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A Comparative Study of Instructor Status on Student Success and Retention at Motlow State

Community College

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

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May 2016

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Keywords: Community College, Adjunct Faculty, Part-time, Full-time

## ABSTRACT

# A Comparative Study of Instructor Status on Student Success and Retention at Motlow State Community College

by

# Cheryl C. Hyland

Data from the National Center for Education Statistics projects total enrollment in post secondary degree-granting institutions to increase 15% from 2010 to 2021 (U.S. Department of Education, 2012). National and state education efforts such as President Obama's American Graduation Initiative, Tennessee's Drive to 55, and Tennessee Promise encourage Americans to expand their educational pursuits in order to increase the number of individuals completing a post secondary degree. As states adopt funding formula measures tied directly to student success and retention, higher education institutions increasingly must rely on the effectiveness of academic and student service programs. Although the employment of adjunct faculty as a cost-saving measure has been on the rise for many years (Kezar & Maxey, 2013), research regarding the possible impact on student learning has been slow to develop and studies in this area have produced contradictory results.

The purpose of this quantitative comparative study was to examine whether there is a significant difference in the fall to fall retention rate and proportion of assigned grades for first-time freshmen attending Motlow State Community College (MSCC) in regard to instructor status (full-time or adjunct). Existing data were used to conduct the study gathered from instructor and student information maintained by the colleges Banner information system using stratified

random sampling. A non proportional sampling technique was chosen because of the potential small sample size and ease of subgroup comparison. Data were analyzed using chi-square tests of independence at the .05 level of significance.

Results indicated no significant difference in the fall-to-fall retention rate and proportion of assigned grades for first-time, full-time students; first-time students; first-time students with a high school grade point average (GPA) of 3.0 or higher; first-time students with a high school grade point average (GPA) of 2.9 or lower; and traditional and non traditional age students. Significant differences were found in the fall-to-fall retention rate for first-time, part-time students taught by adjunct faculty are retained at a significantly lower rate than first-time, part-time students taught by full-time faculty.

As states adopt funding formula measures tied directly to student success and retention at the same time colleges and universities brace for enrollment increases, the use of adjunct faculty continues to rise. Acknowledging the need for highly skilled instructors, higher education institutions must consider the potential impact adjunct faculty instruction has on student success given the potential implications on institutional funding at state and national levels.

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# DEDICATION

This work is dedicated to my husband Sandy and my children Kelli, Sean, Jason, Ian, and my son-in-law Theo whose love, support, encouragement, and humor kept me moving forward. To Gus, my beloved English Golden Retriever whose early morning, late night, and weekend dedicated companionship at my side provided a calming reminder of all that's good. To my parents Sue and Cliff and grandmother Dorothy; although you are no longer with us, the early and unwavering encouragement to never let anything hold me back laid the foundation for my perseverance in this process. I know you are watching from above and share in this celebration.

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# TABLE OF CONTENTS

ABSTRACT2
DEDICATION
ACKNOWLEDGEMENTS
LIST OF TABLES
Chapter
1. INTRODUCTION11
Statement of the Problem15
Research Questions16
Significance of the Study18
Definition of Terms19
Assumptions, Limitations, and Delimitations20
Overview of the Study21
2. LITERATURE REVIEW
Introduction
Review of Related Literature25
The Evolution of Adjunct Instructor Use25
Retention Implications
Graduation Implications44
Summary
3. RESEARCH METHODOLOGY51
Introduction51

Research Questions and Null Hypotheses	52
Instrumentation	54
Population and Sampling Method	55
Data Collection	56
Data Analysis	56
Summary	56
4. FINDINGS	58
Research Questions	
Research Question 1	58
Research Question 2	59
Research Question 3	60
Research Question 4	61
Research Question 5	63
Research Question 6	64
Research Question 7	65
Research Question 8	67
Summary	68
5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	69
Summary of Findings	69
Research Question 1	69
Research Question 2	70
Research Question 3	71
Research Question 4	72

Research Question 5	73
Research Question 6	74
Research Question 7	75
Research Question 8	76
Conclusions	77
Recommendations for Practice	80
Recommendations for Future Research	82
REFERENCES	83
APPENDICES	90
Appendix A: Permission Letter	90
Appendix B: Proposed Research Questions	92
VITA	

# LIST OF TABLES

# Table

1.	First-time, Full-time Student Retention and Instructor Status	.59
2.	First-time, Part-time Student Retention and Instructor Status	.60
3.	First-time Student Retention and Instructor Status	.61
4.	High School GPA of 3.0 or Higher First-time Student Retention and Instructor Status	.62
5.	High School GPA of 2.9 or Lower First-time Student Retention and Instructor Status	.64
6.	Age and Student Retention and Instructor Status	.65
7.	Proportion of Assigned Grades English 1010, First-time, Full-time Student and	
	Instructor Status	.66
8.	Proportion of Assigned Grades History 2010, First-time, Full-time Student and	
	Instructor Status	.68

## CHAPTER 1

#### INTRODUCTION

Originally introduced as a way of educating and producing future clergy, higher education in America has evolved significantly over the last 2 centuries. Prior to the Great Awakening in the mid-18<sup>th</sup> century, only three colleges existed in colonial America: Harvard, Yale, and William and Mary (Colleges, 2012). However as a result of the increased empowerment many colonists experienced through assertion of local religious control, individual faith denominations began establishing their own institutions of higher learning. By the time the War of Independence began in 1775, the majority of Christian sects in America had incorporated higher education institutions into their religious structure (Webb, 2006). The three original colleges had grown to nine, although total enrollment at each institution remained small. Rarely did any college of the time have a graduating class in excess of 100 students (Anderberg, 2014). Although economically affordable for many colonists in terms of tuition, the vast majority of family farms and businesses relied heavily on the physical contribution of male members, necessitating they remain close to home. This trend continued well into the early part of the 20<sup>th</sup> century as colleges struggled to convince young Americans, particularly males, of the benefit of a college degree. The 1900s saw a shift in this perception with many higher education institutions receiving more applications than could be accommodated. College attendance became an acceptable educational and vocational pathway regardless of the fact most occupations did not require specific academic credentials (Anderberg, 2014). Much has changed since then. Once viewed as an option for only the affluent, the attainment of a college degree is now considered essential in terms of economic advancement. From the 1,400 total colonial

college graduates between 1717 to 1747, higher education graduation rates for the 2014-2015 school year are expected to exceed 3,000,000 (Hussar & Bailey, 2006). As the number of individuals seeking a college degree has increased, however, so has the demand for qualified instructors.

In reviewing the evolution of higher education in America several key events helped shape the current educational system, including faculty employment. The first event occurred in the mid to late 1800s when colleges shifted from an educational divinity framework to a more practical education model designed to promote agriculture, science, and technology. Directly contributing to this shift was the countries growing emphasis on commerce. Additionally, the Morrill Land-Grant Acts of 1862 and 1890 designating public land for the establishment of public colleges and universities resulted in a dramatic rise in the number of higher education institutions, from 23 in 1800 to 821 in 1897 (Kaufman, n.d.). Responding to the changing industrial needs of the nation and recognizing the need for skilled practical professionals, education administrators began to shift the curriculum focus from classical to vocational emphasizing agriculture and mechanical arts.

The next key event developed in the early 20th century as America's industry continued to flourish. Colleges and universities responded by adopting a more focused education pathway directing students into specific major areas of study, particularly the practical sciences (Anderberg, 2014). Influenced by the economic demands of the time calling for skilled scientists capable of conducting applied research, institutions directed financial and personnel resources toward the expansion of physics and chemistry departments in order to provide a highly educated work force (Golden & Katz, 2001). Full-time instructor employment became the norm as colleges and universities benefitted from wealthy alumni in terms of financial donations. As the

12

prestige of higher education institutions grew, instructors were expected to not only participate in research activities but also serve as intellectual voices in local communities (Anderberg, 2014). College enrollment between 1920 and 1944 rose dramatically as the number of young Americans between the ages of 17-20 wanting to attend college jumped from 5% to 15% (Anderberg, 2014).

Two postwar initiatives further impacted the evolution of American education: the G.I. Bill and Affirmative Action. Assisting returning veterans in overcoming the financial obstacle college attendance previously entailed, the G.I. Bill allowed lower socioeconomic groups the opportunity for a college education. As a result, college and university enrollment grew nationally from 1.5 million in 1940 to 2.7 million in 1950 (Kaufman, n.d.). Changes in both public attitude and federal policies further contributed to female and minority interest in post secondary education (Kaufman, n.d.). However despite the growing interest, pursuit of a college degree remained largely reserved for white males due to discriminatory practices in admission standards and regulations. Highly specific admission guidelines closely resembling the preparatory school curriculum of the time kept many non preparatory high school graduates from successfully transitioning to the collegiate environment (Brock, 2010). Developing out of the Civil Rights movement of the mid 60s, Affirmative Action policies designed to help ensure equal education access and affordability resulted in many students who previously would have been denied access the opportunity to obtain a college degree (Brock, 2010). Recognizing the need to address student diversity on racial and socioeconomic levels, colleges and universities began incorporating Affirmative Action policies into recruitment strategies. Additionally, the Higher Education Act of 1965 provided program assistance for small and less developed colleges while extending need-based financial assistance to lower middle income families

(McCants, 2003).

Higher education institutions benefitted from direct financial assistance for facility, library, and instructional improvement. Federal scholarships known as "Equal Opportunity Grants" were established under the Act as well as low-interest federally insured loans (Webb, 2006). With the growth in enrollment higher education institutions began distinguishing between research based faculty and instructional faculty, prompting the designation of tenure track versus non tenure track (Cameron, 2010). Those conducting research were considered scholar teachers eligible for tenure, while instructional faculty were relegated to non tenure status.

As the baby boom generation reached young adulthood, higher education enrollment surged as many colleges and universities adopted open admission policies allowing high school graduates admission regardless of academic preparation. Total fall enrollment among higher education institutions rose from 5.9 million in 1965 to 17.5 million in 2005, with the steepest rise occurring in 1975 (Brock, 2010). Post secondary institutions found themselves in a new dilemma; how to meet student demand for services while remaining financially viable. Reductions in federal funding left many institutions reevaluating cost management techniques, implementing efficiency measures such as tuition increases and early retirement incentives. Recognizing the significant cost associated with employing additional full-time faculty colleges and universities began relying on non tenure track or adjunct faculty to meet the rising demand, rationalizing adjunct instructors incorporated practical real-life work experience into curriculum instruction.

However rather than remaining level, the employment of adjunct faculty at post secondary institutions has soared from 23% in 1971 to 50% in 2011(Perez & Litt, n.d.). Although occurring at both 2 and 4-year institutions, the largest increase appears to be at the community

college level. A 2009 report by the American Federation of Teachers indicated 68% of all community college faculty members were employed part-time. Additionally, the Center for Community College Engagement currently estimates adjunct faculty now teach 58% of community college courses (Fain, 2014). Given the flexibility of enrollment management adjunct faculty provide along with the adoption of business model approaches in education, it is unlikely colleges and universities will return to a predominant full-time tenured faculty base. However as more states adopt retention based funding formulas emphasizing student success and completion, many education professionals are questioning the possible adverse effects of adjunct faculty instruction on student retention and progression.

## Statement of the Problem

Rising dependency on adjunct faculty instruction among colleges and universities has led to heightened concerns among education professionals regarding the potential impact on student success and retention (American Association of University Professors, 2003). In order to better understand how the increasing reliance on adjunct faculty may potentially effect academic persistence, I examined whether there is a significant difference in the fall-to-fall retention rate and proportion of assigned grades for first-time freshmen attending Motlow State Community College in regard to instructor status (adjunct or full-time). Part of the Tennessee Board of Regents (TBR) system, Motlow is a multi-campus higher education institution representing an 11 county service area in Middle Tennessee. The independent variable, instructor status, is defined as either full-time tenured or part-time adjunct. The dependent variable, student persistence, is defined as students who return from freshmen to sophomore year.

#### **Research Questions**

The following research questions formed the basis of this study:

RQ1: Is there a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty? RQ2: Is there a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty? RQ3: Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty? RQ3: Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty? RQ4: Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty?

RQ5: Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or less between those taught by adjunct faculty and those taught by full-time faculty?

RQ6: Is there a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty?

RQ7: Is there a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

RQ8: Is there a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

#### Null Hypothesis

Ho1: There is no significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.
Ho2: There is no significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty.
Ho3: There is no significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty.
Ho3: There is no significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty.
Ho4: There is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty.

Ho5: There is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or less between those taught by adjunct faculty and those taught by full-time faculty.

Ho6: There is no significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty.

Ho7: There is no significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.

Ho8: There is no significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.

17

#### Significance of the Study

Data from the National Center for Education Statistics projects total enrollment in post secondary degree-granting institutions to increase 15% from 2010 to 2021 (U.S. Department of Education, 2012). National education efforts such as President Obama's American Graduation Initiative encourage Americans to expand their educational pursuits in order to increase the number of college graduates nationwide. Additionally, research continues to indicate college graduates benefit from greater job opportunities and financial earning potential. A 2014 Pew Center Survey of over 2,000 adults found college graduates ages 25-32 more likely to be employed full-time, annually earning \$17,000 more than those with only a high school diploma. The attainment of a college degree was reported as very useful in career preparation and advancement (Pew Center, 2014).

As states adopt funding formula measures tied directly to student success and retention, however, higher education institutions increasingly must rely on the effectiveness of academic and student service programs. Within the state of Tennessee, Governor Haslam's *Drive to 55* initiative strives to raise the percentage of Tennesseans possessing a college degree or certificate to 55 by the year 2025 (Drive to 55 Alliance, 2014). Starting with the class of 2015, high school seniors attending either a community college or college of applied technology receive their first 2 years essentially free under Tennessee Promise. At the same time colleges and universities brace for enrollment increases, the use of adjunct faculty continues to rise. With state funding now tied directly to student retention and completion, the need for highly skilled instructors is paramount. Examining the impact adjunct faculty instruction has on student success is decidedly relevant given the potential implications on institutional funding at state and national levels.

Although the employment of adjunct faculty as a cost-saving measure has been on the rise for

many years (Kezar & Maxey, 2013), research regarding the possible impact on student learning has been slow to develop. Given the unlikelihood funding will return to previous levels, higher education institutions must develop policies and practices incorporating an ever growing adjunct faculty base. While studies in this area have produced mixed results, the reality of shrinking fulltime tenured faculty positions highlights the need for further research on the issue in order to better understand potential consequences, academically and economically.

# **Definition of Terms**

Adjunct Work: Any job in which an individual does not have an explicit or implicit contract for long-term *employment* or one in which the minimum hours worked can vary in a non systematic manner (U.S. Bureau of Labor Statistics, 2005).

First-Time Full-Time Freshmen: A student who has no prior post secondary experience attending any institution for the first time at the undergraduate level with the exception of students with advanced standing, such as college credits earned while still in high school, taking 12 or more semester credits (National Center for Education Statistics, n.d.).

First-Time Part-Time Freshmen: A student who has no prior post secondary experience attending any institution for the first time at the undergraduate level with the exception of students with advanced standing, such as college credits earned while still in high school, taking fewer than 12 semester credits (National Center for Educational Statistics, n.d.).

Traditional Age Student: A student enrolling in a post secondary institution immediately after high school and attending full-time until graduation (National Center for Educational Statistics, n.d.).

Non Traditional Age Student: A student meeting at least one of the following characteristics:

delayed enrollment into post-secondary education, attends college part-time, works full-time, financially independent for financial aid purposes, has dependents other than a spouse, is a single parent, or does not have a high school diploma (National Center for Educational Statistics, n.d.).

## Assumptions, Limitations, and Delimitations

Data for this study were retrieved from the Motlow State Community College record database system. It is assumed data input was correctly performed in regard to year of enrollment, number of credit hours first-time freshmen were enrolled per semester, academic registration history, and instructor of record status. It is assumed the methodology sufficiently answered the research questions and statistical measures were appropriate to the study, providing adequate capability to detect variable differences. This study was an examination of the impact of instructor status on student retention and proportion of assigned grades at one urban community college. Non traditional students and traditional first-time freshmen graduating from a Tennessee high school and directly enrolling at Motlow for the fall 2013 semester were involved in the study.

Limitations with the research design do exist. Lack of sample randomization, manipulation of the independent variable, and control reflect potential design weakness. External variables and mediating or moderating variables may actually reflect true cause, impacting outcomes (Jacobs, 2003). As with correlational studies, comparative research must be interpreted with caution. According to Gay et al. (as cited in Area Education Agency, 2006), "although a statistically significant difference may exist, it does not automatically mean there is a causal connection between the variables" (p. 4). While single institution studies may result in useful information, findings and validity are limited to institutions with similar characteristics and may not be generalizable.

# Overview of the Study

Chapter 1 introduces the study, providing a brief overview of the topic in regard to the history of higher education in America and the growing reliance on adjunct faculty to address rising student enrollment. Financial implications in light of new state mandated funding formulas based on student success and retention are discussed. History, statement of the problem, identified research questions, significance of the study, and limitations are included in the chapter. Chapter 2 is a review of the literature detailing the evolution of adjunct instructor use and implications for student retention. Chapter 3 provides reasoning as to the choice of a comparative quantitative approach for the study. Specific population and sampling methodology are identified. Research questions and associated null hypothesis are included. Chapter 4 is a presentation of the data, while Chapter 5 offers a summary and discussion of the results including implications and recommendations.

# CHAPTER 2 LITERATURE REVIEW

# Introduction

As higher education institutions continue to face declining state and federal funding, many colleges and universities are increasingly relying on adjunct faculty to meet academic scheduling needs. While no singular definition of adjunct faculty is officially recognized among all higher education institutions, the term is generally interpreted to mean those faculty whose primary responsibility is not related to the institution in question and who do not receive employment benefits (Henry, n.d.). More specifically, adjunct work is defined as "any job in which an individual does not have an explicit or implicit contract for long-term employment or one in which the minimum hours worked can vary in a nonsystematic manner" (U.S. Bureau of Labor Statistics, 2005). For the purpose of this literature review the terms adjunct and part-time faculty are used interchangeably as sources are discussed.

Recent data suggest nearly half of all community college courses are now taught by adjunct or part-time faculty (Fain, 2014). Responding to a request by the White House Council of Economic Advisors to identify business and industry trends LinkedIn, one of the world's largest professional networking and social-media websites, found the designation *adjunct professor* one of the fastest-growing job titles in America ("Portrait of Labour", 2012). According to the Digest of Education Statistics 2012 report full-time faculty employment among our nation's colleges and universities increased by 19% compared to a 35% increase in part-time faculty (U.S. Department of Education, 2012). Data from the United States Department of Labor Bureau of Labor Statistics, project employment of post-secondary teachers to grow 19% from 2012-2022, exceeding the rate for all occupations (2014). Although competition for declining full-time tenure track positions is expected to be high, employment opportunities for adjunct instructors is anticipated to be positive. While the increased use of adjunct instructors has occurred among two and four-year institutions, the largest increase appears to be at the community college level. A 2009 report by the American Federation of Teachers, showed that 69% of all community college instructors identified themselves as part-time (p. 12).

This dependence on an adjunct faculty instruction base, however, has raised concerns among many education professionals. A 2012-2013 annual report on the economic status of the profession by the American Association of University Professors cited the increase of adjunct faculty appointments a recurring concern (Curtis & Thornton, 2013). With reductions in state and federal allocations expected to continue, higher education institutions find themselves challenged with new state mandated funding formulas. In the past institutional funding was primarily determined by the number of students entering the institution. Rather than enrollment based, however, new funding guidelines emphasize student retention and completion. No longer is it enough to simply get students through the front door. Colleges and universities must now retain and successfully graduate students in order to receive maximum funding, prompting many higher education institutions to review existing policies and practices including the increasing reliance on adjunct faculty. Seventeen states currently use funding formulas with an additional 14 states incorporating some aspect of formula funding in determining financial allocations for higher education institutions (Nevada Higher Education Committee, 2012).

What initially began in the 1960s and 1970s as a way to incorporate practical professional work experience into higher education instruction through the use of part-time faculty, has evolved into a cost-saving measure practiced by higher education institutions nationwide on a

23

routine basis. Adjunct faculty reliance at 4-year institutions rose significantly between 1997 and 2007, with part-time positions increasing from 35.6% to 45.8% and full-time faculty positions decreasing from 54.8% to 42.8%. Among private institutions, 37.1% of faculty were tenured or tenure-track, 22.7% were full-time non tenure track, and 42.2% were part-time adjunct (Kezar, Maxey, & Eaton, 2014). Additionally given the fact President Obama is calling for an increase of nearly five million community college graduates by 2020 as part of his American Graduation Initiative, the likelihood higher education institutions will continue to rely on adjunct faculty to meet projected student enrollment increases is high.

While institutions have benefitted financially through the employment of adjunct faculty in terms of salary and benefits, minimal consideration has been given regarding the potential adverse impact this may have on student success and retention. Frequently differences in working conditions, access to academic resources, and institutional support exist between full-time tenure track and part-time adjunct faculty (Eagan & Jaeger, 2009; Mueller, Mandernach, & Sanderson, 2013; Street, Maisto, Merves, & Rhodes, 2012; ). Recognizing the changing instructional landscape, a 2013 meeting hosted by the Council for Higher Education Accreditation (CHEA) in partnership with the Delphi Project sought to identify the role and responsibility policymakers, trustees, presidents, and other academic leaders have in ensuring academic integrity is maintained among the nation's colleges and universities (Kezar et al., 2014).

Studies in this area have produced mixed results ranging from little or no impact to modestly significant. Certain trends and recommendations, however, have emerged. This literature review provides a comprehensive overview of relevant information on this topic in order to prepare for an additional study of the issue. In this paper the potential impact of adjunct faculty instruction on student success and retention is investigated.

While the long-term effect of increased part-time adjunct instruction on student success and retention has produced contradictory results, the influence on freshman and first-year students appears to be more significant. It is the hypothesis of the study that increased exposure to part-time faculty instruction among freshmen students attending at the community college level impacts student success and retention.

# Review of Related Literature

# The Evolution of Adjunct Instructor Use

In attempting to assess the potential result adjunct faculty instruction has on student success and retention, it is important to review the evolution of higher education instruction in the United States. Prior to World War II, higher education institutions relied heavily on full-time faculty as their primary instructor resource. However after the war ended, the staffing patterns among colleges and universities began to change. The initial rationale for the use of adjunct faculty was increasing specialization in certain program areas warranted the need for teachers considered to be experts in their field to offer actual classroom instruction (Smith, 2010, p. 19).

Academic dependence on these experts lasted through the 1960s when a general decline occurred due to increased employment availability of doctoral students. However, a 1972 report by the Carnegie Commission on Higher Education reignited the trend. According to the report predictions, both enrollment and education budgets were anticipated to undergo severe reductions. To compensate for these reductions, the Commission recommended employing additional part-time adjunct faculty as a cost-saving measure (Smith, 2010).

Although state and local budgets nationwide for education did experience a drop through the

70s and 80s, enrollment in colleges and universities did not. In fact enrollment continued to increase, particularly at community colleges. Two primary factors were at work in driving this increase; improved access to higher education for the majority of the population and non traditional students seeking a college education (Ochoa, 2011, p. 138). According to records 700 new community colleges have opened since 1966 (p. 17). To date there are 1,202 American community colleges serving a combined enrollment of 11.6 million students. As a result of this growth, colleges and universities have justified their expanded use of adjunct faculty as essential to meet increased enrollment demands.

Originally intended as a temporary measure by the 1990s higher education institutions, as well as local and state budget makers, had become so accustomed to the economic benefit adjunct instructor employment provided in terms of salary and benefit savings, any attempt to reduce or limit adjunct employment in favor of additional full-time faculty positions was met with resistance (Smith, 2010, p. 21). The economic recession that occurred in the early 90s, also contributed to increased dependence on adjunct faculty as post secondary institutions dealt with decreased funding at the state and local levels. Many institutions compensated for the funding loss by cutting costs in addition to raising tuition and fees. Staff reductions, hiring freezes, and early retirement plans became common methods used by colleges and universities as part of overall economic austerity measures (Holub, 2003, p. 2).

As indicated by Ochoa (2011) even these measures were not enough to offset the cost of rising faculty salaries and benefits, not to mention the day-to-day operating expense of the individual institution. Additionally, administrators at 4-year institutions found themselves under increased pressure from board members to fully use full-time faculty in the classroom rather than oversee research studies. Full-time tenured faculty positions have continued to

decline as colleges and universities increasingly embrace the flexibility part-time adjunct faculty employment provides, allowing institutions to more easily adapt to financial and student enrollment fluctuations (pp. 138-139).

In the past higher education institutions depended on mandatory retirement to help manage faculty employment costs. However as mandatory retirement was eliminated, colleges and universities found themselves unable to accurately predict or plan for faculty retirements. As a result the trend has been as tenured faculty retire, frequently their positions are not replaced. Those monies previously held for salary and benefits are diverted elsewhere within the institution. Not surprisingly, the drop in full-time tenured faculty positions over the years has resulted in an increase of adjunct faculty employment as enrollment numbers continued to rise. Data indicates from 1975 to 1995 part-time faculty appointments rose 103%, accompanied by a 92% increase in non-tenure-track appointments, and a 12% decline in tenure-track positions (Benjamin, 2002). Additionally, Ochoa found between 1975 and 2005 there was a 15% decline in full-time tenured faculty among higher education institutions in the United States (2011). By 2009 tenured full-time faculty positions represented only 33.5% of total teaching positions at American colleges and universities while non tenure track positions accounted for 66.5% (Kezar & Maxey, 2013). Currently the average number of credit hours taught by adjunct faculty exceeds 50% (Eagan & Jaeger, 2009, p. 186).

Passively contributing to higher education's shift from full-time to adjunct faculty dependency have been the accrediting organizations, whose job it is to ensure academic integrity and standards are maintained at institutions of higher learning within the United States. Although 68% percent of all college faculty are in non-tenure track positions, accrediting organizations have not focused on the issue to assess its potential impact on student success and retention (American Association of University Professors, n.d., p. 3). However while each organization has a handbook outlining the standards, requirements, and procedures colleges and universities must meet in order to be accredited, the issue of part-time versus full-time faculty is typically not addressed. In fact references to the term faculty are generally vague, making it unclear as to whether the organization is describing full or part-time faculty. It is this lack of clarity that allows colleges and universities to present their compliance information in the manner most favorable to the institution. However, there are small indicators this may gradually be changing as noted by a 2007 Southern Commission report in which one denial of candidacy and one probation were partially the result of the institutions lack of full-time faculty to adequately ensure the quality and integrity of academic programs (Henry, n.d.).

#### **Retention Implications**

Historically higher education institutional governing boards have been slow to address changes in the composition of the academic workforce, frequently operating under the erroneous assumption of a predominant full-time faculty base. As a result institutional policies and practices often have not realistically reflected the needs of serving a student population whose academic success and progress is primarily dependent on a part-time adjunct instructor group. Economic benefits associated with the employment of an adjunct workforce are now being reevaluated in terms of associated risks regarding student retention (Kezar & Maxey, 2013).

As the number of adjunct instructors continues to rise while full-time tenured faculty positions fall, researchers are beginning to take a much closer look at the potential impact on student success and retention (Bolt & Charlier, 2010; Ronco & Cahill, 2004; Schibik & Harrington, 2004; Umbach, 2008: Umbach & Wawrzynsky, 2005). In the past state funding for

higher education institutions has primarily been based on student enrollment. With increased competition for funding, however, institutions are now finding themselves tasked with documenting and providing hard data regarding the effectiveness of their programs and services. Governing education agencies and funding sources are moving toward a business model approach in how higher education institutions are evaluated. This changing approach has resulted in an increased emphasis on student success, retention, and completion. No longer is it enough an institution is able to get students through the front door: Now they must also ensure the student remains enrolled and continues to academically progress.

Focusing on the lack of institutional support surrounding hiring, contractual responsibilities, and working conditions Benjamin (2003) examined varying perspectives regarding higher educations reliance on part-time adjunct faculty. Benjamin highlighted the potential adverse effects of increased adjunct faculty employment on student success and retention. While acknowledging the lack of research specifically addressing instructor status and student retention, he cited numerous studies documenting the direct link between student outcomes and faculty involvement. Asserting two main perspectives on undergraduate instruction in higher education exist, Benjamin called for additional research to determine whether institutions of higher education have failed to support undergraduate instruction and if institutions of higher education have failed to supporting and respecting adjunct faculty.

Further exploring the relationship between faculty practices and student success, Umbach and Wawrzynsky (2005) used two separate national data sets: the National Survey of Student Engagement (NSSE) and 2003 survey results reflecting faculty attitudes and behaviors across 137 colleges and universities. The NSSE survey measured student engagement in empirical good education practices and associated benefits. The parallel survey measured faculty expectations regarding student engagement in highly effective educational practices as well as classroom structure and out of class work. Using a two stage hierarchal linear model, data from 14,336 completed faculty surveys were analyzed. Results indicated faculty behaviors and attitudes played a significant role in student feelings of support and encouragement regarding the educational process, ultimately impacting student learning and academic success. The study is significant in that it supports existing research indicating the importance of faculty involvement in student learning and retention.

Building on the 2006 paper regarding *positive commandments*, Hagedorn, Perrakis, and Maxwell (2007) outlined 10 negative community college operating principles adversely impacting student success. Although recognizing the unique role community colleges play in serving a diverse student population ranging from immediate career certification seeking students to those pursuing bachelor and beyond educational status, the authors identified common practices hindering student progression and completion. Part of the Transfer and Retention of Urban Community College Students (TRUCCS) project, focus groups were conducted at nine Los Angeles community college campuses fall 2001. Students, faculty, and administrators participated in the qualitative study. Among the findings were two commandments directly pertaining to adjunct faculty:

- 1) Thou shalt not offer an insufficient number of sections of general education courses
- 2) Thou shalt not heavily rely on part-time faculty who hold sparse office hours and thus appear inaccessible to students in need of support and encouragement (p. 29).

Noting community college students typically are initially directed toward fulfilling general education course requirements, Hagedorn et al. (2007) found those courses frequently offered in insufficient numbers and often assigned them to adjunct instructors.

Additionally, student responses indicated a strong preference for experienced full-time faculty instruction in entry level courses in order to provide support and guidance beyond the classroom.

Seeking to better understand the continued reliance on adjunct faculty from an administrative standpoint, Kezar and Gehrke (2014) reviewed 2012 survey data from the American Conference of Academic Deans (ACAD) and Council of Colleges of Arts and Sciences (CCAS). Designed primarily to evaluate views regarding faculty, the survey also examined instructor hiring practices and policy development. Forty-seven items were included in the survey grouped according to faculty composition, faculty hiring practices, data gathering related to faculty hiring, policies pertaining to full and part-time adjunct faculty, and demographics. Respondents were evenly split between public and private institutions, for a total of 278 completed surveys. Master's granting institutions represented the largest type institution (48%) followed by baccalaureate (25%), and associate granting or other (5%) (para.12).

Results indicated that although data on hiring trends, salary, benefits, and contract renewal were collected, information pertaining to adjunct faculty was inaccurate. Non tenure track hiring decisions appeared to be made with minimal review and input. While 40% of respondents routinely developed staffing plans and over 80% of these plans included adjunct faculty, only 28% of deans were actually held responsible for following the designated plan. Acknowledging adjunct faculty comprised 50% of their total faculty base, respondents indicated the ideal proportion of non tenure track faculty to be 25%, signifying a discrepancy between ideology and practice. Responding to the question "which courses non-tenure track faculty are best suited to teach," respondents indicated introductory level courses to be the best option. Remedial education and high enrollment courses were identified as least suitable, highlighting the lack of

alignment between stated values and actual adjunct faculty course assignment. Concluding competing values have resulted in an unbalanced approach to the use of adjunct faculty, the authors advocated the development and implementation of appropriate decision making and accountability mechanisms among higher education administrators to ensure better planning and hiring practices.

Attempting to empirically address the issue, Webb (2007) sought to investigate whether quality of instruction provided by full-time versus part-time adjunct instructors at Southeast Kentucky and Hazard community and technical colleges (KCTCS) was statistically significant. In his research Webb used data obtained from the Kentucky Community and Technical College Student evaluation instrument, which rates instructors in 14 course content and delivery areas. In doing so, five research questions were addressed. Differences in success and satisfaction for students taking courses with full-time versus part-time faculty were examined in addition to the relationship between instructor teaching methodology and student satisfaction. Instructor attitude and enthusiasm toward subject matter and availability outside the classroom comprised the third and fourth questions. The final question assessed the relationship between student perception they benefitted from the course and student satisfaction.

Webb hypothesized there was no statistically significant difference in course satisfaction among community college students completing a course with adjunct faculty serving as the instructor. A total of 556 evaluations were obtained from participating instructors. Of the obtained evaluations 300 were randomly selected, with 150 originating from full-time faculty and 150 originating from part-time adjunct faculty. Webb found no statistically significant difference in student satisfaction in regard to full-time versus part-time instructors, supporting his hypothesis (p. 67). Although the limited sample base might restrict the applicability of this study to other states or institutions, it is relevant in that it is one of the few studies to incorporate student feedback indicators as a means of assessing adjunct instructor impact.

Continuing to examine the impact of instructor status, a 2008 study by Umbach was focused on faculty appointment type (part-time versus full-time) and instructional practices and commitment to teaching. Commitment to teaching was defined as time spent preparing for class, time spent advising or counseling students, and participation in teaching workshops. The researcher sought to answer three questions:

- 1) To what degree do part-time faculty members differ from their full-time peers in their instructional approaches and commitment to teaching?
- 2) What effect does proportion of part-time faculty on campus have on the instructional approaches and commitment to teaching of both full-time and part-time faculty?
- 3) To what extent can other institutional characteristics explain differences in instruction? Data from the 2001 Higher Education Research Institute (HERI) faculty survey consisting of questions related to academic instruction were analyzed. The sample included 20,616 faculty members representing 148 higher education institutions. Fifteen percent of the sample respondents held part-time or adjunct appointments. Using a series of hierarchical linear models Umbach (2008) found compared to their full-time peers, part-time faculty advised students less frequently, were less likely to use active teaching techniques in the classroom, focused less on citizenship development and diversity education, devoted less time to instructional preparation, and were less likely to participate in professional development. As the proportion of part-time faculty increased, commitment to teaching and student engagement decreased for all faculty regardless of status (Umbach, 2008). Applying the social exchange theory, Umbach suggested results might be due to the marginalization of part-time faculty in terms of working conditions

and inclusion in campus culture and decision making. While the size of the data set was impressive, it should be noted the actual percentage of part-time faculty participating in the survey was relatively small, potentially impacting results. Given the voluntary nature of the survey, the potential for bias cannot be ruled out.

Webb's 2007 findings were supported in 2010 when research presented at the annual meeting of the American Educational Research Association appeared to duplicate the results. The study, conducted by Bolt and Charlier (2010), originated out of full-time faculty concern surrounding adjunct instructor impact on student learning. The sample group consisted of 1,424 individuals enrolled as first-year students at Blue Ridge Community College in Virginia. Students were categorized as having either high exposure to adjuncts indicated by 75% of first semester courses taught by an adjunct, or low exposure with no more than 25% of first semester courses taught by an adjunct. Students falling in the middle exposure range were not included in the study. Students were tracked over a 3 year period looking at success rates. Success was based on two measures; fall to fall retention and program completion. Bolt and Charlier found no correlation between adjunct exposure and either of the success measures. However contrary to previously held beliefs, the study did find a positive relationship between part-time enrollment and student outcome. In attempting to explain the finding, researchers hypothesized the decline in full-time student success rates might be because many of the students were recent high school graduates who were unprepared and undecided in terms of academic direction and focus (as cited in Jaschik, 2010).

In a subsequent study involving community college students, Smith (2010) narrowed the focus in order to specifically attempt to evaluate whether the use of adjunct instructors at a 2-year community college had a detrimental effect on student retention particularly in regard to

first-time, full-time students (FTFTS). In his study Smith proposed the following research questions:

- What independent variables predict the likelihood of FTFTS not being retained to the Spring and next Fall semesters for Academic Year 2003?
- 2) What independent variables predict the likelihood of FTFTS not being retained to the Spring and next Fall semesters for Academic Year 2004?
- 3) What independent variables predict the likelihood of FTFTS not being retained to the Spring and next Fall semesters for Academic Year 2005?
- 4) What independent variables predict the likelihood of FTFTS not being retained to the Spring and next Fall semesters for Academic Year 2006?
- 5) What independent variables predict the likelihood of FTFTS not being retained to the Spring and next Fall semesters in all four academic years combined?

His hypothesis for the study was two-fold, as he predicted there would not be a decrease in the likelihood of FTFTS retention in comparison and control of other variables with increased exposure to part-time faculty for any of the specified academic years and all academic years combined. Using archival data from the Center for Research and Community Development at Kansas City Kansas Community College, Smith assessed retention rates of first-time, full-time students from 2003-2006. From the initial sample group of 2,030 students, 56 were eliminated due to missing data such as gender identification, status of professors, and over enrollment. Applying regression analysis, results from the remaining 1,974 sample group did not support the hypothesis and indicated there was an increased likelihood of first-time, full-time students not being retained with increased exposure to adjunct faculty (pp. 112-129). As exposure to adjunct faculty increased, first-time students were .63 times less likely to be retained (p. 107). As with
Webb's 2007 study, Smith's results should be interpreted with caution due to the sample reflecting a singular institution.

Recognizing the importance of faculty involvement in student learning outcomes, Scott and Scott (2012) evaluated faculty attitudes regarding assessment using an online anonymous survey link made available to 500 potential respondents. Striving to understand comprehension and participation in institutional assessment initiatives, participants were asked to select responses most closely aligned with actual experiences. Multiple answers and open-ended responses were allowed on select questions. Sixty-seven usable sets of answers representing a minimum of nine different campus communities, including 2 and 4-year institutions, was generated from the original survey. Participant demographics reflected:

- 1) 79% taught part-time or were contingent
- 2) 60% taught at a 2-year institution
- 3) 30% taught at a 4-year institution
- 4) 10% taught concurrently at both two and four-year institutions
- 5) 56% had more than 11 years teaching experience
- 6) 29% had 4-10 years teaching experience
- 7) 8% had less than 4 years teaching experience
- 8) 54% were age 45 or older
- 9) 53% were female
- 10) 64% had a master's degree
- 11) 14% had a Ph.D (p. 35).

Noting the potential for a selection bias effect, Scott and Scott found adjunct faculty participation in assessment implementation decreased when departments and institutions failed to involve part-time faculty in the design, implementation, and analysis process.

Although the use of adjunct faculty has not been as prevalent at the university level as it has been among community colleges, the rate has steadily increased. In their 2004 study Ronco and Cahill examined the association between three outcomes of freshmen and sophomore years (retention, academic achievement, instructor rating) and the amount of exposure to three types of instructor (regular full-time faculty, adjunct faculty, graduate teaching assistant). Believing prior research surrounding adjunct faculty instruction focused primarily on the direct relationship between exposure to adjunct faculty and student outcomes ignoring the potential influence of other characteristics and enrollment experiences, Ronco and Cahill (2004) designed their study to first control for known associated variables. Characteristic variables included gender, race-ethnicity, high school grade point average (GPA), and graduation in top 20% of high school class. Identified enrollment experience variables included on or off campus residence, declared major and associated university college, and type of financial aid.

In the study students were assigned to an instructor type category based on the percentage of total hours attempted within the category. First- time freshmen attending Florida Atlantic University fall 2000 and 2001 participated in the study resulting in a sample of 3,787. Data analysis was performed using multivariate, descriptive, and analysis of covariance techniques. Results indicated minimal evidence supporting any widespread impact of instructor type on student outcome, instead finding retention and academic achievement could be predicted primarily from educational experience and background variables. Warranting further investigation, however, was the nearly 14% drop in retention to the second fall for students having the least exposure to full-time faculty, prompting the researchers to recommend institutions monitor freshmen instructor assignments to ensure adequate exposure to full-time

faculty.

Acknowledging the increase of adjunct faculty employment at 4-year institutions, Schibik and Harrington (2004) examined whether exposure to adjunct faculty instruction impacted student retention. Drawing from one of their earlier studies in which adjunct faculty were found to be heavily concentrated in lower level survey courses the authors hypothesized large number of students, many high risk, receive initial academic instruction from faculty who may not have adequate institutional knowledge or resources to provide student support. Constructing a data set containing student and faculty characteristics, 7,174 first-time freshmen attending a Midwestern university from fall 1997 to fall 2001 were studied. Student data reflecting age, race, gender, ethnicity, and SAT composite math and verbal scores were collected in addition to declared major, hours attempted, hours completed, course instructor, and residency (on or off campus). Data were matched on a course by course basis to instructor characteristics in terms of department and status as either full or part-time. Results indicated a negative and significant relationship between exposure and retention. Students receiving a high level of exposure to parttime adjunct faculty instruction in their first semester were retained at lower levels in their second semester than students taking the majority of coursework from full-time faculty. Acknowledging prior studies surrounding the impact freshmen year experiences have on individual academic success, Schibik and Harrington recommended higher education administrators reassess broad based contingent faculty assignment for freshmen level courses.

Attempting to substantiate professional concerns surrounding the issue Hinz (2005), in his master's thesis, sought to assess the quantitative impact adjunct faculty instruction had on first-semester freshman retention pointing out while numerous claims of teaching effectiveness differences between part-time and full-time faculty persist, minimal quantitative data supporting

the claims exists. Asking the question "What is the quantitative impact of part-time faculty instruction upon first semester freshman retention?," Hinz looked at five demographic variables to ascertain whether they impacted second-year retention rates when combined with exposure to part-time instructional faculty (SAT, gender, ethnicity, high school rank, and high school grade point average). Using the entire first-semester freshman cohorts from North Carolina State Universities fall 1999, 2000, 2001, 2002, and 2003 classes, 18,620 student records were analyzed using logistic regression. His findings suggested there was little or no impact on retention rates when part-time adjunct faculty were used. According to his results, only high school GPA and gender substantially impacted the outcome of students being retained into the second year, with males 33% more likely to be retained than females.

The lack of quantitative data regarding adjunct instructor impact on student outcomes was also cited by Bettinger and Long in their 2005 study. The researchers attributed the lack of available data to the fact institutions had not developed a system where student outcomes could be linked to instructor characteristics and subsequently studied, although they viewed this as gradually changing with Florida and Ohio leading the way.

In their study Bettinger and Long (2005) were given access to the Ohio public 4-year college dataset to assess student transcripts and evaluate whether exposure to adjunct instruction impacted student persistence beyond the first semester. The sample was restricted to first-time, full-time freshman who were of traditional age (18-20), taken the ACT, and entered a public 4-year college in Ohio during fall 1998 or fall 1999. Using a simple instrumental variables approach to control for student schedule selection issues, Bettinger and Long found those students whose first semester courses primarily taught by adjunct instructors, less likely to persist into subsequent semesters. However their results also indicated within those fields more closely

39

tied to a specific profession, the finding was not supported. Several limitations to the study were noted, including the lack of identifying data in regard to length of service at a particular university, inability to track faculty professional activities, and inclusion of only Ohio based public university students in the sample base.

Desiring to specifically examine student persistence at 4-year institutions, Eagan and Jaeger (2008) hypothesized high levels of exposure to part-time adjunct faculty in introductory, or gatekeeper, courses resulted in fewer meaningful interactions between faculty and students ultimately impacting student retention. Analyzing data from four public residential universities in the southeast United States, the final sample consisted of 15,142 students from doctoral-extensive institutions, 13,588 students from two doctoral-intensive institutions, and 2,000 students from a master's comprehensive institution. Independent variables included information from student enrollment and transcript data consisting of race, gender, standardized aptitude test (SAT), high school grade point average (GPA), state residency, demonstrated financial need, and financial aid awards.

Classifying student academic majors into five broad categories: humanities; social sciences; life and medical sciences; physics, math, and engineering; and business, transcripts were analyzed in regard to academic major, first-year coursework, and first year cumulative GPA. Undeclared majors served as the reference group. First level college credit or introductory courses with a minimum of 90 students were defined as Gatekeeper. Adjunct faculty were classified by title as either graduate assistant, other part-time faculty (including postdoctoral researcher, adjunct professor, and part-time lecturer), or full-time tenure ineligible.

Using logistical regression the researchers found students were not significantly impacted in terms of persistence by exposure to either graduate student or full-time tenure-ineligible

instructors. Exposure to part-time faculty instruction including postdoctoral researchers, adjunct professors, and part-time lecturers in gatekeeper courses was found to result in lower persistence levels. Students in doctoral extensive and intensive institutions were 20% less likely to persist into the second year. Students at master comprehensive institutions were 37% less likely to be retained into the second year. Noting part-time faculty generally have fewer institutional resources, including designated office space and phone access, the authors recommended institutions reevaluate instructor placement and assignment in first-year foundational courses.

In a subsequent study by Eagan and Jaeger (2011) examining the effects of adjunct faculty instruction on first-year student retention, data from six public institutions were analyzed. Institutional characteristics included one doctoral extensive institution, two doctoral intensive institutions, two master's level institutions, and one baccalaureate institution. As a result of the large sample size, Eagan and Jaeger were able to examine the relationship between retention and various forms of adjunct instruction ranging from full-time, non tenure track, graduate student, and "others", which included part-time and postdoctoral. Using logistic regression Eagan and Jaeger found compared to courses taught by tenure-track faculty, freshmen students with more than 50% of credits earned from courses taught by an adjunct instructor in any of the three above mentioned categories (non tenure track, graduate student, and "others") 10% to 30% less likely to persist, supporting the earlier work of Bettinger and Long (pp. 7-9).

However, a recently published report by Figlio, Schapiro, and Soter (2013) appears to contradict these findings. Attempting to assess the impact of tenure on student learning, transcripts of freshmen attending Northwestern University from 2001 to 2008 were analyzed. The study focused on two primary factors: inspiration and preparation. Asking if taking a class from a tenured or tenure-track instructor during the first semester resulted in additional course

pursuance (inspiration) and higher grades in subsequent advanced coursework (preparation), the researchers found freshmen nearly 7% more likely to take a second course in a given discipline if their first course had been taught by an adjunct instructor. Additionally, students taught by adjunct instructors tended to perform at a higher levels in subsequent courses by between .6 to .12 grade points depending on controls. Students with lower SAT admission scores experienced the largest benefit from adjunct faculty instruction.

However in attempting to explain the findings Weismann (2013) concluded the results might not be generalizable due to several unique characteristics of the study. Acknowledging non tenured faculty at Northwestern appeared better at inspiring and preparing first-year freshmen for advanced coursework, Weismann asserted a large number of adjunct faculty at the university were long-term instructors compensated at levels higher than mainstream adjunct faculty at other institutions. Reporting from an interview with David Figlio, one of the studies co-authors, Weismann (2013) noted 82% of all non-tenure track instructors in the study had been employed by Northwestern for at least 6 quarters. Rather than assuming non tenure track faculty were paid at higher levels increased focus and attention could be given to performance in the classroom rather than on institutional research requirements.

Acknowledging the growing popularity of online academic programs, Mueller et al. (2013) examined student performance in online classes in regard to instructor status. Focusing on a single introductory level course, researchers compared student performance between online sections taught by adjunct instructors versus full-time instructors. Instructional content, and assessments for all sections was identical. Final course grade was based on the use of a common rubric using the same course objectives. Faculty individualized instruction was limited to three primary avenues: inclusion of supplemental course content, instructor-student interaction, use-type of feedback. Using composite outcome data from archival records accessed through the institutions learning management system, outcome measures regarding successful completion rate, failure, withdrawal rate, failure-withdrawal combined rate, course grade, grade variance, continued enrollment rate, and end of course satisfaction rate were collected (para. 14).

Results indicated increased student satisfaction and learning, as measured by higher grades, in those courses taught by full-time faculty. Given the identical nature of core content, researchers concluded results were due to individual choices, behaviors, and actions of instructors potentially reflecting work environment differences between full and adjunct faculty.

Also examining the impact of instructor status on student success within the online learning environment, a 2013 dissertation study by Hutto appeared to contradict Mueller et al. (2013) results. Investigating the relationship between course retention and faculty status, Hutto conducted a quantitative correlational research study using student enrollment and faculty employment data. Two research questions guided Hutto's study:

- 1) Is there a correlation between the employment status of faculty members and course retention?
- 2) Is there a difference in course retention between permanent and adjunct faculty members?

Full-time and adjunct faculty members employed at Florida Community College comprised the sample. Faculty status and course retention data were obtained through Florida Community College Office of Institutional Research. As defined within the study, all students successfully completing general education courses with a grade of C or better during the fall 2011 semester were considered retained. Course retention was reflected by the percentage of retained students.

Results indicated full-time faculty members retained a lower percentage of students than adjunct faculty members. Noting results were based on a singular institution with limited student diversity and lack of randomized sampling, Hutto cautioned against generalizing the results and called for additional research to examine potential long-term consequences of adjunct faculty instruction on student retention.

#### **Graduation Implications**

Recognizing the importance retention plays in overall student success, an equally relevant indicator can be found by reviewing student graduation rates. In a 2004 study Ehrenberg and Zhang attempted to do just that. Affirming the significant employment growth of adjunct faculty at American colleges and universities, Ehrenberg and Zhang sought to address whether this growth adversely affected undergraduate students in terms of reduced learning, longer time to degree completion, lower graduation rates, and lower tendency to pursue post-graduate study. Controlling for other factors, panel data from 2 and 4-year colleges and universities over a 15 year period was analyzed using an econometric analysis. Results of the study indicated an adverse impact on graduation at 4-year institutions, particularly for those students attending a master-level public institution. A 10% increase in the use of adjunct faculty was found to be associated with a 3% drop in graduation rates (p. 11). The researchers did point out, however, the study did not address whether those students who failed to successfully complete within the expected time frame later returned to complete or, in fact, never graduated.

Taking a comprehensive approach to student success, in a 2005 working paper Bailey, Calcagno, Jenkins, Kienzel, and Leinbach examined community college institutional characteristics. Institution size, tuition level, adjunct faculty employment, per student expenditures, resource allocation, certificate versus degree emphasis, and level of financial aid were analyzed drawing from a 1988 National Education Longitudinal Study (NELS: 88). Detailed individual level characteristics were obtained from NELS:88. Institutional variables were accessed from the Integrated Postsecondary Education Data System (IPEDS). The study was designed to estimate institutional effect in regard to certificate completion, associate degree completion, and baccalaureate transfer while controlling for individual student characteristics in terms of socioeconomic background and high school standardized test scores. Researchers found graduation rates declined as school size increased. Additionally, students enrolled at institutions with higher adjunct faculty instructor assignments had lower graduation rates. A large minority student population was also found to adversely impact graduation. Interestingly, financial factors did not appear to significantly impact completion. Individual characteristics were strongly related to completion as opposed to institutional factors, suggesting well-prepared students with adequate economic resources do well in a variety of institutional settings. Conversely, students having multiple personal and financial challenges were more likely to have difficulty progressing academically even in strong collegiate environments. Noting the impact pedagogy, guidance, advising, faculty culture, and organizational factors have on student retention and progression, the authors called for additional research to further study the relationship between institutional characteristics and student progression.

In addition to Ehrenberg and Zhang, Jacoby (2006) examined the potential impact adjunct instruction had on student graduation rates. Based on previous studies indicating nearly half of all instruction at 2-year institutions was provided by adjunct faculty, Jacob focused his study on community college students (American Association of University Professors, 1993; Coalition on the Academic Workforce, 2012). Using regression analysis he found as the use of adjunct faculty increased, graduation rates decreased. Furthermore, while increasing the overall

45

faculty-to-student ratio had a positive impact on graduation outcomes it was not enough to compensate for the negative impact higher adjunct use had on student success and completion (p. 1100).

Also citing the increased employment of adjunct faculty at the community college level, Eagan and Jaeger (2009) examined the relationship between part-time adjunct faculty members and associate degree completion for California community college students. Eagan and Jaeger hypothesized students exposed to higher levels of adjunct instruction versus full-time faculty instruction had less meaningful interactions with instructors. Over time these less meaningful interactions resulted in students feeling detached from the academic culture, ultimately impacting academic completion (pp. 174-175). A secondary question included in the study assessed whether the percentage of part-time adjunct faculty employed by a college significantly impacted the likelihood of associate degree completion by attending students. The sample consisted of two cohorts of first-time credit seeking students from 2000 and 2001. After controlling for students who had no initial desire or intent to pursue an associate's degree, the final sample included 178,895 students representing 107 community colleges. Using a hierarchal generalized linear model student transcripts, faculty employment, and institutional data were analyzed. Results indicated a significant yet modest effect in support of the hypothesis. Students who had high exposure to adjunct faculty instruction were 5% less likely to graduate with an associate's degree than students who had taken the majority of their coursework with full-time faculty members (Eagan & Jaeger, p. 186).

Noting the increase in adjunct faculty employment among 2-year institutions, Allison and Beyers (2010) studied the impact of faculty status on short-and long-term student retention and overall student success at a public 2-year college in the Midwest. Two questions guided

the study:

- Does faculty status influence long-term student learning success such as transfer and graduation rates?
- 2) Does faculty status influence short-term student learning outcomes such as retention and enrollment success rates?

Control variables included gender, minority status-ethnicity, median class size, self-reported desired learning outcomes, first-time, full-time freshmen status, and socioeconomic level as measured by median household income. Long-term learning outcomes were measured by graduation or student transfer within 3 years of enrollment. Short-term control variables included faculty status, gender, minority status-ethnicity, class size, self-reported desired learning outcomes, first-time student status, and socioeconomic level. Short-term learning outcomes were measured by retention success and enrollee success. Retention success was defined as course completion with an earned grade of A, B, C, P, D, or F. Enrollee success was defined as student course completion with an A, B, C, or P grade. Hypothesizing faculty status is correlated to student outcomes, Allison and Beyers proposed the following hypotheses:

- 1) Faculty type influences short-term course retention and enrollee success rates
- 2) Faculty type influences whether first-time full-time students graduate or transfer within three years of enrollment

Long-term student success data were based on 1,466 first-time, degree seeking undergraduate students attending fall 2005. Short-term course level data were based on all student learning outcomes fall 2005 to fall 2008 for full-time degree-seeking undergraduate students, totaling 91,188 (duplicated course enrollment). Faculty status, student enrollment, grade, and demographic information were collected from 20<sup>th</sup> day student census and end of term data. The

independent variable in the long-term student outcome dataset was aggregated proportion of fulltime students and part-time adjunct instructors over a 3 year period. The independent variable in the short-term student learning outcome dataset was full-time versus part-time faculty status related to a specific class. Based on the dichotomy of dependent variables, logistic regression analyses was used in order to estimate the linear relationship between the independent variables and identified dependent variable.

Long-term study results indicated students primarily enrolled in part-time adjunct faculty instructed classes just as likely to graduate or transfer as students enrolled in full-time faculty instructed classes. Significance and meaning were found in regard to two student intent variables. Desire to "prepare to change careers" was significantly related to graduation and transfer. "Improving skills for present job", however, was a negative predictor. Socioeconomic status as reflected by median household income was not significant. Median class was significant with a very small positive effect on student transfer or graduation within the 3-year period. Short-term results confirmed those found in the long-term model, finding faculty status not significant in student retention. Student enrollee success was statistically significant, although actual impact as measured by the coefficient was quite small. However, gender was found to be a good predictor of student retention and enrollment success with females scoring higher in both areas.

All defined ethnicity variables were significant in the enrollment success model. Asian students were more likely to be retained in a given class than their counterparts and tended to perform better than Caucasian students. African-American and Hispanic students tended to fail classes at a higher rate than Caucasian students. Student intent was highly significant in both long-and short-term models regarding short-term retention and enrollee success. Students who indicated a desire to "prepare to change careers" or "prepare to enter the job market" were more likely to succeed in a given class. Conversely the statements "explore courses to decide on a career" and "undecided" negatively impacted student enrollment success. Results confirmed studies by Ehrenberg and Zhang (2005) and Umbach (2007), which indicated instruction by fulltime faculty did not lead to higher graduation and transfer rates when compared to adjunct faculty instruction.

In a recent study presented by Yu (2013) at the Association for the Study of Higher Education annual conference, the results of previous research on adjunct instruction and student degree or certificate completion was once again questioned. The study, part of a doctoral dissertation, was conducted by Hongwei Yu and prompted by his experiences as an adjunct instructor. Believing he had been effective in his role as an adjunct instructor, Yu decided to incorporate his experience into a research study. Rather than focus on a particular institution within a particular state, however, he analyzed individual-level data from the National Center for Education Statistics. Using a survey designed for beginning postsecondary students in conjunction with a variety of institutional-level data from the national center's Integrated Postsecondary Education Data System, including a breakdown of part-time adjunct versus full-time faculty, Yu found parttime faculty status had no impact on student degree or certificate attainment. The results did indicate, however, college size and location played a significant role in predicting student success. Although preliminary, the study has already contributed to the ongoing debate surrounding adjunct instructor impact on student success and retention (Flaherty, 2013).

#### Summary

Although adjunct faculty employment in higher education is far from new, interest regarding

the possible ramifications of adjunct academic instruction on student success and retention has gained momentum over the last several decades. As governing boards and agencies increasingly apply business model approaches to educational practices and processes, higher education institutions have found economic value in the employment of adjunct instructors.

Additionally two Tennessee state mandated initiatives, Drive to 55 and Tennessee Promise, signify a heightened focus on higher education. With both initiatives designed to improve post secondary access and completion at the same time state funding formulas reflect an emphasis on student success and retention, the need for decidedly effective instructors is essential. As demonstrated in the literature review, studies regarding instructor status and student success and retention have produced contradictory results. With institutional reliance on adjunct faculty employment growing as state funding reinforces student retention and completion, colleges and universities are challenged in finding the appropriate balance between financial solvency and academic performance. Further research exploring the significance of adjunct instruction on student success is warranted given the associated potential financial implications for higher education institutions.

# CHAPTER 3

# RESEARCH METHODOLOGY

# Introduction

The growth of adjunct faculty employment among higher education institutions has led to heightened concerns regarding the potential impact on student success and retention (Benjamin, 2002; Bettinger & Long, 2005; Eagan & Jaeger, 2011; Ochoa, 2011). Research in this area has produced contradictory results ranging from little to no impact to modestly significant (Perez & Litt, n.d.). While the long-term effect of increased adjunct instruction has not been established, the impact on freshmen and first-year students appears more evident (Bettinger & Long, 2005; Eagan & Jaeger, 2008, 2011; Smith, 2010). The purpose of this quantitative comparative study was to examine whether there is a significant difference in the fall-to-fall retention rate and proportion of assigned grades for first-time freshmen attending Motlow State Community College (MSCC) in regard to instructor status (adjunct or full-time). This chapter provides an overview of the study, research questions and associated null hypotheses, instrumentation, population, data collection and analysis procedures, and summary.

This research design was based on a nonexperimental quantitative design using academic transcripts of first-time freshmen. Retention was defined as the percentage of students who returned from freshmen to sophomore year. Instructor status was defined as either full-time tenure track or part-time adjunct.

The design of the study used a comparative analysis based on student success and retention and instructor status. According to Williams (2007, "causal comparative research design provides the researcher the opportunity to examine the interaction between independent variables and their influence on dependent variables" (p. 66). Comparative analysis was appropriate for the study given the proposed research questions. For the study the use of comparative analysis examined whether a statistically significant difference exists between the independent variable, instructor status (part-time adjunct or full-time tenure track) and student retention (percentage of first-time freshmen who return from freshmen to sophomore year).

Limitations with the research design do exist. Lack of sample randomization, manipulation of the independent variable, and control reflect potential design weakness. External variables and other mediating or moderating variables may actually reflect true cause, impacting outcomes (Jacobs, 2003). As with correlational studies, comparative research must be interpreted with caution. According to Gay et al. (as cited in Area Education Agency, 2006), "although a statistically significant difference may exist, it does not automatically mean there is a causal connection between the variables" (p. 4).

#### Research Questions and Null Hypothesis

Eight research questions and associated null hypothesis were formulated and guided the research for the study.

- Is there a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?
  Ho1: There is no significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.
- 2. Is there a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty?

- Ho2: There is no significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty.
- 3. Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty?
  - Ho3: There is no significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty.
- 4. Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty?
  - Ho4: There is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty.
- 5. Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty?
  - Ho5: There is no significant difference in the fall to fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty?
- 6. Is there a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty?

- Ho6: There is no significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty.
- 7. Is there a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?
  - Ho7: There is no significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.
- 8. Is there a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?
  - Ho8: There is no significant difference in the proportion of assigned grades in History2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.

#### **Instrumentation**

Prior to beginning the study, permission was obtained from the President of Motlow State Community College, Dr. Anthony Kinkel, to conduct research at the institution (see Appendix). Academic and registration records of first-time freshmen attending Motlow State Community College beginning fall 2013 were evaluated. Instructor status was determined through the college's employee classification system as either permanent full-time or temporary part-time. Temporary full-time faculty classifications were not included. Required data was extracted from the Motlow State Community College Banner and Argos systems and verified for accuracy.

### Population and Sampling Method

The population was limited to high school graduates enrolled at Motlow State Community College (MSCC) in Tennessee. The study sample consisted of first-time freshmen attending MSCC beginning fall 2013 and returning fall 2011. Motlow State Community College is a multi-campus higher education institution representing an 11 county service area in Middle Tennessee. Part of the Tennessee Board of Regents (TBR) system, Motlow offers a full range of academic awards including Associate of Arts, Associate of Science, Associate of Applied Science, Associate of Science in Teaching, as well as numerous Technical Certificates. With locations in Fayetteville, McMinnville, Moore County, and Smyrna the college has an average enrollment of 4,800 students. More first-time freshmen graduate from Motlow and then subsequently graduate from a 4-year institution than from any other TBR community college. Motlow employs on average 267 academic instructors. Ninety-two, or 34.45% are full-time tenured and 175, or 65.54%, are part-time adjunct (Motlow State Community College Fact Book, 2014).

Recognizing Motlow College's off-campus location proximity to other higher education institutions and reverse student transfer and transient student implications, first-time freshmen were selected in order to increase the validity of the study. Students beginning their collegiate experience at a 4-year institution and transferring to Motlow as well as students seeking permission to attend for one-term only were excluded from the study. A stratified random sampling method was selected, reflecting first-time, full-time freshmen and first-time, part-time freshmen. A non proportional sampling technique was chosen because of the potential small sample size and ease of subgroup comparisons (McMillan & Schumacher, 2010, p. 134).

# Data Collection

Existing data were used to conduct the study gathered from instructor and student information maintained by Motlow State Community College's Banner information system. Banner is the official information system of the college, designed to ensure data are collected and maintained in a secure and consistent manner. Banner stores official academic, registration, and employment status records of current students and employees of the college. Recognizing the need for enhanced reporting capabilities, the web enabled reporting tool Argos is used in conjunction with Banner allowing more complex and advanced data formatting and analyzation. Student, Finance, Academic, Human Resource, and Institutional Research data can be accessed through Argos allowing for cross-operational analysis (Evisions, 2014). Employing Argos, dependent and independent variable information was extracted and downloaded on a personal computer and analyzed using the SPSS Base Statistical Package.

#### Data Analysis

The compiled data were transferred into the IBM-SPSS, version 19, to analyze the hypothesis. For all research questions a chi-square test for independent samples was used. All findings reported were based on the .05 level of significance (alpha). The statistical procedures are discussed in greater detail in Chapter 4 and the findings thus generated are presented.

#### Summary

Chapter 3 indicated the design and methodology of the study, research questions and

corresponding null hypotheses, population, sample, and data collection and analysis procedures. Quantitative methods were used to evaluate retention of first-time freshmen students attending Motlow State Community College in regard to instructor status. The study consisted of eight research questions for which the data are analyzed in Chapter 4. Chapter 5 includes a summary of the study, conclusions, implications, and recommendations for practice and future research.

### CHAPTER 4

# FINDINGS

The purpose of this comparative quantitative study was to examine whether there is a significant difference in the fall to fall retention rate and proportion of assigned grades for first-time freshmen attending Motlow State Community College (MSCC) in regard to instructor status (adjunct or full-time). Data from first-time freshmen attending Motlow State Community College fall 2013 were studied. The eight hypotheses were tested in the null format for significance at the .05 level. The following findings are reported as the result of the data analysis.

### **Research Questions**

**Research Question 1** 

Is there a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty? Ho1: There is no significant difference in the fall-to-fall retention rate for first-time, full-time

students between those taught by adjunct faculty and those taught by full-time faculty. A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty by adjunct faculty and those taught by full-time faculty by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(1, N = 1437) = .09$ , p = .767. Therefore, the null hypothesis was retained; there is no significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-

time faculty. The fall to fall retention rate was similar for first-time, full-time students whether taught by adjunct faculty or full-time faculty. Table 1 specifies the associated frequencies related to first-time, full-time student retention and instructor status.

# Table 1

	Ret	ained	Not Re	etained	Total
Instructor	Ν	%	Ν	%	
Full-time	428	71.3	172	28.7	600
Adjunct	445	60.4	292	39.6	737
Total	873		464		1,337

First-time, Full-time Student Retention and Instructor Status

# **Research Question 2**

Is there a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty? Ho2: There is no significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty by adjunct faculty and those taught by full-time faculty by adjunct faculty and those taught by full-time faculty and those taught by adjunct faculty and those taught by full-time faculty was significantly different,  $X^2(1, N = 788) = 6.0, p = .014$ . Therefore, the null

hypothesis was rejected; there is a significant difference in the fall-to-fall retention rate for firsttime, part-time students between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate was different for first-time, part-time students taught by adjunct faculty and students taught by full-time faculty. Table 2 specifies the associated frequencies related to first-time, part-time student retention and instructor status.

# Table 2

	Reta	ined	Not R	etained	Total
Instructor	Ν	%	N	%	
Full-time	194	53.6	168	46.4	362
Adjunct	191	44.8	235	55.2	426
Total	385		403		788

### First-time, Part-time Student Retention and Instructor Status

#### Research Question 3

Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty?

Ho3: There is no significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the retention rate for first-

time students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(1, N = 2225) = 3.4, p = .065$ . Therefore, the null hypothesis was retained; there is no significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate was similar for first-time students whether taught by adjunct faculty or full-time faculty. Table 3 specifies the associated frequencies related to first-time students and instructor status.

# Table 3

	Retai	ned	Not R	etained	Total
Instructor	Ν	%	Ν	%	
Full-time	662	60.1	440	39.9	1,102
Adjunct	636	54.7	527	45.3	1,163
Total	1,298		967		2,265

# First-time Student Retention and Instructor Status

# **Research Question 4**

Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty?

Ho4: There is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between

those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(1, N = 1387) = .03, p = .854$ . Therefore, the null hypothesis was retained; there is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate was similar for students with a high school grade point average (GPA) of 3.0 or higher whether taught by adjunct faculty or full-time faculty. Table 4 specifies the associated frequencies related to high school grade point average (GPA) of 3.0 or higher for first-time students.

### Table 4

	Reta	ined	Not R	etained	Total
Instructor	Ν	%	Ν	%	
Full-time	485	71.5	193	28.5	678
Adjunct	504	71.1	205	28.9	709
Total	989		398		1,387

High School GPA of 3.0 or Higher First-time Student Retention and Instructor Status

#### **Research Question 5**

Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty?

Ho5: There is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(1, N = 993) = .98, p = .323$ . Therefore, the null hypothesis was retained; there is no significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty. The fall-to-fall retention rate was similar for students with a high school grade point average (GPA) of 2.9 or lower whether taught by adjunct faculty or full-time faculty. Table 5 specifies the associated frequencies related to high school grade point average (GPA) 2.9 or lower for first-time student retention and instructor status.

### Table 5

	Reta	ined	Not R	etained	Total	
Instructor	Ν	%	Ν	%		
Full-time	313	79.0	83	21.0	396	
Adjunct	487	81.6	110	18.4	597	
Total	800		193		<i>993</i>	

High School GPA of 2.9 or Lower First-time Student Retention and Instructor Status

# Research Question 6

Is there a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by fulltime faculty?

Ho6: There is no significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty.

Chi-square tests were conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty. The analyses indicated the retention rate for traditional and non traditional age students between those taught by adjunct faculty by full-time faculty was not significantly different,

 $X^{2}(1, N = 993) = .98$ , p = .323 and  $X^{2}(1, N = 213) = .14$ , p = .709. Therefore the null hypothesis was retained; there is no significant difference in the fall-to-fall retention rate for traditional and

non traditional age students between those taught by adjunct faculty and those taught by full-time faculty. The fall- to-fall retention rate was similar for traditional and non traditional age students whether taught by adjunct faculty or full-time faculty. Table 6 specifies the associated frequencies related to age and student retention and instructor status.

# Table 6

	Age	Retained			Not Retained		
Instructor		Ν	%	Ν	%		
Full-time	Traditional	313	79.0	83	21.0	396	
Adjunct	Traditional	487	82.0	110	18.0	597	
Total		800		193		<i>993</i>	
Full-time	Non Traditional	53	53.0	47	47.0	100	
Adjunct	Non Traditional	57	50.4	56	49.6	113	
Total		110		103		213	

# Age and Student Retention and Instructor Status

# **Research Question 7**

Is there a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

Ho7: There is no significant difference in the proportion of assigned grades in English

1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(4, N = 816) = 6.8, p = .147$ . Therefore, the null hypothesis was retained; there is no significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty by adjunct faculty and those taught by full-time faculty. The proportion of assigned grades in English 1010 was similar for first-time, full-time students whether taught by adjunct faculty or full-time faculty. Table 7 specifies the associated frequencies related to proportion of assigned grades in English 1010 for first-time, full-time, full-time students and instructor status.

Table 7

	Grade									
Instructor	А	%	В	%	С	%	D	%	F	%
Full-time	143	49.0	134	56.1	77	52.0	23	47.9	36	41.0
Adjunct	150	51.0	105	43.9	71	48.0	25	52.1	52	59.0
Total	293		239		148		48		88	

Proportion of Assigned Grades English 1010, First-time, Full-time Student and Instructor Status

**Research Question 8** 

Is there a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

Ho8: There is no significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different,  $X^2(4, N = 348) = 1.0, p = .909$ . Therefore, the null hypothesis was retained; there is no significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty by adjunct faculty and those taught by adjunct faculty and the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by adjunct faculty and those taught by adjunct faculty. The proportion of assigned grades in History 2010 was similar for first-time, full-time students whether taught by adjunct faculty or full-time faculty. Table 8 specifies the associated frequencies related to proportion of assigned grades History 2010 and instructor status.

# Table 8

Grade											
Instructor	А	%	В	%	С	%	D	%	F	%	
Full-time	40	47.0	49	45.8	41	46.1	15	55.6	20	50.0	
Adjunct	45	53.0	58	54.2	48	53.9	12	44.4	20	50.0	
Total	85		107		89		27		40		

Proportion of Assigned Grades History 2010, First-time, Full-time Student and Instructor Status

# Summary

This chapter presented the comparative analyses for retention and proportion of assigned Grades in regard to instructor status for students attending Motlow State Community College (MSCC) fall 2013. Eight research questions and associated null hypothesis guided data analysis. Chi-square analyses were used to determine differences between instructor status and student retention and proportion of assigned grades. From these analyses, one out of the eight research questions had significant findings. A summary of these findings, as well as conclusions, implications for policy and practice, and recommendations for further study are presented in Chapter 5.

#### **CHAPTER 5**

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The impact of instructor status on student retention and proportion of assigned grades were investigated in this quantitative comparative study. Academic, registration, and employment status records of Motlow State Community College instructors and first-time freshmen attending fall 2013 were evaluated. Instructor status was defined as either part-time adjunct or full-time tenured. Retention was defined as the percentage of students who returned freshmen to sophomore year. A stratified random sampling method and proportional sampling technique was chosen reflecting first-time, full, and part-time freshmen.

Existing data from the Motlow College Banner information system and Argos, a web enabled reporting tool, were extracted allowing for a complex and advanced review. Findings of the study were analyzed using IBM-SPSS, version 19. All findings reported were based on .05 level of significance (alpha). For all research questions, a chi-square test for independent samples were used to examine the relationship between instructor status, student retention and proportion of assigned grades in order to address the associated research questions.

### Summary of Findings

Data from first-time freshmen attending Motlow State Community College fall 2013 were studied. The eight hypotheses were tested in the null format for significance at the .05 level. The following findings are reported as the result of the data analyses.

#### Research Question 1

Is there a significant difference in the fall-to-fall retention rate for first-time, full-time

students between those taught by adjunct faculty and those taught by full-time faculty?

A review of closely related research regarding the impact of instructor status on student success and retention for first-time, full-time students indicates contradictory findings. Bettinger and Long (2005) found students whose first semester courses primarily taught by adjunct instructors less likely to persist into subsequent semesters, excluding program specific disciplines. Smith (2010) confirmed the research finding as exposure to adjunct faculty increased, first-time, full-time students .63 times less likely to be retained. These findings were not supported, however, in Allison and Beyers 2010 study exploring the impact of faculty status on short-and long-term student retention and overall student success. Students primarily enrolled in adjunct faculty instructed classes were just as likely to graduate or transfer as students enrolled in full-time faculty instructed classes.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty different. The fall-to-fall retention rate was similar for first-time, full-time students whether taught by adjunct faculty or full-time faculty. The findings of the analysis support the findings by Allison and Beyers (2010). One difference to point out is the inclusion of student transfer data in Allison and Beyers model of long-term success, including graduation and transfer to other higher education institutions. Success, or retention, in this study was defined as students who returned freshmen to sophomore year. Research Question 2

Is there a significant difference in the fall-to-fall retention rate for first-time, part-time

students between those taught by adjunct faculty and those taught by full-time faculty?

Exploring the impact of high versus low exposure to adjunct instruction on student retention and program completion, Bolt and Charlier (2010) found a positive relationship between parttime enrollment and student success.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty was significantly different. The fall-to-fall retention rate was different for first-time, part-time students taught by adjunct faculty and students taught by full-time faculty. The findings of the analysis support the findings by Bolt and Charlier (2010). Differences in the studies do exist. Students in the Bolt and Charlier study (2010) included high and low adjunct exposure categories excluding middle exposure range students and were tracked over a 3-year period. In this study, all first-time freshmen were examined from fall 2013 to fall 2014.

#### Research Question 3

Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty?

Examining whether exposure to adjunct faculty instruction impacted student retention, Schibik and Harrington (2004) studied 7,174 first-time freshmen. Results indicated a negative and significant relationship between exposure and retention. Students receiving a high level of exposure to adjunct faculty instruction in their first semester were retained at lower levels in their second semester than students taking the majority of coursework from full-time
faculty. Jacoby (2006) confirmed the research finding as the use of adjunct faculty increased, graduation rates decreased.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The fall-to-fall retention rate was similar for first-time students whether taught by adjunct faculty or full-time faculty. The findings of the analysis do not support the findings by Schibik and Harrington (2004) and Jacoby (2006). Interesting to note Jacoby's (2006) study examined students attending at the university college level.

#### Research Question 4

Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty?

Controlling for known associated variables, including high school GPA, Ronco and Cahill (2004) found minimal evidence supporting any widespread impact of instructor type on student outcome. Contradicting these results, a 2005 study by Hinz indicated high school grade point average a significant factor impacting student progression and retention. Attempting to assess the impact tenure had on student learning Figlio et al. (2013) analyzed freshmen transcripts, finding students taught by adjunct faculty more likely to academically perform at higher levels by between .6 to .12 grade points depending on controls, particularly students with lower SAT scores.

72

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The fall-to-fall retention rate was similar for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The fall-to-fall retention rate was similar for first-time students with a high school grade point average (GPA) of 3.0 or higher whether taught by adjunct faculty or full-time faculty. The findings of the analysis support the findings of Ronco and Cahill (2004).

#### Research Question 5

Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty?

Controlling for known associated variables, including high school GPA, Ronco and Cahill (2004) found minimal evidence supporting any widespread impact of instructor type on student outcome. Contradicting these results, a 2005 study by Hinz indicated high school grade point average a significant factor impacting student progression and retention. Attempting to assess the impact tenure had on student learning Figlio et al. (2013) analyzed freshmen transcripts, finding students taught by adjunct faculty more likely to academically perform at higher levels by between .6 to .12 grade points depending on controls, particularly students with lower SAT scores.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point

average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The fall-to-fall retention rate was similar for first-time students with a high school grade point average (GPA) of 2.9 or lower whether taught by adjunct faculty or full-time faculty. The findings of the analysis support the findings of Ronco and Cahill (2004).

## Research Question 6

Is there a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty?

For this analysis the population of students classified as traditional included individuals aged 24 or younger. The population of students classified as non traditional included individuals aged 25 or older.

Chi-square tests were conducted to evaluate the null hypothesis that there is a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty. The analyses indicated the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The fall-to-fall retention rate was similar for traditional and non traditional age students whether taught by adjunct faculty or full-time faculty. This information is important and will be highly useful as higher education institutions look toward incorporating services and programs designed to dually support traditional and non traditional students.

#### Research Question 7

Is there a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

Seeking to understand grade inflation Sonner (2000) found evidence indicating on average, adjunct instructors awarded higher grades than their full-time counterparts. Kezim, Pariseau, and Quinn (2005) compared assigned grades given by adjunct faculty, tenure-track faculty, and tenured faculty over a 20-year period. Results indicated adjunct faculty awarded significantly higher grades than either tenure-track or tenured faculty. Examining grading practices in higher education, BoarerPitchford (2010) surveyed 227 adjunct and full-time instructors at two large community colleges finding adjunct instructors more lenient in awarded credit. A 2010 study by Iris Franz, however, found adjunct instructors awarded lower grades than their full-time counterparts. Investigating multiple potential factors related to the likelihood of grade inflation by faculty members at seven community colleges in three states, Heulett (2013) found no predictive relationship between instructor status and likelihood of grade inflation.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty was not significantly different. The proportion of assigned grades was similar in English 1010 for first-time, full-time students whether taught by adjunct faculty or full-time faculty. The findings of the

analysis support the findings of Heulett (2013). This information is important given the increasing number of undergraduate courses at public colleges and universities taught by adjunct instructors (Jaschik, 2008).

#### **Research Question 8**

Is there a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

Seeking to understand grade inflation Sonner (2000) found evidence indicating on average, adjunct instructors awarded higher grades than their full-time counterparts. Kezim et al. (2005) compared assigned grades given by adjunct faculty, tenure-track faculty, and tenured faculty over a 20-year period. Results indicated adjunct faculty awarded significantly higher grades than either tenure-track or tenured faculty. Examining grading practices in higher education, BoarerPitchford (2010) surveyed 227 adjunct and full-time instructors at two large community colleges finding adjunct instructors more lenient in awarded credit. A 2010 study by Iris Franz, however, found adjunct instructors awarded lower grades than their full-time counterparts. Investigating multiple potential factors related to the likelihood of grade inflation by faculty members at seven community colleges in three states, Heulett (2013) found no predictive relationship between instructor status and likelihood of grade inflation.

A chi-square test was conducted to evaluate the null hypothesis that there is a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. The analysis indicated the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty was not

significantly different. The proportion of assigned grades was similar in History 2010 for firsttime, full-time students whether taught by adjunct faculty or full-time faculty. The findings of the analysis support the findings of Heulett (2013). This information is important given the increasing number of undergraduate courses at public colleges and universities taught by adjunct instructors (Jaschik, 2008).

## **Conclusions**

The purpose of this quantitative comparative study was to examine whether there were significant differences in student retention and proportion of assigned grades for students attending Motlow State Community College fall 2013 based on instructor status. The research questions in this study were addressed through data analysis with chi-square independent sample data analysis.

#### Research Question 1

Research Question 1 focused on the interaction for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. No significant interaction was found,  $X^2(1, N = 1437) = .09$ , p = .767. Therefore the null hypothesis was retained. This was consistent with Allison and Beyers (2010) study examining student success.

#### Research Question 2

Research Question 2 focused on the interaction for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty. A significant interaction was found,  $X^2(1, N = 788) = 6.0$ , p = .014. Therefore the null hypothesis was rejected. This was consistent with Bolt and Charlier (2010) study. However, differences do exist. Students in the Bolt and Charlier study included high and low adjunct exposure categories excluding middle exposure range students and were tracked over a three year period. In this study, all first-time freshmen were examined from fall 2013 to fall 2014.

#### Research Question 3

Research Question 3 focused on the interaction for first-time students between those taught by adjunct faculty and those taught by full-time faculty. No significant interaction was found,  $X^2(1, N = 2225) = 3.4, p = .065$ . Therefore the null hypothesis was retained. This finding is inconsistent with previous studies in which students who received a high level of exposure to adjunct faculty instruction in their first semester were retained at lower levels in their second semester than students taking the majority of coursework from full-time faculty (Jacoby, 2006; Schibik & Harrington, 2004).

#### Research Questions 4 and 5

Research Questions 4 and 5 focused on the interaction for first-time students and high school grade point average between those taught by adjunct faculty and those taught by full-time faculty. No significant interaction was found for first-time students with a high school grade point average of 3.0 or higher and 2.9 or lower,  $X^2(1, N = 1387) = .03$ , p = .854 and  $X^2(1, N = 993) = .98$ , p = .323. Therefore the null hypotheses for Research Questions 4 and 5 were retained. This finding is consistent with Ronco and Cahill (2004) in which researchers found minimal evidence supporting any widespread impact of instructor type on student outcome. Contradicting these results, a 2005 study by Hinz indicated high school grade point average a significant factor impacting student progression and retention. A 2013 study by Figlio et al. found students taught by adjunct faculty more likely to perform at higher levels, particularly students with lower SAT scores.

#### Research Question 6

Research Question 6 focused on the interaction for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty. No significant interaction was found for traditional and non traditional age students,  $X^2(1, N = 993) = .98$ , p = .323 and  $X^2(1, N = 213) = .14$ , p = .709. Therefore the null hypothesis was retained. <u>Research Questions 7 and 8</u>

Research Questions 7 and 8 focused on the proportion of assigned grades in English 1010 and History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty. No significant interaction was found in the proportion of assigned grades in English 1010 and History 2010,  $X^2(4, N = 816) = 6.8, p = .147$  and  $X^2(4, N = 348)$ = 1.0, p = .909. Therefore the null hypotheses for Research Questions 7 and 8 were retained. These findings are inconsistent with prior studies which indicated on average, adjunct instructors awarded higher grades (BoarerPitchford, 2010; Kezim et al., 2005; Sonner, 2000). However, the findings are consistent with Heulett's 2013 study which found no predictive relationship between instructor status and likelihood of grade inflation.

While instructor status appeared to have no significant impact on student retention or proportion of assigned grades for seven of the eight research questions, instructor status did significantly impact student retention for first-time, part-time students in the study. Incorporating student demographic and institutional factors, the researcher proposes several explanations for the finding.

As a demographic, part-time students may face additional challenges outside the classroom. Lacking financial resources to attend full-time, many students must limit their academic enrollment in order to economically support themselves or other family members. Students with dependents must juggle childcare and parenting responsibilities with their own educational needs in terms of preparation and study. Individuals feeling academically underprepared may intentionally enroll in fewer classes as a way of "testing the water" before fully committing. The attainment of a degree may also appear elusive for those students limited to part-time enrollment in terms of years to complete, contributing to early failure or decision not to return.

Institutionally in regard to instructor status, adjunct instructors are frequently assigned at the last minute adversely impacting their ability to adequately prepare in terms of course content. With limited input as to course assignment, many adjunct instructors find themselves teaching outside their actual area of expertise or having to follow outdated or poorly designed course syllabi and materials. Additionally due to low wages associated with part-time employment status adjunct instructors may teach at several institutions simultaneously in order to garner a livable income, hindering their interaction with students outside the classroom. Inadequate or nonexistent designated campus office space and access to technology may further contribute to instructor remoteness. Combined, these factors could result in delayed or reduced instructor responsiveness to student needs and inquiries regarding classroom progress and performance, ultimately impacting student intellectual development and success.

#### Recommendations for Practice

Although institutions of higher education have found economic value in the employment of adjunct faculty, the potential impact on retention has produced contradictory results. This study revealed the complexity of balancing institutional financial viability and student success, especially in regard to part-time students. Assuming state and local funding for higher education remains at its current level, it is imperative colleges and universities actively seek to find best methods and practices in order to incorporate an ever-growing adjunct instructor base

into their respective campus culture. The findings and conclusions of this research have led to the following recommendations for practice:

- 1. Encourage cohort study groups for students attending part-time in order to provide supplemental academic and institutional support.
- 2. Offer educational workshops on topics designed to facilitate integration and adjustment to the collegiate environment.
- 3. Establish a comprehensive list of community based resources for students in regard to housing, food, mental health, and childcare.
- 4. Promote interactive activities and events to encourage communal exchange between students and faculty.
- 5. Evaluate current employment practices for adjunct faculty in order to reduce last minute hiring.
- 6. Improve course assignment process for adjunct faculty to ensure adequate time for curriculum development, preparation, and review.
- 7. Provide designated space and resources including phone and computer, for adjunct faculty faculty as part of an inclusive environment.

## **Recommendations for Future Research**

This quantitative study was conducted within the limitations outlined in Chapter 1. Five recommendations for expanding this study include:

- 1. This study was based on a singular community college. It would be beneficial to expand the study across all community colleges within the Tennessee Board of Regents system.
- 2. This study focused on retention in regard to instructor status. A longitudinal quantitative

study to assess completion rates for community college students in regard to instructor status would provide a more thorough examination of the issue.

- 3. A qualitative study of community college students to assess instructor status and perceived quality of instruction to aid in understanding the potential impact on student success.
- 4. A comparative analysis of the impact of Tennessee Promise in relation to faculty staffing patterns at Tennessee community colleges to assess whether community colleges have adjusted hiring and employment practices of faculty in response to performance funding.
- A cross institutional quantitative study examining grade inflation and instructor status for Tennessee community colleges.

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### APPENDICES

### Appendix A

## Permission Letter to President of Motlow State Community College (MSCC)

Dr. Anthony Kinkel Motlow State Community College P.O. Box 8500 Lynchburg, TN. 37352-8500

## Dear Dr. Kinkel,

As a doctoral student at East Tennessee State University in the Educational Leadership and Policy Analysis program, I am currently working on the prospectus of my dissertation. I have chosen to complete a study examining instructor status and student retention. As a result of several state initiatives, including the governor's *Drive to 55* and *Tennessee Promise*, community colleges are increasingly being asked to implement costly educational directives while state funding continues to decline. Additionally new higher education funding formulas emphasizing student retention and completion are placing even greater pressure on institutions, resulting in a reevaluation of current practices and procedures.

As colleges and universities struggle to adjust, many are relying on the use of adjunct faculty as a way to better manage enrollment trends and personnel costs. As it does not appear state supported higher education funding will improve in the near future, it is important both educational and political leaders understand the potential impact reliance on adjunct faculty may have on student retention and completion. While there have been prior studies in this area, results have been mixed indicating the need for further research.

Please consider this correspondence as an official request to obtain Motlow State Community

College data for my dissertation. Understanding retrieving data from available records will provide more validity than surveys or questionnaires, I would like to request permission to obtain information available on the BANNER and Argos system through the office of Research, Planning, and Communication. I will not be receiving personally identifiable information and you may be assured all information obtained will be managed in accordance with the Family Educational Rights and Privacy Act (FERPA).

I would like permission to study records associated with first-time students enrolled at MSCC beginning fall 2013 through fall 2014. Factors I intend to review include: high school grade point average, course registration history, enrollment status (part-time or full), age (traditional or non-traditional), and instructor of record status (part-time or full). Please find attached a copy of my proposed research questions along with a letter from the Office for the Protection of Human Research Subjects at ETSU clearing my study for research.

I appreciate your willingness to assist with the research process and data extraction associated with my anticipated dissertation topic. Please be assured I will be happy to share the results of my study with you and anyone else you would so indicate. If you have any questions or need additional information, please don't hesitate to contact me. Thanks so much for your support. All the best.

Sincerely,

Cheryl C. Hyland

## Appendix B

## Proposed Research Questions

RQ1: Is there a significant difference in the fall-to-fall retention rate for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

RQ2: Is there a significant difference in the fall-to-fall retention rate for first-time, part-time students between those taught by adjunct faculty and those taught by full-time faculty?

RQ3: Is there a significant difference in the fall-to-fall retention rate for first-time students between those taught by adjunct faculty and those taught by full-time faculty?

RQ4: Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 3.0 or higher between those taught by adjunct faculty and those taught by full-time faculty?

RQ5: Is there a significant difference in the fall-to-fall retention rate for first-time students with a high school grade point average (GPA) of 2.9 or lower between those taught by adjunct faculty and those taught by full-time faculty?

RQ6: Is there a significant difference in the fall-to-fall retention rate for traditional and non traditional age students between those taught by adjunct faculty and those taught by full-time faculty?

RQ7: Is there a significant difference in the proportion of assigned grades in English 1010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

RQ8: Is there a significant difference in the proportion of assigned grades in History 2010 for first-time, full-time students between those taught by adjunct faculty and those taught by full-time faculty?

# VITA

# CHERYL C. HYLAND

Education:	B.S. Psychology, Oklahoma State University, Stillwater,
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	M.Ed. Counseling Psychology, The University of
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	Ed.D. Educational Leadership, East Tennessee State
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Professional Experience:	Clinical Director Therapeutic Foster Care, Children's Medical
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	Assistant Associate Dean/Psychology Faculty, Tulsa Community
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	Campus Director, Motlow State Community College; Smyrna,
	Tennessee 2010-August 2015
	Assistant Vice President for Student Affairs (Interim), Motlow
	State Community College; Smyrna, Tennessee
	September 2015-December 2015
	Vice President for Student Affairs, Motlow State Community
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