OC and profitability by virtue of the high percentage of Clan OC SNPHEIs that showed a profit. However, this interpretation is outside the scope of this study.

The null hypothesis of this study indicated that no relationship exists between a market OC OC (independent variable) in a SNPHEI and its profitability (dependent variable). I performed statistical tests to assess the validity of this hypothesis. For example, I used an independent sample *t* test to compare mean profitability percent between nonmarket OCs versus market OCs. The results of the independent sample *t* test were as follows: The non-market OC group of SNPHEIs (M = 0.30; SD = 13.66; N = 10) and the market OC group (M = 1.67; SD = 11.15; N = 3). These results did not indicate a statistically significant difference in the mean profitability percent between SNPHEIs with a nonmarket OC and those with a market OC at the 5% level of significance, $t(11) = -0.16$, $p = .878$. I could not use these statistical findings to support that a causal

relationship existed between OC and profitability as was posited in the theoretical framework. However the statistical findings did show support for the null hypothesis of this study. Therefore, I was unable to confirm this theoretical framework. However, there were several limitations to the study, which may have contributed to these findings. I addressed these limitations in the next section.

Limitations of the Study

In the execution of this study, I observed certain limitations to generalizability. These limitations stemmed from two issues that came to light after all the data was collected. These issues were (a) the research participants were drawn only from one state and (b) the population size and the number of participants responding to the OCAI was low.

Firstly, my study only included the state of Georgia, which limited my ability to credibly extrapolate the findings to all SNPHEIs throughout the United States. This limitation to generalizability was exacerbated by the small number of colleges and universities that met the criteria for selection in the study and also by the fact that only 13 of the colleges and universities selected responded to the OCAI. I used a census approach in an attempt to test the entire population of colleges and universities in Georgia that met the criteria of an SNPHEI. The response rate of only 56% was not high enough to extrapolate findings to SNPHEIs throughout the entire United States.

However, the response rate of 56% were within the range that some scholars consider high enough to achieve generalizability within a given population. Fincham (2008), suggested that a rate “approximating 60%.” acceptable enough to allow for generalizability in the findings of a study.

Recommendations

Based on the strengths and limitations of this study, as well as the literature synthesized in Chapter 2, this section included several recommendations. Firstly, I recommended that other researchers conduct further studies using a sample of all SNPHEIs throughout the United States, rather than a census limited to a single state. To eliminate the limitation relating to the aging difference between OCAI results and financial profitability, future studies should request financial data from the selected SNPHEIs that is no older than 12 months prior to the date of the OC survey.

Secondly, in terms of methodology, in future studies, researchers could employ a less restrictive hypothesis that seeks to determine any organizational patterns within SNPHEIs that make them more susceptible to economic downturns than larger institutions of higher education.

Implications for Social Change

In the context of the null hypothesis, the results of this study indicate that there is no relationship between a market OC and the profitability of an SNPHEI. Researchers, SNPHEI administrators or higher education policymakers can draw several important implications from this finding. However, I would point out that the small number of SNPHEIs that responded to the study limited the ability to derive generalizable implications. One methodological implication is that a researcher could repeat this study drawing on a much larger and broader based number of SNPHEIS. However, it is possible to draw several implications that may impact positive social change for SNPHEIs.

Firstly, decision makers at SNPHEIs may consider exploring the benefits of a Clan OC. Of the four OCs tested in this study, the Clan OC showed the highest correlation to profitability. The sustainable profitability of SNPHEIs is critical to the survival of the SNPHEI subsector, particularly at a time when SNPHEIs are experiencing significant adverse economic pressures.

Another implication was that SNPHEIs could explore other measures of organizational sustainability. I used profitability as a dependent variable in the context of the theoretical framework, which suggests that a market OC is more conducive to higher levels of profitability. Conversely, Driscoll et al. (2013) posited other measures of organizational sustainability: Five core "abilities" a higher education institution should incorporate in any strategy designed to develop and boost economic and organizational sustainability. These core abilities are: (a) availability, (b) dependability, (c) capability, (d) affordability, and (e) marketability (p. 255). Therefore, a SNPHEI could investigate how its OC may impact any of these five core abilities as a way to measure the impact of OC on organizational sustainability.

Conclusion

This study was important because SNPHEIs continue to experience financial vulnerability in the face of adverse economic conditions and rapidly changing norms within the higher education industry sector. The high rate of closure among SNPHEIs, as documented by Woodhouse (2015a), if left unchecked, could result in the extinction of, or at least lead to a diminishing role for SNPHEIs in the United States. As a matter of public policy, the United States can ill afford to lose the valuable contribution of SNPHEIs to the national economy and America's standing on the global stage. Further

study is needed to build on the findings of this study by looking at other permutations of the data, such as including larger institutions of higher education in a comparative study or comparing the impact of OC on all of the five core measures of organizational sustainability as espoused by Driscoll et al. (2013). Findings from such studies could be instructive to SNPHEIs in terms of the organizational changes they need to make that will enhance their financial sustainability, even during difficult economic conditions.

While the findings of this study indicated no statistically significant relationship between OC and economic sustainability as measured by profitability, this study is beneficial to future studies of SNPHEIs and their profitability. In the future, researchers who conduct studies on factors that contribute to the profitability in SNPHEIs would know from the onset that one variable they can exclude from consideration is the OC of an SNPHEI, specifically Market OC. This knowledge would save future researchers considerable time and resources which they could allocate to researching variables other than OC.

References

Abernethy, M., & Brownwell, P. (1999). The role of budgets in organizations facing strategic change: An exploratory study. *Accounting, Organizations & Society, 24*(3), 189-204. doi:10.1016/S0361-3682(98)00059-2

Agresi, A., & Finlay, B. (2011). *Statistical methods for the social sciences* (4th ed.). Upper Saddle River, NJ: Pearson.

Akers, B., & Chingos, M. (2014). *Is a student loan crisis on the horizon?* Washington, DC: Brookings Institution Brown Center on Education Policy. Retrieved from https://www.cfpbmonitor.com/wp-content/uploads/sites/5/2014/06/

American Association of State Colleges and Universities. (2005, September). *Connecting higher education, public opinion, and public policy*. Retrieved from http://www.aascu.org/uploadedFiles/AASCU/Content/Root/PolicyAndAdvocacy/PolicyPublications/Connecting%20Higher%20Education20Public20Opinion.pdf

American Council on Education (ACE). (2014). *Understanding college & university endowments*. Washington, DC: Author. Retrieved from http://www.acenet.edu/news-room/Documents/Understanding-Endowments-White-Paper.pdf

Aromataris, E., & Riitano, D. (2014). Systematic reviews: Constructing a search strategy and searching for evidence. *American Journal of Nursing*, *114*(5), 49-56.

Ashworth, R., Boyne, G., & Delbridge, R. (2009). Escape from the Iron Cage? Organizational change and isomorphic pressures in the public sector. *Journal of Public Administration Research & Theory, 19*(1), 165-187. doi:0.1093/jopart/mum038

Association of American Colleges and Universities, Hart Research Associates. (2013). *It takes more than a major: Employer priorities for college learning and student success*. Washington, DC: Author. Retrieved from www.aacu.org/leap/presidentstrust/compact/2013surveysummary

Baffour, B., King, T., & Valente, P. (2013). The modern census: Evolution, examples and evaluation. *International Statistical Review*, *81*(3), 407-425.

Baker, V. L., Baldwin, R. G., & Makker, S. (2012). Where are they now? Revisiting Breneman's study of liberal arts colleges. *Liberal Education*, *98*(3), 48-53.

Barnett, R. (2014). The very idea of academic culture: What academy? What culture? *Human Affairs, 24*(1), 7-19. doi:10.2478/s13374-014-0202-4

Barney, J. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review, 11*(3), 656-665. doi:10.5465/amr.1986.4306261

Barr, A., & Turner, S. (2013). Expanding enrollments and contracting state budgets: The effect of the Great Recession on higher education. *Annals of the American Academy of Political & Social Science, 650*(1), 168-193. doi:10.1177/0002716213500035

Barr, A., & Turner, S. (2015). Out of work and into school: Labor market policies and college enrollment during the Great Recession. *Journal of Public Economics, 124*(1), 63-73. doi:10.1016/j.jpubeco.2014.12.009

Barringer, S. (2013). *Limitations on the role of stakeholders and the diverse effects of market conditions: College & university finances, 1980-2010* (Unpublished doctoral dissertation). University of Arizona, Tucson, AZ.

Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines.* New York, NY: McGraw-Hill Education.

Bell, J. D. (2016). *Higher education and economic development*. Western Interstate Commission for Higher Education. Retrieved from http://www.wiche.edu/info/gwypf/bell_economicDevelopment.pdf

Bentes, A., Carneiro, J., da Silva, J., & Kimura, H. (2012). Multidimensional assessment of organizational performance: Integrating BSC and AHP. *Journal of Business Research, 65*(12), 1790-1799. doi:10.1016/j.jbusres.2011.10.039

Bercovitz, J., & Feldman, M. (2008). Academic entrepreneurs: Organizational change at the individual level. *Organization Science, 19*(1), 69-89. doi:10.1287/orsc.1070.0295

Bergquist, W. (2007). *Engaging the six cultures of the academy*. San Francisco, CA: Jossey-Bass.

Berrio, A. (2003). An organizational culture assessment using the competing values framework: A profile of Ohio State University Extension. *Age, 2*(699), 10-52. doi:11.5524x55210

Berry, J., & Worthen, H. (2012, November/December). Higher education as a workplace. *Dollars & Sense, 301*, 19-23.

Black, T. (1999). *Doing quantitative research in the social sciences: An integrated approach to research design, measurement & statistics*. Thousand Oaks, CA: Sage.

Blanchard, O., Cerutti, E., & Summers, L. (2015). *Inflation and activity–two explorations and their monetary policy implications* (No. w21726). National Bureau of Economic Research, Cambridge, MA.

Bogaty, E. (2013, November 25). *Industry outlook: 2014 outlook - US higher education, not-for-profits, and independent schools*. New York, NY: Moody's Investors Service.

Bonvillian, G., & Murphy, R. (2014). *The liberal arts college adapting to change: The survival of small schools.* New York, NY: Routledge.

Booth, A., Papaioannou, D., & Sutton, A. (2013). *Systematic approaches to a successful literature review.* Thousand Oaks, CA: Sage.

Bozeman, B. (1998). Risk culture in public and private organizations. *Public Administration Review, 58*(2), 109-119. doi:10.2307/976358

Breneman, D. (2011). Is the business model of higher education broken? In D. Breneman & P. Yakoboski (Eds.), *Smart leadership for higher education in difficult times* (pp. 13-25). Cheltenham, United Kingdom: Edward Elgar Publishing Limited.

Brinberg, D., & McGrath, J. (1988). *Validity and the research process*. Thousand Oaks, CA: Sage.

Bureau of Labor Statistics [BLS]. (2015). *Employment projections 2014-2024* [News release]. Retrieved from http://www.bls.gov/news.release/pdf/ecopro.pdf

Burke, E. (2019). Thoughts and details on scarcity. *Econ Journal Watch*, *16*(1), 155-179.

Burnett, C. M. (2016). Exploring the difference in participants' factual knowledge between online and in-person survey modes. *Research & Politics*, *3*(2). doi:10.1177/2053168016654326

Büschgens, T., Bausch, A., & Balkin, D. (2013). Organizational culture and innovation: A meta-analytic review. *Journal of Product Innovation Management, 30*(4), 763-781. doi:10.1111/jpim.12021

Cameron, K. (2009). *An introduction to the competing values framework* (Organizational culture white paper). Philadelphia, PA: Haworth.

Cameron, K., & Quinn, R. (2011). *Diagnosing and changing organizational culture: Based on the Competing Values Framework* (3rd ed.). San Francisco, CA: Jossey-Bass.

Cameron, K. S. (1986). Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, *32*(5), 539-553.

Campbell, D., & Fiske, D. (1959). Convergent and discriminant validation by the multi-trait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81-105. doi:10.1037/h0046016

Campbell, D., & Stanley, J. (1963). *Experimental and quasi-experimental designs for research*. Boston, MA: Wadsworth Publishing.

Carmines, E., & Zeller, R. (1979). *Reliability and validity assessment*. Thousand Oaks, CA: Sage.

Carnevale, A., Rose, S., & Cheah, B. (2011). *The college payoff: Education, occupations & lifetime earnings.* Washington, DC: Georgetown University Center on Education & the Workforce.

Chabotar, K. (2010). What about the rest of us? Small colleges in financial crisis. *Change, 42*(4), 6-13. doi:10.1080/00091383.2010.489024

Chaffee, E. (1984). Successful strategic management in small private colleges. *Journal of Higher Education, 55*(2), 212-241. doi:10.2307/1981186

Chingos, M. (2017). Don't forget private, non-profit colleges. *Evidence Speaks Reports, 2*(9).

Clark, B. (2003). Sustaining change in universities: Continuities in case studies and concepts. *Tertiary Education & Management, 9*(2), 99-116. doi:10.1023/A:1023538118918

Clark, B. (2015). The character of the entrepreneurial university. *International Higher Education, 7*(2), 3-8. doi:10.11.6678x.12

CollegeData. (2013). *College size: Small, medium or large?* Retrieved from http://www.collegedata.com/cs/content/content_choosearticle_tmpl.jhtml?articleId=10006

Commonfund Institute. (2014). *Educational endowment report*. Wilton, CT: Commonfund Institute.

Conner, T., & Rabovsky, T. (2011). Accountability, affordability, access: A review of the recent trends in higher education policy research. *Policy Studies Journal, 39*(s1), 93-112. doi:10.1111/j.1541-0072.2010.00389_7.x

Cook, T., & Campbell, D. (1973). *Quasi-experimentation: Design and analysis issues for field settings*. Skokie, IL: Rand McNally.

Cooke, R., & Rousseau, D. (1988). Behavior norms and expectations: A quantitative approach to the assessment of organizational culture. *Group and Organizational Studies, 13*, 245-273.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.

Dahlgren, L., & Pramling, I. (1985). Conceptions of knowledge, professionalism and contemporary problems in some professional academic subcultures. *Studies in Higher Education, 10*(2), 163-173. doi:10.1080/03075078512331378579

Dane, F. (2013). *Evaluating research: Methodology for people who need to read research*. Thousand Oaks, CA: Sage.

Delaney, J. (2014). The role of state policy in promoting college affordability. *Annals of the American Academy of Political & Social Science, 655*(1), 56-78. doi:10.1177/0002716214535898

Denison, D. (1997). *Corporate culture and organizational effectiveness*. Hoboken, NJ: Wiley & Sons.

Denison, D., & Mishra, A. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science, 6*(2), 204-223. doi:10.1287/orsc.6.2.204

Denneen, J., & Dretler, T. (2012, July). *The financially sustainable university*. Boston, MA: Bain & Company. Retrieved from http://www.bain.com/publications/articles/financially-sustainable-university.aspx

Department of Health, Education and Welfare. (1979, April 18). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research.* Washington, DC: National Commission for the Protection of Human Subjects of Biomedical & Behavioral Research.

Department of Treasury. (2015). *The economics of higher education*. Washington, DC: Author. Retrieved from https://www.treasury.gov/connect/blog/Documents/20121212_Economics%20of%20Higher%20Ed_vFINAL.pdf

Dew, J. (2012). The future of American higher education. *World Future Review, 4*(4), 7-13. doi:10.1177/194675671200400403

Dill, D. (2012). The management of academic culture revisited: Integrating universities in an entrepreneurial age. In B. Stensaker & J. Valimaa (Eds.), *Managing reform in universities* (pp. 222-237). New York, NY: Springer.

Dilnot, A. (2012). Numbers and public policy: The power of official statistics and statistical communication in public policy making. *Fiscal Studies, 33*(4), 429-448. doi:10.1111/j.1475-5890.2012.00167.x

DiMaggio, P., & Powell, W. (1983). The Iron Cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147-160. doi:10.10.2095101

Driscoll, E., Comm, C., & Mathaisel, D. (2013). A lesson plan for sustainability in higher education. *American Journal of Business Education, 6*(2), 255-266. doi:12.10.ajbe2013.6.2.1x

Dunn, W. (2011). *Public policy analysis* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.

Dwyer, R., McCloud, L., & Hodson, R. (2012). Debt and graduation from American universities. *Social Forces, 90*(4), 1133-1155. doi:10.1093/sf/sos072

Economic Modeling Specialist International (EMSI). (2015, February). *Demonstrating the collective economic value of North Carolina independent colleges and universities*. Moscow, ID: Author.

Efeoglu, I. E., & Ulum, Ö. G. (2017). Organizational culture in educational institutions. *International Journal of Social Science, 54*, 39-56. doi:10.9761/JASSS3778

Erickson, R. (2012). Geography and the changing landscape of higher education. *Journal of Geography in Higher Education, 36*(1), 9-24. doi:10.1080/03098265.2012.651350

Etzkowitz, H., & Viale, R. (2010). Polyvalent knowledge and the entrepreneurial university: A third academic revolution? *Critical Sociology, 36*(4), 595-609. doi:10.1177/0896920510365921

Fincham J. E. (2008). Response rates and responsiveness for surveys, standards, and the journal. *American Journal of Pharmaceutical Education*, *72*(2), 43.

Flanagan, C. (2012). Business model innovation: A blueprint for higher education. *EDUCAUSE Review, 47*(6), 12-18.

Fralinger, B., & Olson, V. (2007). Organizational culture at the university level: A study using the OCAI instrument. *Journal of College Teaching & Learning, 4*(11), 85-99. doi:10.19030/tlc. v4i11.1528

Frankfort-Nachmias, C., & Nachmias, D. (2014). *Research methods in the social sciences* (8th ed.). New York, NY: Worth Publishers.

Frumkin, P., & Galaskiewicz, J. (2004). Institutional isomorphism and public sector organizations. *Journal of Public Administration Research & Theory, 14*(3), 283-307. doi:10.1093/jopart/muh028

Gaddis, S. (2014). Discrimination in the credential society: An audit study of race and college selectivity in the labor market. *Social Forces, 5*(4), 1-29. doi:10.1093/sf/sou111

Gasman, M., & Commodore, F. (2014). *Opportunities and challenges at historically black colleges and universities.* New York, NY: Palgrave Macmillan.

Gephardt, D. (2015). *Small college closures poised to increase* [Report]. New York, NY: Moody's Investor Service.

Gilliard, M. (2015). Fulfilling their urban mission: Engagement among small to medium-sized private colleges and universities. *Metropolitan Universities, 13*(1), 4-10. doi:12.243.10.10546611x

Gilpin, G., Saunders, J., & Stoddard, C. (2015). Why has for-profit colleges' share of higher education expanded so rapidly? Estimating the responsiveness to labor market changes. *Economics of Education Review, 45*(1), 53-63. doi:10.1016/j.econedurev.2014.11.004

Ginder, S., & Kelly-Reid, J. (2013, July). *Postsecondary institutions and cost of attendance in 2012-13; Degrees and other awards conferred, 2011-12; and 12-month enrollment, 2011-12: First look (provisional data)*. Washington, DC: National Center for Education Statistics.

Gioia, D., & Thomas, J. (1996). Identity, image, and issue interpretation: Sense making during strategic change in academia. *Administrative Science Quarterly, 41*(3), 370-403. doi:10.2307/2393936

Goetzman, W., & Oster, S. (2012). *Competition among university endowments*. Cambridge, MA: National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w18173.pdf

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *Qualitative Report*, *8*(4), 597-607. doi:12.10.88721/qr84597

Golden III, J. H., & Shriner, M. (2019). Examining relationships between transformational leadership and employee creative performance: the moderator effects of organizational culture. *Journal of Creative Behavior*, *53*(3), 363-376.

Goldratt, E. (1998). *Essays on the theory of constraints*. Great Barrington, MA: North River Press.

Grajek, S. (2011). Research and data services for higher education information technology: Past, present, and future. *EDUCAUSE Review, 46*(6), 46-58. doi:12.11.665./educ15.66754.10

Green, L., & Celkan, G. (2014). A very crucial turning point in one's life: College/university choice. *Procedia of Social & Behavioral Sciences, 116*(21), 990-995. doi:10.1016/j.sbspro.2014.01.333

Guerrero, M., & Urbano, D. (2012). The development of an entrepreneurial university. *Journal of Technology Transfer, 37*(1), 43-74. doi:10.1007/s10961-010-9171-x

Gumport, P. (2000). Academic restructuring: Organizational change and institutional imperatives. *Higher Education, 39*(1), 67-91. doi:10.1023/A:1003859026301

Hansmann, H. (2012). The evolving economic structure of higher education. *University of Chicago Law Review, 79*(1), 159-183. doi:15.11/i40074900

Harris, S. (2014). *How to critique journal articles in the social sciences*. Thousand Oaks, CA: Sage.

Hartley, M. (2014). *Call to purpose: Mission-centered change at three liberal arts colleges.* New York, NY: Routledge.

Hatch, M. (1993). The dynamics of organizational culture. *Academy of Management Review, 18*(4), 657-693. doi:10.5465/AMR.1993.9402210

Hayes, M. (2014). *Implications of financial shocks and budgetary constraints on the public education sector* (Unpublished doctoral dissertation). American University, Washington, DC

Helfrich, C. D., Li, Y. F., Mohr, D. C., Meterko, M., & Sales, A. E. (2007). Assessing an organizational culture instrument based on the Competing Values Framework: Exploratory and confirmatory factor analyses. *Implementation Science*, *2*(1), 13.

Heller, D. (2011). *The states and public higher education policy: Affordability, access, and accountability.* Baltimore, MD: Johns Hopkins University Press.

Hemelt, S., & Marcotte, D. (2011). The impact of tuition increases on enrollment at public colleges and universities. *Educational Evaluation & Policy Analysis, 33*(4), 435-457. doi:10.3102/0162373711415261

Heritage, B., Pollock, C., & Roberts, L. (2014). Validation of the organizational culture assessment instrument. *PLoS ONE, 9*(3), 2-12. doi:10.1371/journal.pone.0092879

Hersh, R., & Merrow, J. (2015). *Declining by degrees: Higher education at risk*. New York, NY: Macmillan.

Hofstede, G., Neuijen, B., Ohayv, D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly, 35*(2), 286-316. doi:10.2307/2393392

Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, *67*(8), 1609-1621.

Hopkins, B. (2015). *The law of tax-exempt organizations*. Hoboken, NJ: Wiley.

Hout, M. (2012). Social and economic returns to college education in the United States. *Annual Review of Sociology, 38*(1), 379-400. doi:10.1146/annurev.soc.012809.102503

Janicijevic, N. (2013). The mutual impact of organizational culture and structure. *Economic Annals, 58*(198), 35-60. doi:10.2298/eka1398035j

Johnson, A. (2011). *Organization change in higher education: Transforming institutions of learning into learning organizations*. Duluth, MN: The College of St. Scholastica.

Jung, T., Scott, T., Davies, H., Bower, P., Whalley, D., McNally, R., & Mannion, R. (2009). Instruments for exploring organizational culture: A review of the literature. *Public Administration Review, 69*(6), 1087-1096. doi:10.1111/j.1540-6210.2009. 02066.x

Kezar, A. (2014). *How colleges change: Understanding, leading & enacting change*. New York, NY: Routledge.

Kezar, A., & Eckel, P. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *Journal of Higher Education, 73*(4), 435-460. doi:10.1353/jhe.2002.0038

Kinser, K., Levy, D., Silas, J., Bernasconi, A., & Slantcheva-Durst, S. (2010). The global growth of private higher education. *ASHE Higher Education Report, 36*(3), 1-152.

Kirby, D., Guerrero, M., & Urbano, D. (2011). Making universities more entrepreneurial: Development of a model. *Canadian Journal of Administrative Sciences, 28*(3), 302-316. doi:10.1002/cjas.220

Kirstein, R., & Hurlburt, S. (2012). *Revenues: Where does the money come from.* Washington, DC: American Institutes for Research. Retrieved from http://www.deltacostproject.org/sites/default/files/products/Revenue_Trends_Production.pdf

Knowlton, L., & Phillips, C. (2013). *The logic model guidebook* (2nd ed.). Thousand Oaks, CA: Sage.

Koonce, L., & Lipe, M. G. (2010). Earnings trend and performance relative to benchmarks: How consistency influences their joint use. *Journal of Accounting Research*, *48*(4), 859-884.

Kotter, J., & Heskett, J. (2011). *Corporate culture and performance*. Bethesda, MD: Free Press.

Krzanowski, W. (2014). *Statistical principles and techniques in scientific and social research*. Oxford, United Kingdom: Oxford University Press.

Kwan, P., & Walker, A. (2004). Validating the competing values model as a representation of organizational culture through inter-institution comparisons. *Organizational Analysis, 12*(1), 21-39.

Lane, I. (2007). Change in higher education: Understanding and responding to individual and organizational resistance. *Journal of Veterinary Medical Education, 34*(2), 85-92. doi:10.3138/jvme.34.2.85

Letherby, G., & Williams, M. (2013). *Objectivity and subjectivity in social research.* Thousand Oaks, CA: Sage.

Levine, A. (1980). *Why innovation fails: The institutionalization and termination of innovation in higher education*. Albany, NY: State University of New York Press.

Levy, D. (2009). For-profit versus nonprofit private higher education. *International Higher Education, 54*(3), 116-120. doi:12.11.7763.11.k1

Levy, D. (2011). The global growth of private higher education. *ASHE Higher Education Report, 36*(3), 121-133. doi:11.23ashe10.5561

Li, C. H. (2016). Confirmatory factor analysis with ordinal data: Comparing robust maximum likelihood and diagonally weighted least squares. *Behavior Research Methods*, *48*(3), 936-949.

Lim, B. (1995). Examining the organizational culture and organizational performance link. *Leadership & Organization Development Journal, 16*(5), 16-21. doi:10.1108/01437739510088491

Locke, L., Silverman, S., & Spirduso, W. (2012). *Reading and understanding research.* Thousand Oaks, CA: Sage.

Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of Business and Industrial Marketing, 18*(3), 219-236.

Lyken-Segosebe, D., & Shepherd, J. (2013). *Learning from closed institutions: Indicators of risk for small private colleges and universities.* Nashville, TN: Tennessee Independent Colleges & Universities Association. Retrieved from http://www.ticua.org/public_policy/sm_files/Learning%20from%20Closed%20Institutions.pdf

Malbašić, I., Rey, C., & Potočan, V. (2015). Balanced organizational values: From theory to practice. *Journal of Business Ethics*, *130*(2), 437-446.

Maramba, D., Palmer, R., Yull, D., & Ozuna, T. (2015). A qualitative investigation of the college choice process for Asian Americans and Latinos at a public HBCU. *Journal of Diversity in Higher Education, 8*(4), 258-271. doi:10.1037/a0039009

Markides, C. (2006). Disruptive innovation: In need of better theory. *Journal of Product Innovation Management*, *23*(1), 19-25.

Martin, J., & Samels, J. (2013). *Turnaround: Leading stressed colleges and universities to excellence*. Baltimore, MD: Johns Hopkins University Press.

Maskooki, K., & Maskooki, K. (2012). American higher education at crossroad. *Global Conference on Business & Finance Proceedings, 7*(2), 765-1215.

McClean, R. (2014). *U.S. higher education 2015 outlook: Negative*. New York, NY: Standard & Poor's Rating Services.

McDonald, J. H. (2009). *Handbook of biological statistics* (Vol. 2, pp. 6-59). Baltimore, MD: Sparky House Publishing.

McGuinness, A. (2016). The states and higher education. In M. Bastedo & P. Altbach (Eds.), *American higher education in the 21st century: Social, political, and economic challenges* (4th ed.). Baltimore, MD: Johns Hopkins University Press.

Meyer, K. (2010). The role of disruptive technology in the future of higher education. *EDUCAUSE Review, 11*(3), 1-4. doi:10.11.educ.33251

Milton, R., & Ehrenberg, R. (2014). *University endowment growth: Assessing policy proposals*. Ithaca, NY: Cornell University.

Mitchell, M., Palacios, V., & Leachman, M. (2014). *States are still funding higher education below pre-recession levels*. Washington, DC: Center on Budget & Policy Priorities.

Montague, J. (2013). The law and financial transparency in churches: Reconsidering the form 990 exemption. *Cardozo Law Review*, *35*, 203. Retrieved from https://ssrn.com/abstract=2349093

Mumper, M., Gladieux, L., King, J., & Corrigan, M. (2016). The federal government and higher education. In M. Bastedo & P. Altbach (Eds.), *American higher education in the 21st century: Social, political and economic challenges* (4th ed.). Baltimore, MD: Johns Hopkins University Press.

National Association of College and University Business Officers [NACUBO]. (2014). *The NACUBO 2014 tuition discounting study*. Washington, DC: Author. Retrieved from http://www.nacubo.org/Research/NACUBO_Tuition_ Discounting_Study.html

National Association of College and University Business Officers [NACUBO]. (2015). *U.S. and Canadian institutions listed by fiscal year 2014 endowment market value & change in endowment market value from FY2014 to FY2015: National Association of College & University Business Officers (NACUBO).* Retrieved from http://www.nacubo.org/Documents/EndowmentFiles/2015_NCSE_ Endowment_Market_Values.pdf

National Association of College and University Business Officers (NACUBO). (2016). *2015 colleges & universities endowments study*. Washington, DC: Author. Retrieved from http://www.nacubo.org/Documents/EndowmentFiles/2015_ NCSE_Public_Tables_Endowment_Market_Values_by_Size_of_Endowment.pdf

National Association of Independent Colleges and Universities. (2011). *Independent colleges and universities: A national profile.* Washington, DC: Author. Retrieved from https://www.naicu.edu/docLib/20110308_NAICU_profiles.pdf

National Center for Education Statistics (NCES). (2015a). *Fast facts: Back to school statistics.* Washington, DC: Author. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=372

National Center for Education Statistics (NCES). (2015b). *Institutional retention & graduation rates for undergraduate students*. Washington, DC: Author. Retrieved from http://nces.ed.gov/programs/coe/indicator_cva.asp

National Center for Education Statistics (NCES). (2015c). *Undergraduate enrollment & college size.* Washington, DC: Author. Retrieved from http://nces.ed.gov/programs/coe/indicator_cha.asp

National Center for Education Statistics (NCES). (2016). *Integrated Postsecondary Education Data System (IPEDS), "fall enrollment survey" (IPEDS-EF:96–99); IPEDS spring 2001 through spring 2011, enrollment component; and enrollment in degree-granting institutions model, 1980–2010.* Washington, DC: Author.

National Student Clearinghouse Research Center (NSCRC). (2015). *Term enrollment estimates: Spring 2015.* Retrieved from https://nscresearchcenter.org/wp-content/uploads/CurrentTermEnrollment-Spring2015.pdf

Needle, D. (2004). *Business in context: An introduction to business and its environment*. Boston, MA: Cengage Learning.

Nevo, B. (1985). Face validity revisited. *Journal of Educational Measurement, 22*(4), 287-293. Retrieved from http://www.jstor.org/stable/1434704

Newton, R., & Rudestam, K. (2013). *Your statistical consultant: Answers to your data analysis questions* (2nd ed.). Thousand Oaks, CA: Sage.

Ng'ang'a, M. J., & Wesonga, J. N. (2012). The impact of organisational culture on performance of educational institutions. *International Journal of Business & Social Science, 3*(8), 211-217.

Onwuegbuzie, A., & Johnson, R. (2006). The validity issue in mixed research. *Research in the Schools, 13*(1), 48-63. doi:11.4423.124x5

Organisation for Economic Co-operation and Development. (2013). *Education at a glance: OECD indicators 2013*. Paris, France: Author. Retrieved from https://www.oecd.org/edu/eag2013%20(eng)--FINAL%2020%20June%202013.pdf

Oseguera, L., & Malagon, M. (2011). For-profit colleges and universities and the Latina/o students who enroll in them. *Journal of Hispanic Higher Education, 10*(1), 66-91. doi:10.1177/1538192710392040

Ostrom, E. (2005). *Understanding institutional diversity*. Princeton, NJ: Princeton University Press.

Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review, 100*(3), 641-672. doi:10.1257/aer.100.3.641

Ouchi, W., & Wilkins, A. (1985). Organizational culture. *Annual Review of Sociology, 11*(2), 457-483. doi:10.1146/annurev.so.11.080185.002325

Pallais, A. (2015). Small differences that matter: Mistakes in applying to college. *Journal of Labor Economics*, *33*(2), 493-520.

Palmer, P., & Zajonk, A. (2010). *The heart of higher education: A call to renewal*. San Francisco, CA: Jossey-Bass.

Panigrahi, J. (2015). Growing private providers and constraints in the choice of higher education institutions: Impact on access to higher education. *Economic Affairs, 60*(1), 41-47. doi:10.5958/0976-4666.2015.00004.2

Papoutsakis, H. (2008). On measuring organizational relationships: Threats to validity in the use of key-informants. *Electronic Journal of Knowledge Management, 6*(2), 145-156. doi:11.3324.ejkm62.145x

Patton, C., Sawicki, D., & Clark, J. (2015). *Basic methods of policy analysis and planning*. London, United Kingdom: Routledge.

Pettigrew, A. (1979). On studying organizational cultures. *Administrative Science Quarterly, 24*(4), 570-581. doi:10.2307/2392363

Philpott, K., Dooley, L., O'Reilly, C., & Lupton, G. (2011). The entrepreneurial university: Examining the underlying academic tensions. *Technovation, 31*(4), 161-170. doi:10.1016/j.technovation.2010.12.003

Quinn, R., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review, 5*(2), 122-140. doi:10.2307/3380029

Rand, G. (2000). Critical chain: The theory of constraints applied to project management. *International Journal of Project Management, 18*(3), 173-177. doi:10.1016/S0263-7863(99)00019-8

Rask, K. (2010). Attrition in STEM fields at a liberal arts college: The importance of grades and pre-collegiate preferences. *Economics of Education Review, 29*(6), 892-900. doi:10.1016/j.econedurev.2010.06.013

Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal, 49*(3), 433-458. doi:10.5465/amj.2006.21794663

Ravich, S., & Riggan, M. (2013). *Reason and rigor: How conceptual frameworks guide research.* Thousand Oaks, CA: Sage.

Rea, L., & Parker, R. (1992). *Designing and conducting survey research: A comprehensive guide.* San Francisco, CA: Jossey-Bass.

Reichardt, C., & Gollob, H. (1989). Ruling out threats to validity. *Evaluation Review, 13*(1), 3-17. doi:10.1177/0193841x8901300101

Robertson, P., & Seneviratne, S. (1996). Outcomes of planned organizational change in public sector: A meta-analytic comparison to the private sector. *Public Administration Review, 55*(6), 547-569. doi:10.2307/3110346

Rowley, D., Lujan, H., & Dolence, M. (2001). *Strategic change in colleges and universities: Planning to survive and prosper*. San Francisco, CA: Jossey-Bass.

Schein, E. (1996). Three cultures of management: The key to organizational learning. *Sloan Management Review, 38*(1), 9-19.

Schein, E. (2010). *Organizational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.

Schwartz, H., & Davis, S. (1981). Matching corporate culture and business strategy. *Organizational Dynamics, 10*(1), 30-48. doi:10.1016/0090-2616(81)90010-3

Schwarz, E. (2013, January 10). *More US colleges face stagnating enrollment and tuition revenue.* New York, NY: Moody's Investor Services. Retrieved from http://www.careercollegecentral.com/pdf/moodysreport.pdf

Selingo, J. (2015). *College (un)bound: The future of higher education and what it means for students*. Seattle, WA: Amazon Publishing.

Selingo, J. J. (2013, April 12). Colleges struggle to stay afloat. *New York Times*. Retrieved from http://www.nytimes.com/2013/04/14/education/edlife/many-colleges-and-universities-face-financial-problems.html?_r=0

Sheets, R., Crawford, S., & Soares, L. (2012). *Rethinking higher education business models: Steps toward a disruptive innovation approach to understanding and improving higher education business models*. Washington, DC: Center for American Progress. Retrieved from http://www.americanprogress.org/wp-content/uploads/issues/2013/03/pdf/higher_ed_business_models.pdf

Sieber, J., & Tolich, M. (2013). *Planning ethically responsible research* (2nd ed.). Thousand Oaks, CA: Sage.

Siegfried, J., Sanderson, A., & McHenry, P. (2007). The economic impact of colleges and universities. *Economics of Education Review, 26*(5), 546-558. doi:10.1016/j.econedurev.2006.07.010

Siegfried, J. J., Sanderson, A. R., & McHenry, P. (2008). The economic impact of colleges and universities. *Change: The Magazine of Higher Learning*, *40*(2), 24-31.

Simsek, H., & Louis, K. (1994). Organizational change as paradigm shift: Analysis of the change process in a large, public university. *Journal of Higher Education, 65*(6), 670-695. doi:10.2307/2943824

Smart, J., & St. John, E. (1996). Organizational culture and effectiveness in higher education: A test of the “Culture Type” and “Strong Culture” hypotheses.

Educational Evaluation & Policy Analysis, 18(3), 219-241. doi:10.3102/01623737018003219

Smircich, L. (1983). Concepts of culture and organizational analysis. *Administrative Science Quarterly, 28*(3), 339-358. doi:10.2307/2392246

Smith, D. (2016). The diversity imperative: Moving to the next generation. In M. Bastedo & P. Altbach (Eds.), *American higher education in the 21st century: Social, political, and economic challenges* (4th ed.). Baltimore, MD: Johns Hopkins University Press.

Smith, J., Pender, M., & Howell, J. (2013). The full extent of student-college academic undermatch. *Economics of Education Review, 32*(2), 247-261. doi:10.1016/j.econedurev.2012.11.001

Snyder, T. D., & Dillow, S. A. (2015). *Digest of education statistics 2013* (NCES 2015-022). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2015/2015011.pdf

Steinacker, A. (2005). The economic effect of urban colleges on their surrounding communities. *Urban Studies, 42*(7), 1161-1175. doi:10.1080/00420980500121335

Stuber, J. (2012). *Inside the college gates: How class and culture matter in higher education.* Lanham, MD: Lexington Books.

Suderman, J. (2012). Using the organizational cultural assessment (OCAI) as a tool for new team development. *Journal of Practical Consulting, 4*(1), 52-58. doi:12.11.5542/6210x

Tagg, J. (2012). Why does the faculty resist change? *Change: The Magazine of Higher Learning, 44*(1), 6-15. doi:10.1080/00091383.2012.635987

Tandberg, D., & Hillman, N. (2014). State higher education performance funding: Data, outcomes & policy implications. *Journal of Education Finance, 39*(3), 222-243. doi:10.14.652.117751

The Pew Charitable Trusts. (2015). *Federal and state funding of higher education: A changing landscape*. Philadelphia, PA: Author. Retrieved from http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/06/federal-and-state-funding-of-higher-education

The Pew Charitable Trusts. (2017). *How governments support higher education through the tax code*. Philadelphia, PA: Author. Retrieved from https://www.pewtrusts.org/en/research-and-analysis/reports/2017/02/how-governments-support-higher-education-through-the-tax-code

Tierney, W., & Hentschke, G. (2007). *New players, different game: Understanding the rise of for-profit colleges and universities*. Baltimore, MD: Johns Hopkins University Press.

United States Congress. (1974). *National research act*. Public law 93-348. Washington, DC: Author.

United States Department of Education. (2006). *A test of leadership: Charting the future of US higher education*. Washington, DC: Author. https://www2.ed.gov/about/bdscomm/list/hiedfuture/reports/pre-pub-report.pdf

United States Government Accountability Office [GAO]. (2014, December). *Higher education: State funding trends and policies on affordability* (Report #GA015-151). Washington, DC: Author.

Vasquez Urias, M., & Wood, J. L. (2014). Black male graduation rates in community colleges: Do institutional characteristics make a difference. *Community College Journal of Research and Practice*, *38*(12), 1112-1124.

Vedder, R. (2012). *Twelve inconvenient truths about American higher education*. Washington, DC: Center for College Affordability & Productivity. Retrieved from http://files.eric.ed.gov/fulltext/ED541358.pdf

Watkins, J., & Mazur, E. (2013). Retaining students in science, technology, engineering, and mathematics (STEM) majors. *Journal of College Science Teaching, 42*(5), 36-41. doi:12.12.554209.11x

Weber, M. (1947). *The theory of social and economic organization*. New York, NY: The Free Press.

Wegner, G. R. (2008). *Engaging higher education in societal challenges of the 21st century*. San Jose, CA: National Center for Public Policy and Higher Education. Retrieved from http://highereducation.org/reports/wegner/index.shtml

Weisbrod, B., & Asch, E. (2010). The truth about the 'crisis' in higher education finance. *Change: The Magazine of Higher Learning, 30*(1), 23-31.

Woodhouse, K. (2015a, September 28). *Moody's predicts college closures to triple by 2017*. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/news/2015/09/28/moodys-predicts-college-closures-triple-2017

Woodhouse, K. (2015b, August). Tuition discounting grows at private colleges and universities. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/news/2015/08/25/tuition-discounting-grows-private-colleges-and-universities

World Medical Association. (1964). Declaration of Helsinki. *British Medical Journal, 313*(7070), 1448-1449.

Yanow, D. (2000). Seeing organizational learning: A cultural view. *Organization, 7*(2), 247-268. doi:10.1177/135050840072003

Yu, T., & Wu, N. (2009). A review of study on the competing values framework. *International Journal of Business and Management*, *4*(7), 37-42. doi:10.5539/ijbm.v4n7p37

Zaback, K., Carlson, A., & Crellin, M. (2012). *The economic benefit of post-secondary degrees: A state and national level analysis.* Boulder, CO: State Higher Education Executive Officers. Retrieved from http://files.eric.ed.gov/fulltext/ED540267.pdf

Zumeta, W. (2010). The Great Recession: Implications for higher education. In NEA (Ed.), *NEA 2010 almanac of higher education* (pp. 29-42). Washington, DC: National Education Association. Retrieved from http://www.nea.org/assets/img/PubAlmanac/Zumeta_2010.pdf

Zumeta, W., & LaSota, R. (2010). Recent patterns in the growth of private higher education in the United States. *ASHE Higher Education Report, 36*(3), 91-106.

Zusman, A. (2011). Issues facing higher education in the 21st century. In P. Altbach, P. Gumport, & R. Berdahl (Eds.), *American higher education in the 21st century: Social, political and economic challenges* (3rd ed.). Baltimore, MD: Johns Hopkins University Press.

Appendix A: Organizational Culture Assessment Instrument–Current

1. Dominant Characteristics	
A	The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.
B	The organization is a very dynamic entrepreneurial place. People are willing to stick their necks out and take risks.
C	The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.
D	The organization is a very controlled and structured place. Formal procedures generally govern what people do.
	Total
2. Organizational Leadership	
A	The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.
B	The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.
C	The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
D	The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.
	Total
3. Management of Employees	
A	The management style in the organization is characterized by teamwork, consensus, and participation.
B	The management style in the organization is characterized by individual risk-taking, innovation, freedom, and uniqueness.
C	The management style in the organization is characterized by hard- driving competitiveness, high demands, and achievement.
D	The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.
	Total
4. Organization Glue	
A	The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.
B	The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.
C	The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.
D	The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.
	Total

5. Strategic Emphases	
A	The organization emphasizes human development. High trust, openness, and participation persist.
B	The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.
C	The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.
D	The organization emphasizes permanence and stability. Efficiency, control and smooth operations are important.
	Total
6. Criteria of Success	
A	The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.
B	The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.
C	The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.
D	The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling and low-cost production are critical.
	Total

Appendix B: Permission to use OCAI

To: wmurray@chromakhloros.org
Subject: FW: Permission to use OCAI
From: Meredith Smith [mailto:meredithbusiness@gmail.com]
Sent: Thursday, August 10, 2017 4:39 PM

Dear Walter,

Thank you for your inquiry regarding the Organizational Culture Assessment Instrument (OCAI). Kim Cameron copyrighted the OCAI in the 1980s, but because it is published in the Diagnosing and Changing Organizational Culture book, it is also copyrighted by Jossey Bass.

The instrument may be used free of charge for research or student purposes, but a licensing fee is charged when the instrument is used by a company or by consulting firms to generate revenues. As a graduate student, you may use it free of charge. Please be sure all surveys include the appropriate copyright information (© Kim Cameron). Professor Cameron would appreciate it if you would share your results with him when you finish your study.

We do have a local company (BDS, Behavioral Data Services, 734-663-2990, Sherry.Slade@b-d-s.com) which can distribute the instrument on-line, tabulate scores, and produce feedback reports for a fee. These reports include comparison data from approximately 10,000 organizations--representing many industries and sectors, five continents, and approximately 100,000 individuals.

I hope this explanation is helpful. Congratulations on your program, and I wish you well on your project.

Best wishes,

Meredith Smith

Assistant to Kim Cameron