2023

The Effect of Social Stratification on College Students' Academic Performance & Progress

Detrenyona Nekebra Chester

The Effect of Social Stratification On College Students' Academic Performance & Progress

by
Detrenyona Nekebra Chester

A Dissertation
Submitted in partial Fulfillment for
the Degree of Doctor of Education
In Curriculum and Leadership
Higher Education

Columbus State University
Columbus, GA

Keywords: college academics, social stratification, housing insecurities, overall academic performance, student retention, and grade point average

Parul Acharya, PhD, Chair and Methodologist, Associate Professor, Teacher Education, Leadership and Education
Jennifer Lovelace, PhD, Committee Member, Director of Doctoral Programs, Teacher Education, Leadership and Counseling
John McElveen, EdD, Committee Member, Assistant Vice President for Student Affairs, Dean of Students

Dedication

My dissertation is dedicated in memory of my loving parents, Allen L. Chester Sr. and Annie M. Chester, who gave me a solid foundation. They gave me the free will to dream big and allowed my imagination to run wild. I am so grateful to have been gifted to such wonderful parents that taught me the true meaning of dedication and hard work.

Acknowledgment

First, I want to acknowledge and thank my committee members. They all gave selflessly over the countless months and years of pouring into my dream and assisted me in making it a reality.

Dr. Parul Acharya, you have been so magnificent throughout my dissertation process. It has been a long journey for us both, serving as professor and chair; thank you for lending your time to the countless Zoom meetings, edits, discussions, and helpful insight. During some of the most unpredictable moments in my life, Dr. Acharya, you remained constant and supportive, which gave me the strength to continue with my dissertation.

Dr. Jennifer Lovelace, you have been a long-time contributor to my dissertation process, which started in 2017. You began molding me for what I have embarked upon today. Thank you for serving and providing your expert insights in the various phases of the multiple edits, formatting dilemmas, and guidance.

Dr. John McElveen, thank you for agreeing to serve as my committee member. It has been a pleasure learning from you and thank you for lending your time and sharing helpful insights in the various content areas related to higher education critical topics.

Lastly, I would like to thank my family, friends, and colleagues for being supportive throughout the dissertation journey. You all played a critical role in my success in the doctoral program and finishing strong.

Resume

Detrenyona Chester

PROFESSIONAL OBJECTIVE

An exemplary results-oriented professional with proven expertise in customer service execution, strategic enrollment management, database, and office management. Excellent communication and process improvement capabilities. Eager to apply skill sets and experience within a leading private or public organization.

EXPERIENCE

Registrar
Edward Waters College-Jacksonville, FL 2019 – Present

- Maintain adequate electronic data record management.
- Produce various registration reports, identifying trends and communicating opportunity and risks.
- Certify student records for graduation.
- Lead all technology delivery and implementation for institution as it pertains to online class delivery, along with data record management.
- Supervise and manage personnel, resources, functions, and activities.
- Design course and classroom scheduling for academic terms.
- Lead successful Veterans Affairs compliance review.
- Collaborate with academic programs chairs and academic advisors to provide software system trainings.
- Created training modules for faculty on technology functions directly related to their functional roles.
- Serve as evaluator for NAIA policies and procedures that govern student athletes.
- Coordinate registration functions for pre-registration, new incoming students, and special population groups.
- Conduct evaluations and degree audit systems processes.
- Served as project manager for implementation of e-transcript delivery, and electronic degree audit system.
- Oversee departmental processes related to registration, drop/add processes, and grading
- Facilitate training sessions for admissions staff and faculty.
- Implemented standard operation procedure manual for functional roles in registrar department.
- Develop and monitor academic curriculum programs updates and catalog production updates.
- Ensure institutional compliance with FERPA.
- Increased processing time for transcript request by 30%, with implementing electronic transcript system.
- Improved overall customer service experience for external and internal customers. utilizing process mapping to streamline all internal processes.

- Designed framework for new Registrar Office website.
- Conduct internal audits to monitor daily processes related to registrar office functions.
- Serve as a member of student appeals committee.
- Active member of President's Strategic Enrollment & Retention Team (SERT).
- Perform routine audits for Power Campus system various functions related to various modules that connects to student records, course sections, catalog validation tables, and grading scales.
- Organize commencement exercises in collaboration with Associate Provost of Academic Affairs.
- Implemented transfer polices and developed transfer process.
- Developed automated graduation processes to track phases of graduation utilizing institutional data system of records.

Director of Admissions Operations 2017 – 2019
Life University-Marietta, GA

- Supervised and manage personnel, resources, functions, and activities.
- Produced enrollment reports, identifying trends, and communicating opportunity and risk.
- Provided leadership in organizational development of data integrity practices, process management and technology implementation.
- Served as project manager for document imaging system implementation for intake of all application related document.
- Oversaw departmental processes related to admissions and use of technology systems
- Designed framework for new Admissions website.
- Conducted internal audits to monitor daily processes.
- Collaborated with Academic Colleges to ensure smooth transition for incoming students and updating of departmental policies.
- Created standard operational procedure manual for Enrollment Management Teams.
- Led implementation process for CRM and Document imaging student information systems to interface with Colleague student record management system.
- Prepared communication plan for full student life cycle phases.
- Orientated and guided direct reports by communicating departmental standard procedures, philosophy of mentoring and supervising students on work crews and general performance expectations.
- Worked closely with university administration, administrative units, academic departments to set enrollment targets and solidify practices to recruit admit, enroll and retain students.
- Developed and executed strategic enrollment plan that works to maintain current enrollment of the goals for university.
- Communicated the strategic enrollment plan effectively and persuasively with on and off-campus constituencies.
- Implemented file management and records retention procedures.

Interim Associate Director of Admissions 2015 – 2017
Albany State University-Albany, GA

- Assisted in the management of staff responsible for the recruitment and admissions of students.
- Coordinated all activities related to the determination of decisions for admission,
- Assisted with the supervision of data entry and maintenance of student Information into Banner, XAP, and other third-party products used for recruitment and admission of students to the University.
- Counseled prospective students regarding their post-secondary options and educational goals
- Assessed and evaluated admissions applications, credentials and make final recommendations regarding admission.
- Assisted with CRM processes for undergraduate communication plans.
- Served as the project manager for admissions banner consolidation team.
- Designed research-based recruitment strategies targeting specific demographics increasing overall enrollment.
- Successfully managed customer/student complaints as well as sensitive admissions issues.
- Planned and executed recruitment and admissions orientation activities.
- Applied current and success proven trends when designing marketing and enrollment initiatives and programming.
- Regularly assessed and offered recommendations to administrators on process improvement measures.
- Wrote and presented reports relevant to semester recruitment and admissions Processes.
- Trained new Admissions personnel on enrollment processes and practices.
- Facilitated training sessions on admissions processes, financial aid, transfer guidelines, and housing to prospective students.
- Served as ASU liaison at regional and local recruitment fairs.
- Managed database enrollment processes.
- Ensured data and recordation process remains in compliance with University System, federal, and state regulations.
- Generated daily report in Argos for Transfer, Readmit, and Graduate population for review.
- Developed report for daily number count of all student population.
- Evaluated and awarded transfer credit to prospective students.
- Oversaw dual enrollment/MOWR enrollment efforts within 24 service county area.

Enrollment Services Counselor
Albany State University- Albany, GA 2008 – 2017

- Extended excellent customer service when forging and maintaining relationships with prospective and current students.
- Counseled prospective students regarding their post-secondary options and educational

goals.

- Assessed and evaluated admissions applications, credentials and make final recommendations regarding admission.
- Designed research-based recruitment strategies targeting specific demographics increasing overall enrollment.
- Successfully managed customer/student complaints as well as sensitive admissions issues
- Plan and execute recruitment and admissions orientation activities.
- Applied current and success proven trends when designing marketing and enrollment initiatives and programming
- Regularly assessed and offered recommendations to administrators on process improvement measures.
- Wrote and presented reports relevant to semester recruitment and admissions processes.
- Trained new Admissions personnel on enrollment processes, practices, and customer relations.
- Processed graduate applications.
- Monitored graduate admissions process between academic colleges.
- Facilitated training sessions on admissions processes, financial aid, transfer guidelines and housing to prospective students.
- Served as ASU liaison at regional and local recruitment fairs.
- Managed database enrollment processes.
- Ensured data and recordation process remains in compliance with University System, federal and state regulations.
- Generated daily report in Argos for Transfer & Readmit population for review.
- Developed report for daily number count of all student population.
- Evaluated and awarded transfer credit to prospective students.
- Resolved departmental complaints.

Administrative Secretary
Albany State University- Albany, GA 2003 – 2008

- Provided administrative support to departmental faculty and staff.
- Served as primary greeter and officer manager.
- Served as a meeting planner accurately managing office database.
- Assigned classes to department's instructors.
- Coordinated onsite and off-site meetings.
- Handled highly confidential and sensitive information in a professional manner.
- Screened phone calls for departmental staff.
- Assisted with design and implementation of campus programming and events.
- Created and maintained spreadsheets relevant to departmental activities.
- Assisted with editing and proofing of documents.
- Prepared reports and processed incoming and outgoing correspondence.
- Assisted with the administration of operational processes.
- Managed, processed, and archived data and departmental records electronically.
- Assisted faculty members with workload management.
- Assisted with development of class schedule utilizing banner.
- Prepared reports for academic appeals.

- Assisted special population of students with class registration

Office Assistant
South Georgia Technical College- Americus, GA 2001 – 2003

- Served as primary greeter and managed various aspects of day-to-day office operations.
- Managed and processed students' records into Banner system.
- Prepared official transcripts and certificates based on respective academic programs.
- Entered grades on a quarterly basis.
- Prepared documents referencing transfer credits to enrolled students.
- Assisted with enrollment management efforts.
- Prepared student identification cards and class schedules.
- Assisted with student graduation audits and final processing.
- Processed IP grade changes.

COMPUTER SKILLS

Banner * Banner Ellucian/Student Information System* Ellucian/Recruiter - Customer Relationship Management* Hobsons Connect - Customer Relationship Management* Advanced Microsoft Office *Argos * Colleague* Perceptive Content* Banner BDMS* Crystal* Meeting Maker*Power Campus*Moodle

EDUCATION

Doctor of Education
Curriculum and Leadership Higher Education December 2022
Columbus State University – Columbus, GA

Master of Business Administration May 2015
Albany State University- Albany, GA

Bachelor of Science – Management May 2011
Albany State University- Albany, GA

Diploma- Business and Technology May 2001
Albany Technical College- Albany, GA

Abstract

The purpose of this quantitative correlational research study is to understand the variables of social stratification, academic performance, and academic progress and how those variables affect a student's decision to drop out of college. The researcher selected participants for this study from the database at a 4-year private HBCU located in the northern part of Jacksonville Florida. Many students enrolled in college encounter outstanding tuition balances that threaten their ability to obtain adequate housing and remain actively enrolled in college. The researcher explored social stratification as measured by high school Title I status, academic performance as measured by overall institutional grade point average, and academic progress as measured by academic standing. The data collection method for the study is from a purposive sampling of undergraduate students from a Title I high school.

On a national average, college students and college graduates owe a staggering 1.4 trillion dollars in student loan debt. The public concern about student loan debt has increased; there has also been an increase in the number of college students facing housing insecurities linked to a growing population of homeless individuals in the United States. Consequently, many undergraduate students that attend 4-year colleges still have almost $11,000 in unmet needs after utilizing student loans, grants, and other scholarships. This study will contribute to the literature on the factors that influence retention and progression in college.

Keywords: *college academics*, *social stratification*, *housing insecurities*, *overall academic performance*, *student retention*, and *grade point average*

Table of Contents

List of Figures

List of Tables

Chapter I: Introduction

Numerous research studies have been conducted on social stratification, seeking to discover a clearer understanding of people's actions as they transition through society Lucas, 2001; Turcios-Cotto & Milan, 2012; Zhimin & Yao, 2015). Davis-Kean's (2005) cross-functional study examined social stratification in the context of evaluating the effects of parental income and education on a student's academic achievement. The study participants were boys and girls in the age range of 8 to 12 years old, from non-Hispanic European American and African American families. Family income alone was not a vital contributor to a student's academic outcome, although family income and education together contributed to developing children's behavior patterns toward academic achievement (Davis-Kean, 2005).

Baum et al. (2013) examined individuals' perceptions of education in the 1960s. The public shared strong beliefs of efficacy toward government and strong confidence towards higher education as vital to a better life. During the 1960s, higher education was viewed positively due to the rise in the baby boomer generation. Baum et al.'s (2013) study outlined the changes in the United States over a 50-year time frame among high school students who attended college. The definition of post-secondary education shifted from being viewed as a 4-year degree to a period of post-secondary study that applies to education or occupation, public or private, 2-year, and 4-year, or that can lead to the completion of a certificate, diploma, or degree (Baum et al., 2013). The federal government provided financial support for colleges in the 1960s, currently support for colleges and universities are supported by state, federal, and other private resources. Public views toward who should pay for post-secondary education changed from being widely supported by the federal government to one that shifted the responsibility to the state, parents, students, and others. Positive concepts such as Dwight Eisenhower's National Defense Student

Loan provided options for funding. Colleges have also taken on the role of accommodating demand for formal job training. In the past, on-the-job training was the sole responsibility of employers. Throughout the 1960s, access to a college education was available through private non-profit colleges, but it is now a commodity expanded to public colleges. There is a new trend of demographics in post-secondary education that consists of increases in women being the majority enrolled in colleges or universities and higher enrollment numbers of those from a disadvantaged population. Before the1960s, post-secondary education was sought by male military servicemembers.

The researcher investigated changes in higher education over the last 50 years that include the type of students entering college, the transition in financial resources provided by the federal government, state support for education, societal views towards higher education, and issues policymakers face with higher education.

The values of higher education can be associated with the scarcity of factory jobs, which became more prevalent in the 1960s, along with the cultural expectations of women transitioning from being viewed as homemakers to being gainfully employed outside the home (Baum et al., 2013). Also, widespread commitment toward education took place at the state level, with the University of California laying the groundwork by promoting an environment that increased college access for high school students. Later, the federal government followed a similar pattern by implementing new policies to support education (i.e., The Higher Education Act of 1965 and The Basic Educational Opportunity Grant Program, now known as Pell grants; Baum et al., 2013).

The once strong perception of higher education has diminished in the eyes of parents, prospective students, college graduates, and government officials at state and local levels

(Freeland, 2018). People in society no longer see the value of a college education due to excessive tuition increases and a lack of confidence that obtaining a degree will guarantee financial security (Freeland, 2018).

According to Bloom et al. (2017), the number of two-parent family households has declined. The family household encompasses many extensions, including single-parent family homes, where either mother or father is absent. The non-traditional family can include students at risk, such as foster children, those with a low socioeconomic status (SES), homeless, or unaccompanied. Findings from this research study details that individuals brought up outside of the traditional two-parent families experience higher instances of mobility than those from traditional two-parent families (Bloom et al., 2017). Even though children may interact with both parents over an allotted timeframe, this does not impact the number of mobility instances that may occur. In the 1960s, 86% of the population consisted of two-parent families. By 2016, two-parent families declined to 68.7%. The shift in higher education funding created much anxiety for many students considering college as an option. Now, the responsibility for funding education is placed on the student alone. Earlier, both parents shared the responsibility of providing support for children.

The positive values linked to a college education are now unclear because of the daunting challenges related to colleges and universities' financial standing. This change of perception is due to a decrease in funding to support higher education by state and the federal government and increases in tuition and fees and low enrollment rates after the 2008 recession (Baum & Ma, 2012). Baum and Ma (2012) released a report that indicated state appropriations decreased 25% per full-time equivalent (FTE) for higher education. The state appropriations' decrease was due to the mandates by state constitutions that required all states to maintain a balanced budget

yearly (Baum & Ma, 2012). An upsurge impacted the supply and demand for higher education in college enrollment numbers on a national level, which was a reaction to counterpoise the downturn in revenue resources, including those from donations (Long, 2014).

For over a century, the funding for higher education in the United States encountered numerous changes, requiring more support from state funding and less support from the federal government (Edirisooriya, 2003). Terenzini et al. (2001) revealed that state institutions relied on state funding as a significant financing source. From 2008 to 2011, public 4-year colleges experienced increases in tuition and fees in various geographic locations such as Florida 32% increase, Georgia's 32% increase, Hawaii's 28% increase, Alabama's 24% increase, and California's 38% increase (Baum & Ma, 2012). Enrollment headcounts such as FTE are critical predictors for state allocation of funds for all institutions, emphasizing that high enrollment counts as a positive sign of operational practices (Edirisooriya, 2003).

The 2008 recession impacted millions of Americans and caused many of them to encounter economic hardships (Frotman, 2018). During this time, the economic downfall triggered an exponential increase in college enrollment due to job shortages (Barr & Turner, 2013). During the recession, a 1% increase in unemployment accounted for a 2% increase in college attendance among part-time students, primarily comprised of African American students (Bell & Blanchflower, 2011). Nonetheless, colleges and universities were not prepared to address the increase in enrollment. During the recession, higher education funding remained stagnant and could not meet the demands due to the rise in college enrollment. The recession caused a sudden shift from state funding, which supported most higher education tuition costs, to the onus being placed on parents or students alone to fill the gap in funding for college education (Barr & Turner, 2013). Perna et al. (2008) indicated that students experienced high-stress levels

due to financing their college education as student loan debt is perceived as a burden rather than a future investment. The collision effect of increases in employment rates and college enrollment rates is not surprising during an economic recession (Leonard, 2014). According to the Baum and Ma (2012), there have been numerous changes within the student loan sector to compensate for economic reforms and families' increased needs. The economic changes during the recession period caused financial strain on families due to decreased income and an increase in unemployment rates. These changes in the economy placed an increased demand on student loans to fill the unmet needs gap created by stagnant funding for higher education (Bell & Blanchflower, 2011).

Americans owe over 1.5 trillion dollars in student loan debt, which is the world's second-largest consumer debt (Frotman, 2018). The student loan debt crisis results from a fragmented collaboration between the United States government and citizens (Frotman, 2018). On average, student loan debt has been growing steadily over the last two decades at the point of graduation. In 2018, enrolled college students borrowed 7.4 million dollars in student loans. Students previously enrolled in college had loans in forbearance status, which amounted to 111.1 billion dollars. College graduates owe 623.7 billion dollars in student loans. The Great Depression of 2008 caused widespread financial hardships on a national level that caused many families to lose their homes (Frotman, 2018). Americans viewed higher education as a pathway to middle-class status in society and relied on debt financing as the primary source of support for higher education (Frotman, 2018). Despite the positive outcomes linked to higher education, attending college became cumbersome as policy changes increased college tuition rates, placing more responsibility on family or the student to pay for college (Frotman, 2018).

In 2008, The Ensuring Continued Access to Student Loans Act implemented by Congress was due to transitions within the credit markets that were influenced by the recession, which caused lenders to suspend lending of private loans during this time because of increases in consumer household debt (Frotman, 2018). As a result of the act, United States Department of Education began over servicing of loans that were aimed to raised Stafford loan amounts and ensure lover interest rates. The demand for Pell grants and need-based scholarship programs increased by three-quarters during 2008 to 2009 for families with income at or below 30,000 dollars, which doubled expenditures from $15.9 million to 31.5 million dollars (Mahan, 2011). Although, policy makers sought to create adjustments to ease the consumer debt related to student loans, over eight million student loan borrowers are in status of default and another three million have payment agreements that are delinquent up to two months (Frotman, 2018).

There was an aggressive initiative in higher education to increase the number of degrees awarded and restore degree completion rates under President Obama's administration in 2009 (Romano et al., 2011). During this time, higher education support was stagnant due to the crippled economy (Romano et al., 2011). The overall cost of obtaining a college education surpassed inflation rates, with the total cost of tuition, fees, room, and board averaging 17,131 dollars for public state colleges. The total cost of attendance for private colleges is higher (Baum & Ma, 2012). An individual considering attending college must consider critical factors that determine the total cost of college tuition based on degree level such as undergraduate or graduate and college classification, which can be private or public (Romano et al., 2011). The process referred to as catalog cost includes the total cost of attending college, including each degree program's credit requirements. In calculating the price of a degree, the catalog costs method includes a 48.8% instructional overhead cost per academic department. The average cost

per degree at public colleges based on the degree of degree is $8,230 dollars, 8,670 dollars, and 10,830 dollars for undergraduate, graduate, and doctorate level degrees. Private college costs per degree based on the level of degree is 33,450 dollars, 29,960 dollars, and 42,920 dollars for undergraduate, graduate, and doctorate level degree, respectively. Reed and Cochrane (2012) reported that almost two-thirds of students who graduated in 2010 had an estimated debt value of over 25,000 dollars.

One of the most significant expenses students and families must encounter in college is student housing. Levin and Bohannon (2013) examined the vital role that campus housing can serve in meeting institutional goals at colleges and universities by broadening the population of students recruited for enrollment, which can generate additional revenue. Campus housing is an essential resource that elevates the overall campus experience for students (Levin & Bohannon, 2013). Demand for college housing increased over the last ten years due to the rise in college enrollment attributed to the college-age population (Ong et al., 2013). College housing promotes positive learning outcomes, creates a sense of association and connectedness to the college campus community, and improves retention and graduation rates (Ong et al., 2013).

The rise in the homeless population in the United States has become a significant concern that impacts the lives of adults and adolescents aspiring to higher education. In the United States African Americans represent 41% of the homeless population. Approximately 32.8% of African American students reported having housing insecurities while enrolled in college (Blevins, 2018). African American women encounter more challenges related to housing insecurities when compared to other female students. Approximately 33.9% of women and 31.8% men attending community college face challenges related to housing insecurities caused by an increase in tuition, housing fees, and policy changes with financial aid (Blevins, 2018). These factors create

barriers for students to meet their basic needs for food, a stable place to live, and reliable transportation (Blevins, 2018).

The impact of housing insecurities can affect students' psychological health, physical wellbeing, and academic success. In the college setting, African American women developed acuity because of the lack of benevolence exemplified by institutions toward housing insecurities (Walpole, 2008). Housing insecurities increase living costs, which can exceed the cost of tuition (Sackett, 2015). Housing insecurity puts students at risk of poor academic performance, promotes part-time college enrollment, less motivation to purchase textbook materials, and drops out of college, decreasing the chances of graduating from college **(**Sackett, 2015). As a result, college housing administrators are placed in difficult situations when managing students experiencing housing insecurities.

Background of The Problem

The rising cost of attending college is a significant stress factor for many college students (Bennett et al., 2015). Between 9% to 40% of students enrolled in college held the perception that stress had an impact on their academic performance (Bennett et al., 2015). A student's academic standing and enrollment status can interfere with their obligations to satisfy financial aid and other loan repayment programs. Students who cannot uphold the terms and conditions of student loan repayment programs are susceptible to financial hardships. When students face financial stress, they are more prone to drop courses and are less likely to graduate from college. Campus housing is also a significant financial obligation that students must pay and their tuition and fees, influencing college dropouts. Among students stressed in college, women, minorities, and first-generation college students had a higher rate of low scores and below-average attendance rates in class. Measures are needed to alleviate financial stress for students to become

productive members of society and receive an education. Financial stress can be removed by improving students' financial literacy about student loans, increase federal support for low-income families, increase funding for higher education at the state level, and colleges should refrain from rising tuition rates. Researchers have explored homeless students from different angles, including the family's low SES on students' college completion, Title I status of high school impact on high school grade point average (GPA), and how students perform in school. However, there is no existing integrated study that considers all factors that impact students from the point of high school to see how social stratification measures the status of high school students' college semester GPA, their ability to pay outstanding tuition balances, and influence students college attendance.

Reliable and affordable housing has become a growing concern as the student population's demographic is changing on college campuses. Colleges are now serving a more substantial number of first-generation college students from low income and underprivileged families. According to United States census data, approximately 60 million people in the United States meet the standards of rural status (Koricich et al., 2018). SES plays a critical role in post-secondary outcomes and influences college dropout rates (Koricich et al., 2018). The factor influencing increases in college dropout rates is due to gaps in educational preparedness (Koricich et al., 2018). There is a need to resolve educational opportunities in rural areas among the disadvantaged population to better our national economy.

Concerns toward student achievement are evident in federal law dating back to 1965, with the Elementary Secondary Education Act's creation. The federal government saw the need to develop regulations that would close the gap in academic achievement among students from different social and economic backgrounds (Klein, 2015). In 1965, President John Lyndon

implemented the Great Society Program, which established the federal government's role in K–12 policy (Klein, 2015). The Great Society Program aimed at supporting the cost of educating students classified as disadvantaged. President George Bush implemented the No Child Left Behind Act in 2002, which placed greater responsibility on schools for students' academic outcomes. The No Child Left Behind Act emphasized improving educational outcomes among English language learners, students in special education programs, and low and minority students. Four hundred thirty thousand schools failed to meet yearly academic progress (AYP) under No Child Left Behind guidelines.

Many students that enroll in college graduate from a Title I high school and come from families of low socioeconomic status backgrounds. Most of these students qualify for free or reduced lunch and struggle with instances of mobility. On a national level in 2016, 52.3% of students enrolled in school qualified for reduced or free lunch (Olfert et al., 2021). To date, the National School Lunch Program has provided 30 million children with lunch daily while enrolled in grade levels K–12 (Ralston & Guthrie, 2018). Students who graduate from Title I high schools enter college at a disadvantage due to housing disparities and food disparities, considerable gaps in unmet financial needs, and academic performance issues that preexisted before college.

Higher education has become a significant contributor to building a workforce of advanced skilled workers (Broton & Goldrick-Rab, 2013). Post-secondary education is now a critical requirement for those who aspire to enter the workforce to compete for higher-paying jobs (Broton & Goldrick-Rab, 2013). Those without post-secondary education are more apt to experience financial hardships with the cost of living and lack the resources required to cover the cost of attending college. Individuals from the low-income status and those from higher-income

status both aspire toward higher education; first-generation students from the lower-income status lag in completing their degree. Eleven percent of first-generation college students completed a 4-year degree, and 26% achieved an associate degree after six years of enrollment. More research data are needed to determine how typical housing instability is among the undergraduate population and what processes colleges and universities need to adopt to provide adequate support for students. Housing policies should also be updated to align with educational policies to support students at risk of housing instability and a college dropout.

On a national average, 58,000 homeless students are a part of the student population on college campuses. Homelessness is an area of concern for policymakers and higher education administrators (Broton et al., 2014). Community colleges and 4-year colleges have students who occupy homeless shelters due to decreases in state and federal funding and increases in housing costs (Broton et al., 2014).

According to Broton and Goldrick-Rab (2018), increases occurred among students from low-income families enrolling in college by approximately 10 million students. However, disparities still subsist between college completion rates among wealthy and low-income families. Only 14% of students from a lower economic status complete their college degrees compared to 29% from the middle-income status, and 60% from higher-income status. The inflated cost of college has caused many college students to experience housing instability and struggle to meet their basic needs.

The research study conducted by the City University of New York revealed that 42% of students enrolled in 2-year and 4-year colleges experienced housing insecurities (Broton & Goldrick-Rab, 2018). As people continue to seek opportunities through higher education, this causes new issues to develop and known issues to become more widespread related to housing

insecurities. The economic downturn influenced access to affordable housing, increased college tuition rates, and decreased support from financial aid, which created an environment where students are now seeking degrees without solidifying adequate housing. Provisions have been made in the K–12 sector to focus on meeting students' basic needs through subsidized meals. There is a lack of public support to investigate the extent to which housing insecurities influence undergraduate students.

Students who attend 4-year colleges encounter several barriers related to academic performance, lack of financial resources for college, and college dropout instances. These barriers impede students' aspirations toward completing their educational degree program. An intentional effort needs to be geared toward college completion rates to expand on all factors related to the cost of attendance. A gap in research data exists related to hardships students face on a national level. The literature suggests that students' basic needs are not known and go unidentified and unresolved. Further research studies are needed to understand the relationship between housing and food insecurities among undergraduate students and create intervention programs to ensure that universities meet their basic needs. When students' basic needs are met, this allows for the natural process of learning to occur.

The growing issues of housing insecurities on college campuses can increase as the homeless population continues to grow. Students' housing insecurities interfere with their ability to participate in post-secondary education (Wolf et al., 2017). Students with housing insecurities can develop stress due to the absence of adequate living space, making them more susceptible to poor academic performance (Klitzman, 2017). Students who face housing insecurities also encounter food inadequacies and are at a higher risk of poor academic performance than their peers who are not facing housing and food insecurities (Wolf et al.,

2017). Positive interactions with mentors among students experiencing housing insecurities have proven to motivate them. In contrast, negative interactions that lack the support of mentorship or someone to guide students with educational processes can threaten the overall quality of their academic experience, which leads to a higher chance of college dropout (Klitzman, 2017).

Colleges have started to rethink housing insecurities' influence on enrollment goals (Levin & Bohannon, 2013). Traditional commuter colleges such as community colleges and technical colleges are considering offering on-campus housing as an option because of changes in student demographics and the need to stabilize enrollment numbers (Levin & Bohannon, 2013). The cost of college housing is considered one of the most substantial financial responsibilities for families. On-campus housing is a significant expenditure for students who enroll in college (Broton et al., 2014). These matters related to adequate housing is widespread in the K–12 sector, just now impacting higher education, while more students seek advancement through gaining a higher degree in education.

Although numerous research studies exist related to basic needs, housing insecurities, college students' academic performance, and health considering the K–12 sector, they fail to define a causal relationship to post-secondary education (Goldrick-Rab et al., 2018). In the United States, a commonality existed among colleges and universities surrounding housing insecurities among students that interconnect with increases in the homeless population. According to Broton and Goldrick-Rab (2013), 68% of students who enroll in college experienced housing insecurities, and 42% of those who did not attend college listed housing as a reason for not attending college. Students' basic needs with housing insecurities correlate to students delegating time for work, which can lead to unemployment. However, the level of academic effort in and outside the classroom is the same for students without housing

insecurities and students experiencing housing insecurities. There is a need for more attention placed on connecting students with support groups that can improve their chances of degree completion.

Clark (2018) reviewed the factors of social mobility on the reproduction of social stratification. Previous researchers considered social mobility from adulthood as a trajectory of leaving home, and the timeframe of residential independence occurs for social-economic attainment. The transition into mobility occurs once an individual is outside the parental household and is essential to social-economic inequality during adulthood (Clark, 2018). The frequency of residential mobility among young adults aged18- to 25 years old affects their decision about education, career choice, and romantic exploration pattern. Only 52% of students move from the parent household to attend college; this leaves many mobility unexplained changes. In 2018, 33% of young adults moved during the year compared to 17% for adults 33-to 44 years old and 9% for adults 45-to 64 years old. Also, frequency in residential mobility is associated with people from a lower SES who experience more negative outcomes in education, employment, food security, and health. During the period of adulthood, higher rates of residential mobility occur. Many factors influence an individual's decision to move (i.e., increases in college enrollment, summer breaks, graduation, and transitioning for a career within the lower SES). Researchers often measure housing instability as a time of financial suffering that includes housing and residential mobility. Young adults' ability to maintain adequate housing depends on their financial contribution and the assistance of family support and other resources. If young adults experience relationship issues, job loss, academic suspension from school, or absence of family support, this can lead to homelessness. Those with a high frequency

of mobility experienced poverty during the preliminary stages of their life and were also more likely to move amid life changes.

Davis-Kean (2005) indicated that the parent's educational status and income influenced their children's academic outcomes in the K–12 system. However, the researcher presented minimal information in the study to determine how parents' education and income influenced their children's college attendance and performance. The SES of parents is a strong predictor of the academic achievement of children. Davis-Kean (2005) indicated that the parent's education, SES, and behavior are vital in determining their children's positive educational outcomes. The study revealed a strong correlation between parents' education, income, and children's academic achievement.

Parents' beliefs and behavior influenced their children's academic achievement (Davis-Kean, 2005). Family capital contributes to the quantity and quality of higher education (Zhimin & Yao, 2015). The enrollment rate in China is 34% for institutions of higher education. Despite an individual's ethnic background, parents of all social strata share the same view that education is critical to increasing one's social strata (Zhimin & Yao, 2015). Family background marks the beginning of inequality in higher education as this impacts the level of access an individual will have to higher education.

On the contrary, this means that as students migrate through the various pathways into higher education, some will have access to more elite colleges and a larger quantity of educational resources. Once students graduate from college, they transition to different work fields where there is a significant difference in salaries. College graduates are employed in various work areas with varying pay levels, which is considered a form of social stratification. Social stratification impacts the equal distribution of educational opportunities in higher

education. Past researchers focused on the quantity of education rather than the quality of education.

Statement of the Problem

Nationally, student retention has been a long-standing issue for many colleges and universities. McFarland et al. (2019) indicated that colleges with the most selective admissions practices have the highest retention rates at 81%. Still, retention rates for less selective colleges are at 63%. Retention rates for selective and less-selective private non-profit colleges coincide with the public, non-profit colleges. Over previous years retention rates for all colleges were at 97%. Crain and Mahard (1978) conducted a longitudinal study that outlined high schools' racial composition impact on college choice. Student persistence in college varies based on the family's SES in low-income and high-income categories (NCES, n.d.). A student who enters college from the higher income range has an 89% chance of returning to college the second year, but students from the low-income range have a 79% chance of returning to college (NCES, n.d.). When considering college completion rates, 47% of higher-income students complete their degree within 6 years in comparison to 27% of low-income students finishing their college degrees (NCES, n.d.).

Students' academic progress once they enroll in college has been researched from many angles. For example, previous research studies looked at parents' educational level and income influence on academic performance in grade school, and the rising cost of tuition influences academic performance in college, increased college dropout rates, housing insecurities, and food insecurities. However, those research studies failed to consider what type of high school these students come from and whether this impacts their college performance.

On a national level, all states rely on state funding to support K–12 schools' educational activities, salaries, overall operational costs, textbooks, and supplies (Podgursky & Springer, 2011). In the United States, approximately 47% of the revenue for K–12 schools comes through state funds (Podgursky & Springer, 2011). Due to the recession, some states decreased their funding formula for K–12 schools, which led to teachers' protesting in Arizona, Kentucky, North Carolina, and West Virginia (Podgursky & Springer, 2011). Teachers in the states mentioned above protested because of low pay rates, the decline in funding, pressures toward cutting pensions for teachers, and the per-student budget (Podgursky & Springer, 2011.) The Elementary and Secondary Education Act (ESEA) of 1965 supports equal access to quality education for all (Paul, 2016). Schools and districts with a high percentage of low-income students have access to resources through (ESEA) Title I extension (Paul, 2016). ESAE contributes $14 billion a year toward elementary and secondary education, accounting for one-third of all federal funding (Matsudaira et al., 2012). Title I-status schools serve many students who qualify for free or reduced meals and assist with the skills gap among low-income and middle-class households in reading, writing, and mathematics. In 1988, Title I extension focused more on school improvement and excellence programs due to Hawkins-Stafford Elementary and School Improvement Act (Paul, 2016). Schools are designated as Title I status if they enroll at least 40% of students from low-income families. Each counties United States Census data determine the funding formula for Title I status schools, which outlines the number of poor students (Matsudaira et al., 2012). Title I status schools receive financial assistance through federal funding for programs geared toward improving students' achievement in school (McGonigal, 2020). In the United States 46, 969 schools are eligible to receive Title I funds. All states have a funding formula to allocate resources towards K–12 schools. Thirty-five of those states have

funding formulas that consider low-income students attending schools in other districts with access to better funding and resources (Chingos & Blagg, 2017). For example, the state of Florida school system accounted for 1,194 Title I status schools which comprised 32.5% of all students in the state (McGonigal, 2020). Matsudaira et al. (2012) supported that Title I funding did not impact students' assessment and test scores.

Public schools in high poverty, high minority, and low performing geographical locations encounter barriers with staffing teaching positions (Matsudaira et al., 2012). In addition, high schools in urban and rural areas are at significant risk of experiencing staffing issues with teaching positions than elementary and middle schools (Malkus et al., 2015). The obstacles that impact staffing positions are associated with salaries, school safety, and school location. From 1999-2012 there was a decline in at least one vacant position at public schools from 83%-78% (Malkus et al., 2015). Although improvement among difficult-to-staff positions was evident at all school levels, public high schools showed less progress in filling vacant positions from 1999-2012 (Malkus et al., 2015). For example, low minority schools' difficulty filling positions in two or more teaching subjects went from 28% to 7% during the 1999-2012 timeframe but high minority school positions experienced a 39% to 17% improvement. Research studies continue to outline that districts that enroll a high volume of low-income students and minorities receive less funding toward instructional resources. District schools that enroll a large number of low-income students receive a lower quality of textbooks, curriculum materials, laboratories, and computers. The distribution pattern among teachers assigned to teach across disciplines could negatively impact recruiting high-quality teachers and achievement gaps among disadvantaged students (Podgursky & Springer, 2011).

The COVID-19 pandemic caused 55.1 million students to receive their educational instruction through distance learning. In addition, the COVID-19 pandemic was responsible for school closures nationally, affecting students' academic growth (Kuhfeld et al., 2020). Southern states are expected to experience a 10% to 25% decline for K–12 sector schools due to the COVID-19 pandemic (Tinubu Ali & Herrera, 2020). The COVID-19 pandemic caused many school districts to swiftly transition to a distance learning format for classroom instruction, adjust teaching contact hours, and expand school nutrition programs (Tinubu Ali & Herrera, 2020). As a result, students' growth in reading is likely to increase by 70% and students' growth in math is expected to decline by 50% (Kuhfeld et al., 2020).

Hall et al. (2016) reviewed students from low-income families who attended Title I status school and non-Title I status school to determine the impact of knowledge, self-efficacy, and behavior patterns on school lunch programs. Fifty-five fifth grade students from Title I status schools and 122 students from non-Title I status schools participated in the study (Hall et al., 2016). Behavior patterns among students from lower SES could contribute to obesity among children and adolescents because they have limited access to healthy food options (Hall et al., 2016). Based on a national study, children 10-17 years of age have a 3.3-3.4 higher probability of becoming obese. Students from a lower SES that attend Title I status schools tend to receive lower test score outcomes than students from non-Title I status schools (Hall et al., 2016). The study's outcome confirmed disparities among the population of students in the areas of self-efficacy, knowledge, and behavior patterns towards nutrition (Hall et al., 2016). Students from lower socioeconomic backgrounds need more resources.

Although, many policies are in place to support equal access to a quality education for all, disparities still exist between the rich and poor related to educational outcomes (McGonigal,

2020). Income inequality is an ongoing problem in the United States that creates great concern for education. In Florida, disparities are more evident among upper-level and lower-level wage earners. One percent of upper-level wage-earners earn $1,543.124 and 99% of the average income for lower-level wage earners earn $39,094 (McGonigal, 2020). To counterpoise the gap with income inequality, Florida's Constitution Law supports providing the same quality of education, same access to quality activities, and resources for all schools (McGonigal, 2020). In addition, the federal government supports all states with overcoming income inequalities by providing schools with resources through Title-I funding. However, the need for education reform is far greater than the resources provided through Title-I funding and does not address disparities related to social justice (McGonigal, 2020). Social justice entails processes and goals to ensure full and equal participation for all (Ball, 1997). McGonigal (2020) indicated that 70% of Non -Title I status schools and 30% of Title-I status schools participated in Florida's Music Performance Assessment (MPA). There were 4,768 students rated by MPA from middle school and high school bands in Florida. Title I status schools accounted for only 1,414 of students represented through MPA. Non-Title-I status schools received ratings of superior and less than 12% received a rating of excellent. The research study points out disparities in rating for high school bands ensembles in Florida between Title-I and non-Title I status schools.

Teachers are vital stakeholders in accountability measures for K–12 sector schools but they face more intense pressures within the Title I status school environment (Vernaza, 2012). High-stakes accountability is a known issue among schools nationally, which holds teachers responsible for students' assessment outcomes associated with standard-based reform (Vernaza, 2012). The trend of high enrollment of students from low socioeconomic backgrounds is commonplace at Title I status schools. Vernaza (2012) children from low socioeconomic

backgrounds enter the school environment with a lower probability of being motivated to learn than their peers. Students from Title I status schools are less likely to meet standardized testing requirements than students from non-Title I status schools. Training programs fail to equip teachers with the skills to assist students from lower socioeconomic backgrounds (McGonigal, 2020). High demands related to high stakes accountability have caused many educators to leave the field of teaching (Vernaza, 2012).

Purpose of The Study

The researcher sought to determine if the effects of social stratification, as measured by students' attendance at Title I status high school that qualify for free and reduced lunch, impacts college GPA. In the United States more than 22 million students received breakfast and lunch at a reduced rate through National School Lunch programs ('Ralston & Guthrie, 2018; Turner et al., 2019). Participants are graduates of a Title I status high school and Non- Title I status high school, who are undergraduate students enrolled in a historically Black private college located in the southern region of Florida. The purpose of this quantitative study is to examine the variables of social stratification as measured by Title I status of high school, academic performance measured by college GPA (based on the status of academic warning, probation, and suspension). Academic progress were compared as a longitudinal study for an academic term of 3 years with data collection from 2018-2021. Academic terms include the fall 2018- fall 2020, fall 2021 semester, spring 2019-2021 semester, and summer semester 2019-2021. The primary research questions driving this study were as follows:

Research Questions

Research Question 1: What is the overall impact of high school GPA on semester GPA in respective of Title I versus non-Title I?

Research Question 1.1: What is the impact of high school GPA, from a Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Research Question 1.2: What is the impact of high school GPA, from a non-Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Research Question 2: What is the overall impact of high school GPA on a freshman student's academic performance as measured by college cumulative GPA irrespective of Title I versus non-Title I?

Research Question 2.1: What is the impact of high school GPA, from a non-Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Research Question 2.2: What is the impact of high school GPA, from a Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Research Question 3: What is the overall impact of earned credit hours on registered credit hours (measure of continued attendance) in respective of Title I versus non-Title I high school?

Research Question 3.1: What is the impact of earned credit hours on registered credit hours (measure of continued attendance) for Title I?

Research Question 3.2: What is the impact of earned credit hours on registered credit hours (measure of continued attendance) for non-Title I schools?

Research Question 4: What is the relationship between financial aid available and earned credit hours?

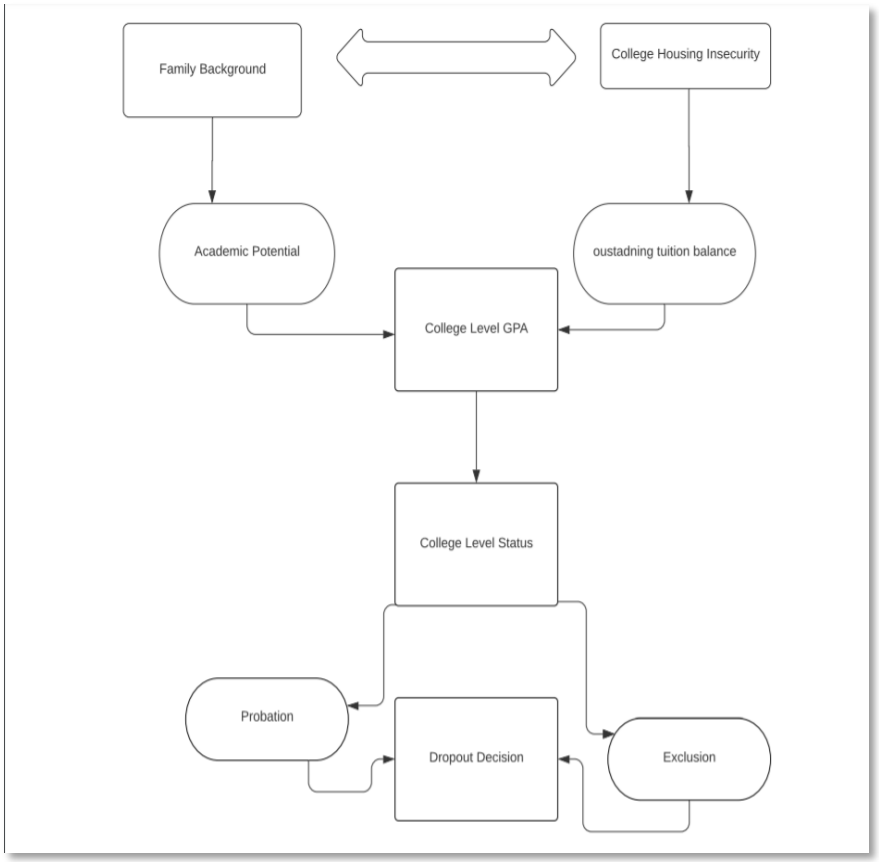
Research Question 5: What is the relationship between financial aid available and registered credit hours?

Conceptual Framework

This study's conceptualization derived from elements in Spady's 1971 undergraduate dropout process model (Burke, 2019). Spady's undergraduate dropout process model states that for students to achieve success in college, students must detach from their prior social communities to transition into the new environment of college (Burke, 2019). In this new social norm of college, students must learn new behaviors to integrate into college societies' multiple phases. (Burke, 2019). Spady's undergraduate dropout process model helped conceptualize this study as it relates to building retention theories, linking student attrition to social integration, and building upon family background and students' academic performance (Burke, 2019).

Figure 1

The Undergraduate Dropout Process Model



Social stratification is related to family background, such as family income, and previous research studies have supported parents' education level as impacting students' academic outcomes (Davis-Kean, 2005). The factor of family income also determines students' attendance in Title I status high schools versus non-Title I status high schools and whether they qualify for free or reduced lunch, which is an indirect measure of family SES that remains constant from the point of entry into the K–12 sector and still present during the integration phase of college (Ralston & Guthrie, 2018). This study took a step backward to review the family background at the high school level, which determines the student's attendance in Title I status high school and non-Title I status high school, which is stratified.

Reflecting on the position of Spady's (1971) undergraduate dropout process model, in the 1960s, families had strong beliefs toward higher education (Burke, 2019). Institutional departure theory makes people aware of their surroundings and the world; knowledge is power (Burke, 2019). When higher education institutions become more inaccessible to families of low SES, they start to have an outward look at the world they live in among the disadvantaged populations of people such as African Americans, Hispanics, and Asians. An individual functioning in the college setting; could be impacted by various outcomes in life-based upon imagined views of society. Some may have difficulty becoming a part of the new college environment, where systems exist that were not a part of their culture before (Burke, 2019). A student's opportunity to succeed in college depends upon people having access to equal educational opportunities and the ability to transition through the integration process of college systems, which determines the quality of their academic success (Handel, 2011). Students entering an institution of higher education come from various socioeconomic backgrounds, which creates a higher probability of experiencing housing insecurities and other barriers that exist as they navigate through the full

student life cycle in college (Blevins, 2018). Students enter college from either traditional or non-traditional pathways; they all have a set of basic needs that must be met for the natural learning processing to occur without interruption. Throughout this research study, various student-related data considered students experiencing housing insecurities and the critical impact this has on students' academic performance in college. These factors could lead students to not move through the integration process of social systems that exist in college.

Methodology Overview

In the United States, 58,000 homeless students reside on college campuses (Broton et al., 2014). Colleges serve a substantial number of first-generation college students from underprivileged families. These factors alone give a reason for increased efforts on monitoring and evaluating housing insecurities on campus.

This study's attributions came from a quantitative correlational approach that incorporates descriptive and inferential statistics to evaluate the sample population characteristics. However, as an approach to narrow the study's scope, a purposive criterion sampling design was used as a sampling method. The criteria for selecting participants for the study include the timeframe of at least two semesters of college attendance and attendance at a Title I high school. Also, the study's data included academic calendar years 2018-2021, which consists of fall semester, summer semester, and spring semester. The data collection method used in the study is from a review of institutional records that provide students' academic and financial documents. The process for data collection consists of extracting students' mass data from the college's database system used for collecting and tracking student information. The data were organized through pivot charts for variables that are specific for this study. Once the specified data points related to semester GPA, cumulative GPA, earned credit hours, registered

credit hours, and FAFSA available are organized in excel; then the variables were translated to SPSS so that the statistical testing can begin. The two statistical testing methods that were used for this study is correlation coefficient and linear regression.

Correlational design method was utilized to discover the effects of social stratification as measured by Title I status of high school impact on students' college GPA. There are two primary reasons that correlational studies are used in educational research today: to explore the relationships between variables of interest and determine which variables can predict essential characteristics of a specific group that will not occur until later (Hahs-Vaughn & Lomax, 2013). Correlational studies also allow for all levels of the variables within a sample data set to be measured and outline the magnitude and direction of each relationship that might be present (Hahs-Vaughn & Lomax, 2013).

Assumptions of the Regression Model

All the premises of a regression model were checked before running the regression model. The logistic regression process was performed by organizing and coding variables in Microsoft Excel and identifying categorical and dependent variables once the data set is uploaded to SPSS. After this process, categorical data must be clearly defined in the regression model dialog description box. Defining the data helped predict the effect variables used in the research study have on students' college GPA. The G*Power analysis application was utilized to calculate the relationship between the independent and dependent variables. Descriptive statistics were calculated for the observed variables. Correlation between the observed variables will be calculated. Scatter plots were also used to examine the relationship between the observed variables. Two types of regression model were utilized:

1. Multiple linear regression: At least one independent variable (IV) and only one dependent (DV) variable. Example: Status of high school (Title I and non-Title I status high schools) being one of the IVs and DV in cumulative institutional GPA.
2. Logistic regression: Calculates the probability of occurrence of the DV based on the IV scores. In this regression model, the DV is a binary dichotomous variable having two outcomes, and the IV is on a continuous scale. Example: The amount of FAFSA loan available to the student to pay their tuition influence the number of earned credit hours to satisfy the degree requirements.

All the data were analyzed using SPSS (version 26). Pearson correlation coefficient was used to explain the direction and magnitude of the relationships between the variables. Regression analyzes the independent variables' influence (title account balances) and dependent variables (DV) GPA and academic standing. Random data set of students from one private 4-year college in Florida have been enrolled in college over a 1-year timeframe. Student data sets were examined based on high school Title-I status district, student academic status, significant tuition imbalances, and students' instances of a college dropout.

Delimitations and Limitations

This study aimed to understand the influence of social stratification (as measured by students' attendance at a Title I high school) as measured by students' institutional GPA and their likelihood of dropping out of college. Several other variables worthy of research could impact college students' academic performance while in college, such as working schedule, grades in college courses, financial aid, demographic characteristics, and other psychological attributes. Some form of stress impacts 33% to 70% of college students due to financial burdens (Fosnacht & Dong, 2013). To counteract the rising tuition cost, many students work full-time,

compromising their time from studying and attending classes. There is a negative correlation found between grades and the number of hours students work, which affects their grades (Kara et al., 2009). Retrospective data collection, with no real-time data, purposive sampling, other factors such as students' working status, psychological and attitudinal variables, family background; support services; instruction by college faculty. External validity is limited because only one college is being evaluated, limiting the generalizability of study findings. It is difficult to establish causality.

The researcher considered data from only one HBCU institution in Florida. Retrospective data are collected at a one-time point only, which limits the study findings. A study of this type is selected to gain more insight into the student populations' background to discover the impact of high school on students' academic performance in college. Although general information is available through IPEDS data for this institution, it does not provide details about the population of students to assist with identifying variables that impact students' academic outcomes, which can provide opportunities for building strategies and support resources. Collecting retrospective data allowed for determining if there is a difference in students' academic performance in college that graduate from a title I status high school or non-title I status high school. Utilizing institutional data allows for learning more about the student population enrolled within an institution which allows for developing programs and resources to address the unique needs of those students in hopes of improving their educational outcomes. The study does not consider the current trends in student's academic performance. The characteristics of the study sample may change since retrospective data are collected. The study results could be of more significance if data from two or more HBCU colleges from other geographical locations were a part of the sample population. This research study could add more validity to the study findings. The study

findings cannot be generalized to research universities and private institutions of higher education.

Definition of Key Terms

Adult learners - Students enrolled in college typically over 24 years of age, have families, work part-time or full-time, and have limited involvement with on-campus activities and college life culture (Johnson, 2013).

Dropouts - Identifies students that decide not to return to college for a semester or quarter term, often referred to as non-college attendance.

Expected family contributions (EFC) - Referred to as an index used by colleges that determines a family's expected contribution to a student's college tuition (Dynarski & Scott-Clayton, 2013).

FTE - Relates to the number of students enrolled in college, based on credit hours (Edirisooriya, 2003).

Homelessness - An extreme form of housing insecurity; an individual lacks a place to sleep at night or has unstable housing access (Broton & Goldrick-Rab, 2018).

Housing insecurities- The absence of an individual having access to adequate night-time living space or residence. For example, an individual utilizing an abandoned building, shelters, or car as a living dwelling (Broton & Goldrick-Rab, 2018).

In-campus college housing - Living spaces located on campus are owned by an institution for enrolled students (Najib et al., 2015).

Matriculate - The active process of being enrolled in college (Kofoed, 2017).

Outstanding account balance - Tuition balance acquired while enrolled in college and not paid in full by specified payment date that the institution identifies (Chan et al., 2019).

Retention - A school's retention rate is the percentage of new first-year students that enroll in the same school the following year. The retention rate refers specifically to freshmen students who continue at the same school for their sophomore year. When a student transfers to another school or drops out after their freshman year, it can negatively impact their university's retention rate (D'Amico et al., 2014).

Social stratification - This is a form of social class that groups people in categories based on their occupation, income, wealth, and social status. Stratification can also be the person's relative position within a social group category, geographic region, or social (Clark, 2018).

Title I status high school- Designation assigned to school based on percentage of students receiving free or reduced lunch (Stichter et al., 2009).

Summary

Social stratification has a strong influence on students' academic performance in high school and their perception of education based on their parents' income and level of education. This study's foundational premise is that students who graduate from Title I high schools have a higher probability of encountering issues with housing insecurities and lower academic performance, hence having a higher probability of dropping out of college.

Chapter II: Literature Review

Colleges and universities across the United States continue to experience many student dropouts due to poor academic performance. The gaps in research studies point to the need for a deeper understanding of social stratification's impact on equal distribution of education that influences an individual's access to college (Davis-Kean, 2005). Clark (2018) overviewed how social mobility frequency among people from low social-economic status affects education, employment, food security, and health. Housing insecurities beyond the K–12 sector have been studied from various angles but fail to identify the impact of housing insecurities on post-secondary education (Broton & Goldrick-Rab, 2013). Wolf et al. (2017) highlighted the adverse outcomes of housing securities and how it interferes with students' academic outcomes in college. There are some gaps in research studies related to discovering the factors that influence a students' academic performance and their decision to drop out of college.

Davis-Kean (2005) conducted a cross-sectional study that examined the impact that parents' level of education and income have on children's academic achievement. The data is from a national database, the 1977 Child Development Supplement of the Panel Study of Income Dynamics (PSID-CDS), which includes survey data on approximately 8,000 families. The children included in the database were 12-years of age, which consisted of 436 females and 433 females. The study participants were 49% non-Hispanic European American and 47% African American. A random selection criterion was used to select participants for the study because some families had more than one child with selection requirements. The children's caregivers provided answers to a series of questions about their children's health, behaviors, home environment, childcare arrangements, education, and food security. The response rate for the survey was 88% for home and telephone interviews for the caregiver. The response rate for the

children surveyed was 81%. The Woodcock-Johnson Test of Achievement was administered to children to gather information about their knowledge of letter-words, comprehension, mathematics, and applied problems. The family's SES is outlined by the parent's education level, parent income, and family size. Education data for family income was collected on the head of the household; this could vary based on if the mother and father were present in the home or if data were collected from a single-parent home being led by a mother or other family member.

To test the hypothesis that parent income and education indirectly impact children's academic outcomes but are influenced by the parent's behavior patterns and beliefs. The researcher used Amos 4.0 program to analyze the moment structure that is suited for representing missing data and evaluating the structural equation model. The best fit of the model was determined based on the chi-square statistics test. The results indicated a strong relationship between parents' income and education related to students' academic performance; however, the study limitation did not examine this relationship based on racial sub-groups. A moderate relationship between reading behaviors and achievement exists among variables.

Declining Resources for Higher Education

On average, public, and private colleges have experienced a constant decrease in funding at the state level for several years, which has led to an increase in college tuition rates and presented challenges to the students' educational experiences (Mitchell et al., 2016). During 2008-2014, an unpredictable shift created false hope for many colleges; enrollment numbers soared to 8.6%. The exponential rise in college enrollment resulted from a rapid increase in traditional and non-traditional students pursuing college as the only sustainable option, giving shortages of jobs amid the recession. The college tuition growth has surpassed income growth by 110% from 1973-2016. The upward trend seen in college tuition rates placed greater

responsibility on students to cover the cost of public higher education, creating financial hardships for many families due to stagnant income. On average, four -year college tuition rates have increased from 4% to 7% nationally, with Louisiana and Arizona tuition rates ranking amongst the highest compared to all other states. Higher education public colleges receive financial support through state and local tax, but private institutions rely on financial support from donations, charitable contributions, and endowments.

The government's response to the decline in revenue was to cut financial support for higher education, which has threatened college affordability and quality. The decrease in the quality of a college degree has weakened the workforce's need to meet advanced job skills. Accessibility to a good college education for young adults has become difficult, causing them to choose less selective colleges that minimize their chances of competing for higher-paying jobs. Since the recession, some states have begun to recover from the decline in financial support allocated for higher education. However, the level of financial backing remains far less than previous contributions.

The duty of securing the affordability of higher education now rests with the states (Klein, 2015). The critical questions related to the government's role in higher education have become a vital topic for discussion by the U. S. Senate Committee on Health Education, Labor, and Pension (HELP). Currently, funding for higher education is far less in comparison to contributions during the 1980s. Government spending for higher education has paid 70% of tuition costs per student at public colleges (Klein, 2015). Now government spending per student has declined to 30%, creating a 40% gap in funding to be covered by parents and students. During the 1960s and 1970s state government allocated 336% of the fiscal budget to support higher education. Contributions began to decline in 1990-2000 due to the economic recession.

People have developed uncertainty towards government directives that require states to provide Medicaid health insurance benefits for low-income families (Klein, 2015). Providing Medicaid benefits is based on a matching process requiring the state and federal government to make contributions. The matching process minimum fee is determined by the number of low-income families receiving Medicaid health insurance benefits. However, the number of low-income families receiving Medicaid health benefits increases, causing the minimum cost that states pay for Medicaid to increase. Providing Medicaid benefits for low-income families has created challenges for many states as it relates to budget spending. In 2008, the American Recovery and Reinvestment Act was implemented to provide support for Medicaid during the recession. The American Recovery and Reinvestment Act increased state contributions for Medicaid to 15%, which declined higher education contribution for funding by 15%. Taking a closer look at the underfunding for higher education, one can ascertain that other factors impact higher education funding, such as tax cuts, unemployment rates, and mandates governing the K–12 education sector. During harsh economic times, higher education expenditures decrease due to the lack of constitutional support and colleges' ability to generate revenue through tuition.

Higher education financial instability in the United States is a situation that has not been resolved and is now more widespread, creating financial concerns. Tuition increased by almost 3.5% higher than inflation rates at selective private colleges and universities (St. John, 2003). Compared to public four-year and two-year colleges and universities, tuition rates prospectively increased by 5.1% and 3.5%. The trend in college tuition increasing to surpass the household family income became prevalent in the 1980s.

Fethke (2018) conducted a study to determine if the pay what you can afford (PWYCA) resident tuition model could increase public colleges' revenue. The PWYCA tuition model

permits charging non-residents and high-income students a higher tuition rate while providing discounted tuition rates to in-state residents from low-income families. Tuition and state appropriations are considered a primary income source for colleges; however, contributions have declined by 11.6% over the last ten years, while tuition increased by 37.4% (Fethke, 2018). Government grants and support for post-secondary education have been unsuccessful in keeping up with the pattern of inflation with college tuition rates. Consequently, the decline in funding allocated for higher education has caused administrators to develop new strategies that can support colleges with remaining financially stable by adjusting budgets and increasing tuition to offset the government's decline in funding. The pay what you can afford policy could be implemented at other colleges to help offset declines in state appropriation funds. PWYCA was implemented at the University of Michigan. The methodology used to evaluate tuition discounting was the conceptual framework and foundational components of welfare-maximizing. Overall, the concept of tuition discounting is a process that permits charging higher tuition rates to students with a higher capacity to pay and then offer aid or other resources to students with a lower ability to pay. Thus, this is considered a form of price discrimination, referred to as high tuition-high aid, which correlates with the foundation of Pay What You Can Afford. The procedure for PWYCA follows a set tuition rate for non-resident students and assigns available appropriation for all resident students within the low-income range. The University of Michigan's fiscal year budget information from the 2013-2014 winter term is used in the study, including budget allocations, tuition fees, and enrollment data. The research participants for the study were non-resident and resident students from the high to the low-income median.

Colleges and universities have a common standard of setting aside excess tuition revenue funds to support discounting tuition rates for low-income resident students. Some institutions

have implemented other strategies of discounting tuition in the form of tuition waivers to support low-income students with tuition costs such as University of California System's Blue and Gold Opportunity Plan, Indiana's 21 Century Scholars Program, University of Michigan four-year tuition waiver for resident students, and New York's Excelsior Scholarship. Also, some state leaders are engaging in conversations about removing tuition fees for all community colleges. The PWYCA could be an additional strategy for colleges and universities to consider for extending tuition discounting latitude. There are several problems noted with the Pay What You Can Afford process. The process lacked inclusion of any guidelines for determining tuition for non-resident students, latitude for changes in demand, and adjustments for state appropriations. There are some positive aspects of discounting tuition for low-income students as it ensures that students who meet specific guidelines have access to a college education by lessening financial barriers. The threats posed by tuition discounting impact contributions from state appropriation funds because tuition revenue and state appropriations are offset when a decline in state funding occurs, which offset revenue increases.

Changing Demographics of College Students

There was a demand in the workforce in the United States that calls for higher degree production rates to minimize the gaps in degree attainment among racial and socioeconomic groups (Reindl, 2007). High skills jobs will exceed jobs that require low skills (Reindl, 2007). If the degree production rates in the United States remain constant, this could result in top competitors in other nation's degree production rates reaching 16 million by 2025. There will be a 30% rise in the population of African Americans and Latinos within the age range of 18-44 years, increasing approximately 10 million people. The increase among populations is expected to take place between 2000 and 2025.

Consequently, this presents a disadvantage to the United States and will require a degree production rate of 37% to remain competitive with other nations. The growth among African Americans and Latinos will require colleges and universities to create new initiatives geared towards increasing degree completion rates among students from low-income families, non-traditional age students, and minority students. Although the United States has experienced increases among students pursuing a degree, the completion rates for degrees have remained stagnant.

The degree attainment gap among minority groups, non-traditional college students, and students from low-income families has not subsided. Failure to close degree attainment gaps means that the United States will not sustain the demand for a more skilled workforce. Resolving degree attainment gaps requires continuous higher education investment by developing new institutional practices and revamping policies that promote cost-effectiveness. Also, it requires processes for transitioning students from the K–12 sector to post-secondary education institutions. As a result of closing the gaps among minority students, non-traditional-age students, and low-income families bring degree completion rates parallel to Whites, Asians, and wealthier students. Taking this approach will produce 10.6 million students obtaining a degree.

Osam' et al. (2017) integrated literature review focused on the empirical findings of adult learners' challenges in college. (Osam et al., 2017). There has been an 18% increase in adult learners gaining a college degree to seek opportunities to advance financially and enhance their employability skills. Adult learners account for 50% of part-time enrollment and 33% of total college enrollment. The enrollment trends among adult learners are forecasted to surpass the enrollment of traditional-age college students. Growth among adult learners is due to demand in the workforce for entry-level to mid-level jobs that require some form of a college education.

Adult learners have become a prime target opportunity for colleges to increase enrollment numbers; however, adult learners are juggling multiple responsibilities while enrolled in college that interfere with degree completion. The burden of caring for family, financial obligations, and frequently moving are known barriers identified among traditional-age students as well (Osam et al., 2017). Many research studies have been conducted related to obstacles students encounter in college; the variables considered most critical are situational, institutional, and dispositional (Osam et al., 2017). Women that face are less likely to return to college, and 50% of those who married early in the college process are less likely to return to college. The situational barriers that were common among women are obligations related to community, family, and finances. According to the research outcome, women who married early in the college process had a high probability of returning to college.

Financial resources are a significant barrier for adult learners. Adult learners affected by dispositional barriers have fears of failing, participating in academic activity, which interfere with their ability to succeed. Students who have been absent from an educational setting for a long-time encounter challenge with their ability to develop autonomy and self-efficacy. There is a need for continued research to gain more information about other barriers that impact adult learners and practices that could help overcome those known barriers.

Legislative Policies

Historically, higher education played a pivotal role in society and is related to economic growth and stability. Higher education is seen as the pathway to escape poverty and is a critical component that prepares an individual to compete in a competitive job market that demands a more skilled workforce (Garritzmann, 2017). Government leaders such as Abraham Lincoln; began to take a vested interest in higher education by passing laws to create a partnership

between the federal government and state government, which aimed to generate resources for higher education such as the creation of the Morrill Land Grant Act in 1862 (Zumeta et al., 2012).

Justin Morrill was the congressman of Vermont. He is noted for his legislative efforts on the Morrill Act of 1862 and creating the first land grant institutions (Lee & Keys, 2013). Abraham Lincoln enacted the Morrill Act into law on July 2, 1862, which was instrumental in forming a public school system (Lee & Keys, 2013). The responsibility to provide educational opportunities beyond high school was led by private colleges, limiting access to higher education for many people. Under the land grant partnership, states contributed one-to-one matching funds to land grant institutions of 1862, 1890, and 1994(Lee & Keys, 2013). The land grant colleges continue to serve their mission of expanding equal access to education for all, creating innovative ideas, and staying abreast of the demand for technological advances globally. There is one land grant college present in every state and territory throughout the country. References to support the research shows the disparities. The support for colleges developed under the 1890 land grant initiative has experienced a decline in funding by 61% from 2010-2012. The Morrill Act led to 70 colleges, which includes 18 historically Black colleges (Lee & Keys, 2013).

The First Morrill Act of 1862 met the demand for agricultural and technical education in the United States, which produced a more advanced industrial class society. These colleges stand as a catalyst toward a more educated community where colleges and universities evolved to expand educational opportunities on a larger scale. In 1887, The Hatch Act played a vital role in transforming land grant legislation with his development of an agricultural experiment station program for land grant colleges established under the 1862 Act (Lee & Keys, 2013). Because of the Hatch Act, the federal government was required to designate matching funds to support

agricultural research. As a result, direct payment of federal grant funds is now available to colleges in every state to establish an agricultural experiment station.

In 1890, the second Morrill Act passed, which required states that were once considered confederate states to provide evidence that their college entrance policies did not incorporate race as a benchmark for college admissions (Lee & Keys, 2013). A separate land grant was designated to assist the African American population if a state failed to demonstrate that its admissions policies were not based on race. Historically Black colleges and universities emerged with equal legal standing as colleges established under the previous 1862 Act. Henceforward, Historical Black universities and colleges emerged with equal legal status, same as colleges established under the previous 1862 Act. Historically Black colleges and universities established under the 1890 Act received cash incentives from the government instead of land for building colleges. A transition occurred in 1994 that provided cash incentives as a substitute for property to the University of the District of Columbia (Lee & Keys, 2013). This action provided land grant colleges for Native Americans to gain land grant status. The federal government continued to show interest in evolving efforts toward agricultural advancement as additional legislation developed with the same purpose in mind as the Smith Level Act of 1914 and Evens Allen Act of 1977. Smith Level Act of 1914 offered support to community and rural education programs through the guidance of Cooperative County Extension Services. Evens Allen Act of 1977 followed a similar course of action by providing support through the continuation of agricultural research by promoting production efforts, awareness, marketing, and distribution related to farming for people's health and welfare.

Wheatle (2019) gave voice in the research study on the Morrill Acts by viewing them as a critical legislative policy that expanded access to higher education and supported rules to

decrease the disparities in allocating funding to black land grant colleges. The purpose of this historical narrative is to explore the foundational components of the Second Morrill Act, which utilized a race clause during the negotiation phase of the bill that adversely affected funding for colleges. This study utilized archival documents from the Congressional Record of the 51st Congress and excerpts (Wheatle, 2019)

The Morrill Act supported the citizens who were entitled to educational resources from the federal government and supported as a pivotal moment to change cultural views. The Morrill Act of 1890; provided funding to land grant colleges, which were established under the 1862 land grant legislation. Conditions existed for White land grant colleges to qualify for more resources if the race was used in the college admission process and if a separate college existed to educate African Americans. The race clause was viewed haphazardly by historians who only perceived the Morrill Acts as a critical component to expanding access to higher education but failed to mention their legislative intent. The Reconstruction Era was seen as a pivotal moment supporting the protection of African Americans' rights, but the Acts were also solutions to protecting those rights. However, racial factors were used in the legislative bylaws to establish the Morrill Acts when decision-makers responded to demand from vital agricultural stakeholders to support increasing instruction and maintenance for White land grant colleges.

The 1890 legislation allowed for the preservation of White people as it pertains to education, policies, administrators, and students. Taking a closer look at the 1890 Act, the individual who held responsible for being critical decision-makers in the development of the Second Morrill Act was guided based on racist views. The use of the race clause to determine the finance for land grant colleges in the Second Morrill Act created disparities in allocating funds to support land grants because states were given options.

The next movement of the federal government's interest in higher education transpired during the Revolutionary War (Dortch, 2017). During the Revolutionary War, Americans held mixed views toward the government's role in supporting the military because there were limited resources for disabled service members, and no support was provided to service members without disabilities. During this timeframe, America suffered from a decline in production, prices, and high unemployment rates. Consequently, military service members without disabilities were unemployed and homeless (Dortch, 2017). The issues with military service members not receiving equal support influenced the development of the Montgomery Government Issue Bill (GI Bill), which provided support to service members regardless of if a disability existed. In the United States, there were 4.1 million servicemen unemployed after serving in the military. GI Bill provided supportive efforts through educational grants to 6.1 million military service members. The government and the American Legion collaborated on passing the first GI Bill with a mission to counteract the fear of mass unemployment before the close of World War II. The GI Bill was influential in forming an aggressive expansion of resources that included building hospitals, providing educational resources for veterans without disabilities, home loans, business loans, farm loans, counseling services, unemployment benefits, and job placement assistance. The Bill also created disparities for allocating funds made available to support land grants because states were allowed options. Some states embraced the approach by creating separate colleges, and other states opted to reinvest in colleges already established. Disparities could be witnessed by states when Fisk and Knoxville College utilized the funds to pay college tuition for African American students who attended those schools.

The Montgomery GI Bill, once known as the Serviceman Readjustment Act of 1944, provided several benefits for veterans returning from World War II with hopes of increasing

employment opportunities through allocating benefits for those who served and supported military retention (Dortch, 2017). Military veterans and their dependents can receive funding to cover college expenses. This benefit became active after 1985 under the Montgomery GI Bill Active-Duty fund (MGIB). Military reservists also receive financing but at a lower rate under the Selected Reserve Bill (MGIB-SIR). The Montgomery GI Bill also provides additional educational funding through the Vietnam Educational Assistance Program (VEAP) to military service members enlisted in the military after 1977. The Dependents' Educational Assistance Program is available to dependents of deceased or detained service members.

Expanding college access can positively impact the economy by decreasing poverty and preparing people to compete in a global labor market. The unpredictable upward trends in college tuition rates pose a roadblock for 400,00 high school graduates who have an aspiration to attend college (Packer, 2008). The positive impact of higher education has become more widespread as the government takes on an active role in alleviating barriers to increase college access by creating positive measures like the Higher Education Act of 1965, The College Cost Reduction Act, and the Montgomery GI Bill (Packer, 2008). This shift in government, realizing the importance of higher education, continues to unfold for more than thirty years. In September 2007, President George W. Bush approved The College Cost Reduction and Access Act (CCRAA) to increase college pathways for students and strengthen supportive resources (Packer, 2008). The College Cost Reduction Access Act is a supportive effort that assists in removing barriers that interfere with college access by increasing Pell grant funding, decreasing loan interest rates, and minimizing appropriations to private lenders (Packer, 2008). Additionally, the College Cost Reduction and Access Act are among the most significant financial resources available to students since the implementation of the Montgomery GI Bill.

The Congress continues to play a pivotal role in higher education by using their influence to ease funding regulations and standards of FAFSA to alleviate the barriers faced by homeless students and unaccompanied students who cannot adhere to the financial aid policies. For many years, homeless and unaccompanied students could not complete the FAFSA application process without submitting their parents' financial information. Congress's influence lessened federal regulations governing FAFSA for homeless and unaccompanied students, which resulted in their status to be in line with those having independent status.

Some of the significant components embedded in the College Cost Reduction and Access Act (CCRAA) relate to Pell grants allocations, eliminating incentives for private lenders, and creating competitive loan option programs. Initially, the primary purpose of Pell grants (also defined as need-based grants) was deeply rooted in serving the disadvantaged population and low-income families to increase their probability to attend college. Pell grants once covered 85% of tuition costs in public colleges and universities. The rate declined to 39% by the end of 2000. The change in Pell grants' purpose occurred under the influence of the federal government's policy on policy for higher education. The grant became more reliant on student loans. The expected family contribution determines the amount of funding allocated to students through Pell grants. Investments contributed to support Pell grants resulted in maximum amounts increasing from $4,310 to $5,400 for students who meet the expected family contributions guidelines. The shift in students becoming more reliant on loans to cover college costs is partly due to the government's failure to maintain pace with rising costs related to higher education. The shift in financial support has resulted in low-income families utilizing loans that have adverse effects on students who cannot meet the terms for loan repayment.

A second major component of the College Cost Reduction and Access Act relates to removing incentives for private lenders, which resulted in a reduction in payments made by the federal government to private lenders. Before the Act, the federal government carried the responsibility for paying up to 99% under the exceptional performer status for the outstanding principal and accrued interest on all loans that are in default status. The rules established by the College Cost Reduction and Access Act removed the incentives that were provided under the exceptional performer status options that were once awarded to private lenders, thus decreasing reimbursement payments to 95%. The government became more invested in the student loan process by developing more cost-effective options for student borrowers and allowed for the creation of direct federal loan programs. Direct loans made up 25% of all student loans granted to students or parents.

The federal government's collaborative efforts continued in higher education by creating the Competitive Loan Auction Program, which granted access to specific private lenders for providing student loans based on state. The Secretary of Education led this effort to ensure that the lowest bidders would have the right to offer loan services for a timeframe of 2 years. The Secretary of Education helped to develop better loan options for college students. As a result of government influence, private lenders' prequalification standards evolved, which ensured significant benefits for students and lenders' capacity. A lender's capacity involves assessing a loan borrower's ability to repay a loan.

For over a decade, there has been a political debate on federal and state levels of influence over immigration policies in the United States (Pierotte et al., 2018). To date, there are 11.3 million undocumented immigrants in the United States. A majority of undocumented

immigrants face roadblocks when they compete for jobs, enroll in college, and meet public benefits qualifications (Bishop, 2018).

Undocumented students are challenged with several barriers to gain access to college-related financial needs, academic distraction, mental health, and limited postgraduate preparation. In 2019, the University of California Institute for Research on Labor and Employment conducted a research study to identify the barriers and explore strategies colleges could implement to create educational equity for undocumented students (Enriquez et al., 2019). Educational equity is a broad term that describes a system that supports all individuals who have the same opportunities, free; from personal and social circumstances and often impede upon opportunities for achievement. The pursuit of higher education is difficult for undocumented students because of the absence of educational equity. Some institutions have begun creating programs for undocumented students, which improved the overall college experience for immigrant students. However, institutions without supportive resource programs for undocumented students encounter barriers at a much higher magnitude. Key factors identified as barriers for undocumented students are financial needs, academic distraction, mental health, and inadequate postgraduate preparation.

State laws have a major influence on access to higher education for many individuals. The State of California is revamping its state laws and supporting efforts to provide undocumented students financial opportunities (Enriquez et al., 2019). Assembly Bill 540 was passed in 2002, which allowed undocumented students to receive in-state tuition funds if they enroll in a public college or university. Subsequently, California also incorporated an additional layer of support for undocumented students; by allowing them to apply for loans under The California Dream Act Loan Program, passed through Senate Bill 1210. In 2011, a private

funding source of 8.4 million was created through the California Dream Act. These funds were used to provide financial aid to undocumented students. Positive strides continued for undocumented students when President Barack Obama implemented the federal Deferred Action for Childhood Arrivals (DACA). DACA created an opportunity for a select group of undocumented individuals to gain access to two-year colleges, access to work permits, and protection from deportation. As a result of DACA, more positive results related to high school and college completion rates among undocumented individuals became prevalent, creating opportunities for higher-paying jobs.

The study included all the nine institutions within the University of California systems (Enriquez et al., 2019). The criteria for institutions to participate in the study hinged on support services being in place for undocumented students and having access to in-state and state-funded financial aid. The study was lead through surveys from 508 undocumented students, and 214 undocumented students participated in interviews. Focus groups all consisted of undocumented students. The study's outcome indicates a gap in financial resources between the state and institutional need-based financial aid funds provided to low-income individuals and undocumented students attending the University of California. Students lacked resources to support their basic living requirements and educational expenses. This resulted in undocumented students experiencing instances of low academic performance. They also experienced academic distractions related to academic performance issues due to their immigration status and the probability of immigration policies changing. These distractions interrupt the student's academic engagement process in and outside of the classroom, which could interfere with their overall academic performance. Nationally, undocumented students experience higher stress levels than other ethnic groups (Enriquez et al., 2019). These students have problems with balancing their

responsibilities because of worries about deportation and financial strains. A large volume of undocumented students has minimal opportunities to assist them in acquiring the skills needed to prepare for their desired career path.

The University of California (UC) took the lead in strengthening the funding efforts for undocumented students from 2015-2016, which has resulted in the enrollment of 4,000 undocumented students due to the implementation. In 2013, UC's president made a significant commitment to extend support initiatives for undocumented students through a $5 million commitment in a multi-year contract to provide support resources to these students enrolled within California. These collaborative efforts between the government and the California college system resulted in relaxing the challenges with policies that many undocumented students encounter during their enrollment in state colleges. UC campuses now have staff members that specifically provide services to the specific population of undocumented students. The tireless efforts of state and university administrators have recognized undocumented students' unmet needs and implemented new processes that support students who face barriers in the college system. Colleges can benefit from having resources to assist undocumented students with transitioning through the multiple facets of higher education. The study indicated that undocumented students have numerous inquiries related to their immigration status, the application process, and petition for additional support. The majority of faculty and staff members do not clearly understand the various support programs and resources.

The survey results indicated that undocumented students who attended college were hesitant about sharing their immigration status: 39% shared their immigration status when required, 13% did not want to share their status, and 18% were comfortable sharing their immigration status. Fifty-six percent of those students that requested services from staff and

faculty members received incorrect information; another 58% shared that they were more aware of resources and processes available for immigrant students than university staff members. Financial needs continue to be the most significant barrier for immigrant students, and 96% of participants surveyed relied on scholarships and grants to cover the cost of education expenses. The study identified that immigrant students' unwillingness to share information about their immigration status interfered with them having access to available resources and could impact their academic plan for graduation.

Housing Insecurities in Higher Education

Approximately 3.5 million students are homeless and experience residential instability every year once they enter college (Hallett & Crutchfield, 2018). On a national average, 58,000 homeless students reside on college campuses, which has caused significant concerns for policymakers and higher education administrators. One of the most significant barriers faced by homeless students is graduating from high school and transitioning into post-secondary education (Hallett & Crutchfield, 2018). These students who experience residential instability are often migrant children, undocumented students, and individuals in foster care who enter college where there is a lack of support resources from colleges and legislature (Hallett & Crutchfield, 2018).

In a 2018 study, 430,000 students from 35 four-year colleges, universities, and community colleges in Wisconsin participated in a survey. The participants were Pell Grant recipients from low to moderate-income students in public and private colleges. Broton and Goldrick-Rab (2018) conducted a research study," Exploration of Food and Housing Insecurities Among Undergraduates." The study indicated that living conditions for students in college do

not receive any attention. Three different student groups were selected from the 2015-2016-time frame.

The first study was conducted at the beginning of the fall semester in 2016 because it is the most critical point to gather data on the students' lived experiences (Broton & Goldrick-Rab, 2018). The sample was taken from 24 states and 70 community colleges and represented 330,000 students, most of whom experienced significant food disparities and housing insecurities.

The second study was conducted in 2015 and consisted of California, Louisiana, New York, Pennsylvania, Wisconsin, and Wyoming that included 4,000 students (Broton & Goldrick-Rab, 2018). Students were evaluated based on a questionnaire administered a few weeks after the fall semester had begun. At this point, students decided to drop out of college, and the study yielded a 4% response rate (Broton & Goldrick-Rab, 2018).

The third and fourth studies took place in Wisconsin during 2015. The study included 4-year college students from medium-income families. Students were randomly selected based on FAFSA data that utilized the first year and second year attendance status along with the threshold of unmet needs (Broton & Goldrick-Rab, 2018). These students had a family contribution within the 200% percentile range to qualify for Pell Grant. All colleges in the sample population had high poverty rates between 10% to 14% below the national poverty average. The survey results indicated that 46% of community college students and 35% of university college students experienced housing insecurities.

Ten public community colleges included students from the poverty-stricken area, which also encountered issues with food and housing insecurities (Broton & Goldrick-Rab, 2018). The approach for identifying undergraduate students' experience with food and housing insecurities is made based on an estimation for each study. Overall, 52% to 67% of students encountered

food insecurities that included anxiety related to inadequate food access. The students had low to moderate food insecurities in the range of 9% to 25%. Students could not afford a daily supply of balanced meals, which resulted in missing out on meals. Eleven percent of the students who reported being hungry went without food due to the absence of money. Housing insecurities among 2-year colleges were more prevalent than 4-year colleges; 11% of students from study 3 and 19% of students from study 4 encountered barriers related to their ability to pay rent (Broton & Goldrick-Rab, 2018). Students with families received assistance for food and housing. The poverty rate is 15% in the communities surrounding six colleges, including seven states: Louisiana, New Jersey, New York, Pennsylvania, Wisconsin, and Wyoming. There is a 7% to 9% rate of lower poverty at three colleges, and one college has the highest rate of poverty at 27%.

Learning support courses in math, reading, and writing occupy 59.7% to 73.9% of students who face challenges with housing insecurities, based on a study conducted by Wood et al. (2017). African Americans and Asian men have a higher risk of suffering from barriers linked to food and housing insecurities (Wood et al., 2017). The increased risk is because African Americans and Latinos take on providers' role for their families before meeting their own needs.

Food insecurities have been a problematic situation that impacted several college campuses in the United States. 14.1% to 58.8% of undergraduate students endure circumstances related to food insecurity (Forman et al., 2018). A sample population of undergraduate students enrolled at the University of Texas at Austin from 2014 - 2015 participated in a study that measured the volume and number of students that suffered from hunger. Forman et al. (2018) took a vested interest in discovering the impact and gravity of food insecurities on college

campuses in the United States. The research study surveyed 1,069 enrolled in undergraduate students. Of those students surveyed, 23.3% had food insecurities.

Undergraduate students are among the most massive populace to experience food insecurities; while enrolled in college, 58.8% of undergraduate students encounter food insecurities issues than household occurrences of hunger in the United States reported as 12.3% (Forman et al., 2018). Nationally, this situation is alarming as the undergraduate students enrolled in college are at a higher risk of experiencing food insecurities than the average household family. The long-term effects of food insecurities impair an individual's ability to function, affecting their physical and psychological wellbeing.

Social Stratification

The effects of social stratification impact higher education in the United States and other countries (Davis-Kean, 2005; Wu, 2017; Zhimin & Yao, 2015). There is a significant concern in China towards higher education being beneficial for all in society. Educational attainment is a matter of concern for the equal distribution of wealth to occur, which is considered a form of elite status in China (Wu, 2017). The Chinese elite class has political and educational affiliations, one through educational and political paths that allow entry into administrative status. The second point of entry is through an educational pathway, does not have any political affiliations, but provides professional positions. This educational pathway is important because a college degree must compete in the workforce for professional careers. Wu (2017) reviewed Beijing's college student's panel to discover the level of impact family background, high school admissions procedures, and geographic locations have on influencing an individual's probability of being enrolled in elite research second-tier and third-tier universities. College students from a disadvantaged population or working-class families are more apt to attend second-tier or third-

tier universities. Social stratification's ability on the educational progression of children from a disadvantaged background has long been of interest to researchers (Wu, 2017). Some research studies point to the assumption that the mass expansion of higher threatens the college degree's value. The question that guided the research study is how the doubled-edged role of education mediates family background on status attainment (Wu, 2017). In China, two policy initiatives, the allocation of resources for colleges, were provided, the 211 and 985 programs. The foundation of the 211 and 985 policy initiatives was to support the creation of prestigious universities. The initiatives included 109 civilian universities and three military universities which 39 of the universities were accepted into the 985 programs. These policies were influential in creating social stratification in higher education because the employers in China will only accept applicants in their job pools who graduated from a 112 or 985 program. Higher education research is needed to further ascertain the effects of expansion and differentiation on various social stratification patterns.

Davis-Kean (2005) viewed parents' SES through a national cross-functional study that considered the status of parental income and education as critical variables in determining students' success in grade school. The study's purpose was to understand the influence of race and parent's SES on a child's development in middle school through a cross-sectional model. The study consisted of 868 students consisting of male and female students in the age range of 8-12. Student participants included 436 females and 433 males. The population had 49% non-Hispanic and 47% African American students. There is a wealth of research available on different variables linked to parent's influence on a child's successful outcome, such as parent behaviors, structured home environment, effects of harsh parenting, nurturing, and warmth, but minimal research studies reviewed achievement expectations or efficacy (Davis-Kean, 2005).

Caregivers of the children selected received an invitation to participate in the sample answered questions regarding their children's health, behavior, home environment, childcare arrangements, schooling, and food security (Davis-Kean, 2005 pg. 296). There was an 82% response rate from the sample population, including visits to the home, phone interviews, and monetary gifts. Parents' education compared to income levels were in the moderate to high range. Parents' expectations and beliefs were in correlation with their children's performance. Although they held high hopes and beliefs toward education in the low-income range, children's academic performance did not match their expectations Mothers with high academic achievement held higher expectations for their children and positively impacted their children's academic success.

A mother in the household with education credentials can create a more solid foundation in the home and build a robust educational environment for their children. Davis-Kean (2005) stated that the literature review about race status falls short of showing relevance between stress levels of African Americans and European Americans' SES. A shift occurred in successful outcomes for children due to the impact of stress on parents' financial and mental health when incorporating low-income samples. Positive beliefs and behavior of parents positively influence children's academic achievement (Davis-Kean, 2005).

Education is critical to building a pathway to a better way of life. Parents' SES and education level impact a student's academic performance in secondary school (Farooq et al., 2011). The study conducted by Farooq et al. (2011) consisted of 300 male and 300 female students enrolled in 10th grade who were provided questionnaires. Students' academic performance was based on scores from the ninth grade school year's standardized exam, which provided information about parents' education, occupation, and SES. Descriptive and inferential statistics were used to analyze the variables in the study. To compare achievement scores

between male and female students, the researcher performed a standard t-test. Outcomes from the study revealed that parents' SES and level of education have a major impact on students' academic performance and their performance in Math and Reading courses.

Bastedo and Jaquette (2011) overview of the social-economic status in higher education has shown signs of progression among low-income students related to academic achievements, but far fewer gains than wealthier students. The correlation between social-economic status and attendance at selective colleges is of great concern and at the focal point of many research studies about higher education (Hearn, 1991; Karen, 2002; Kingston & Lewis, 1990). Students from families with high social-economic status have access to exceptional high schools with intense academic rigor and resources. Hence strengthening their ability to obtain higher academic achievement scores and enhance their probability of being accepted into selective colleges. Whereas their lower social-economic status counterparts do not have access to the same educational opportunities, limiting their chances of attending selective high schools and colleges. Nationally, there has been an increase among first-time college students from low- social income status enrolling in community colleges. This growth in community college enrollment by first-time college students lessen their probability of obtaining a four-year degree by 13%. This longitudinal research study is from a national database of high school graduates from 1972, 1982, 1994, and 2004. The selection criteria for the test population included students that completed high school within 1.5 years' timeframe. The study's testing methods included descriptive statistics and multinomial logistic regression in determining the outcome effect among variables.

Institutional stratification that exists among colleges harm low-income students and states. The foundation of institutional stratification is guided by the unparalleled educational

opportunities that coexist in higher education due to the student's social-economic status (Bastedo & Jaquette, 2011). Consequently, allowing education equality to rest on family income minimizes entrance to selective public and private colleges for low-income students. Wealthier students have over-saturated public and private college admissions lists for selective colleges and universities. This oversaturation makes competing for admissions slots at selective colleges difficult for low-income students. Attending selective colleges provides positive benefits for students to earn a higher income, gain access to top graduate colleges, and become a part of different social classes.

Higher education's stratification is related to a decrease in academic preparation and under matching (Bastedo & Jaquette, 2011). The under matching process causes low-income students who are academically prepared to attend selective colleges to attend less selective colleges. The under matching process interferes with low-income students' achieving better educational outcomes because equal opportunities do not persist for connecting the students with colleges aligned with their academic achievement. Nonetheless, these disproportions in higher education threaten the academic and economical attainment of low-income students.

Although women and men have equal enrollment ranges at selective colleges, differences exist at highly selective colleges because enrollment of men outranks women (Bastedo & Jaquette, 2011). A clear understanding of how colleges determine admissions decisions for low SES students is needed. There is also limited research on all students' college application process; gaining more knowledge will help discover if patterns exist related to SES.

Homeless College Students

The Federal financial aid application data revealed that 60,000 students under were homeless (Klitzman, 2017). In 2018, 36% of the students who applied for federal financial aid

experienced housing insecurities while attending community colleges and universities. Therefore, colleges have begun to develop support services to accommodate the homeless population's unique needs, such as providing on-campus support services, partnerships with community organizations and social services agencies. Providing support services helps connect students with resources for housing, food, childcare, and health insurance (Klitzman, 2017). Homelessness became a growing concern almost 30 years ago. The McKinney-Vento Homelessness Assistant Act was passed in 1987, which provided resources for programs offering shelter. Klitzman (2017) conducted field research with policymakers, students, and activists related to higher education legislation. The data collection method used for the study were interviews with focus groups. The interviews helped to gain more insight into how and why people experience homelessness by examining the capacity of higher education to serve students' academic and non-academic needs. The sample population consisted of homeless or experienced housing insecurities that resided in New York, Bronx, and Manhattan (Klitzman, 2017). This study's data were retrospective data collected from the Center for Institutional and Social Change at Columbia Law School database. Many colleges are faced with hardships when tackling the needs of homeless students due to limited resources and staffing. The result is that homeless students' needs are left unmet, due to which they struggle to remain enrolled in college. Several factors were addressed in the field study: academic preparation, personal needs, academic support, financial considerations, patterns of interaction, non-academic initiatives, student, government, and college agencies

Academic preparation for homeless students is difficult due to their high mobility experience, which interferes with academic achievement (Klitzman, 2017). Homeless students perform poorly academically because they suffer from stress due to frequently moving. The

interview results indicated that students had fears about college admissions and standardized testing exams. There is a high probability of dropping out of college caused by being placed in learning support courses, which lengthens students' degree completion time. Students' negative emotions towards college were being bored in school, prolonged graduation time from high school because students needed to work, friends' influence, and encountering barriers with selecting appropriate courses required to achieve their goals. Although all K–12 sector schools are required to have a McKinney-Vento liaison on staff to assist homeless students with their needs, there is minimal opportunity for interaction with the counselor because of the large student counselor ratio. The counselors spend their time assisting students with obtaining food and shelter resources, which leaves minimum time for counseling students on post-secondary education needs.

Personal academic support for homeless students is critical to improving their pathway to college because they hold a strong perception of not viewing college as an option, due to complex admission procedures utilized for college entry (Klitzman, 2017). The homeless students who aspire to attend college encounter barriers financially and bureaucratically. Homeless students encounter hardships completing their federal financial aid application, which includes complex financial information related to parental income. Recently, the application for financial assistance underwent modifications to ease the process for homeless students who desired to pursue a college education by waiving the requirement for information on parental income. The students also exhibited positive aspirations when a sibling attended college, making their goal of attending college more feasible though limited financial resources were available. One participant shared her desire to attend college was influenced by her children. This is considered an affirmative action of this type is a form of transformative influence that can be

inspired by pairing students with mentorship programs, like the McKinney Veto Liaison structure.

Financial considerations are an essential factor for prospective college students that have encountered housing insecurities because they lack adequate financial resources to attend college (Klitzman, 2017). The average tuition for public 4-year college from 2015- 2018 was 9,970 dollars yearly; this reflects a 300-dollar tuition increase. College tuition for private and nonprofit 4-year colleges was 35,260 dollars (Klitzman, 2017). Higher tuition rates have prompted many students to rely on financial aid to cover the cost of tuition and fees. Other barriers also exist in the college admission process, such as application fees, transcript fees, and exam fees, which can interfere with prospective students completing the financial aid application. These students have a high probability of not completing their college studies with their cohort from high-income families and are six times likely to graduate from college than those from low-income families. The College Board college testing program provides incentives that waive standard test fees, but the lengthy application process complicates qualifying (Klitzman, 2017). Students interviewed reported that living costs associated with college often exceeded average living expenses, and the cost of living for college is more than what is being advertised by the institution. One participant shared that tuition fees were expensive, and they had issues with qualifying for the full financial aid amount. There are limited resources available for covering unmet needs after receiving financial aid, and students must seek support outside of private and federal loans.

Once students enter college, they navigate through patterns of interaction, which are critical to forming their experiences (Klitzman, 2017). Creating an environment where positive patterns of interactions exist can encourage students from disadvantaged or low-income households who lack family support. If negative interactions exist among students from

disadvantaged or low-income families, it diminishes their academic experiences and opportunity to thrive in the academic environment. The absence of communication can weaken the overall quality of educational experience for students with housing insecurities. Key stakeholders such as faculty, administrators, and staff often are not aware of homelessness among college students, which is a significant contributor to college dropout patterns. For example, faculty are often unaware of the challenges students face with housing insecurities or may be informed of the issues but not aware of how widespread housing issues impact students' lives daily. Faculty members play a critical role in shaping the positive experiences of students in the academic environment. The faculty can incorporate positive interaction among students in the classroom setting to help students maneuver through the college life cycle.

Government programs can be influential in a student's decision to attend college and share the responsibility for enforcing guidelines that impede their access to benefits, easing hardships present during the college pathway process (Klitzman, 2017). For instance, housing and food programs are ideal for people who fall into a specific category, such as students with dependent children, those working more than 20 hours per week, and individuals participating in federal work-study programs. There are limited resources allocated for federal work-study programs at the community college level; more significant funds are made available to more prestigious institutions. The federal work-study program assists students by providing a steady income source that can be used to support their basic living needs. Only 20% of students who attend community college qualify for the Supplemental Nutrition Assistance Program (SNAP) distributed through food stamp benefits. This situation supports that students are not aware of their eligibility to receive (SNAP) or may be hesitant to seek social stigma benefits. The lack of collaboration between educational institutions and social services is responsible for preventing

students from obtaining resources available for them to utilize. Colleges are often not well informed of government resources that are available to students geared towards housing needs. Students must identify their status with government agencies and colleges, which is a duplication of processes and is considered time-consuming. Government agencies and local agencies both require students seeking resources to provide information about their finances and living status as pre-requisites for being considered eligible for resources. There is a critical need for students' non-academic needs to be studied through continued research to determine the level of impact this has on a student's life if they are met or not met.

African Americans make up 46% of the homeless population in the United States, representing 32.8% of students experiencing housing insecurities on community college campuses (Blevins, 2018). The African American population were more susceptible to encounter housing insecurities at increasing rates. As classified by gender, 33.9% of women face higher rates of housing insecurities than men at 31.8%. Students who are impacted by housing insecurities in college face adverse effects on their psychological and physical well-being and have less successful academic outcomes (Blevins, 2018). A person facing those adverse effects often meets their basic needs of having meals daily, stable living quarters, and reliable transportation. The research study utilized hunger and transportation parameters as predictors to identify housing insecurities among college students. Outcomes from the study were conducted through logistic regression testing, which revealed that 693% of students with transportation barriers were more likely to encounter housing insecurity than students who did not have hunger issues. Women who were African American who reported hunger issues had a higher probability of experiencing housing insecurities than other individuals who did not report having issues with hunger.

Blevins' (2018) research study incorporated socio-ecological outcomes (SEO) based on socio-ecological domains of inputs and outcomes. Inputs and outcomes are characteristics students bring with them to college gained from their background and society. The fundamental characteristics that make up the background are age, employment status, language, and citizenship status. Societal factors are defined as stereotypes, conditions of the economy, behaviors toward crime, incarceration, views, and beliefs. The purpose of the study sought to gain more knowledge on the extent to which external impact factors housing insecurities among African American women (Blevins, 2018). The sample consisted of community college success measures stressful life scale (Blevins, 2018). Minimal imperial literature exists about women transitions in community college, due to the societal views related to broad enrollment trends among women in college and their widespread presence in leadership roles in the workforce.

Through the free application for federal student aid (FAFSA) application, higher education key stakeholders have begun to track students' self-reporting unaccompanied on their application, which is a term used to identify the homeless status. The FAFSA application process provides a series of questions related to students' background, parents' background, and personal finance, which is assumed accurate until the evaluation of data is completed by institutional financial administrators.

However, FAFSA is not a reliable source for identifying homeless students because many students are reserving their right not to complete an application or choose not to answer questions truthfully (Kantrowitz, 2019). Forty percent of students in the United States were eligible to apply for financial aid but did not submit a FAFSA application (Kantrowitz, 2019). An estimated 2.3 million students were classified as United States citizens and permanent residents from 2007 to 2008, that elected not to complete a free FAFSA application. Students not

filing a FAFSA caused many college students not to receive the available student financial resources. In contrast, FAFSA applications increased by 59.1%, but the number of students who did not submit a FAFSA application also increased by 40.9%.

Many students that elected not to apply for FAFSA had the following characteristics: enrolled in college part-time, 24 years of age or older, considered independent students, and feared that they would not meet the qualifications to receive aid. The study's purpose was to improve completion rates of FAFSA through the modification of questions required on the form (Kantrowitz, 2019). A regression model guided the statistical analysis, including variables of income, dependency, family size, and some college students in households. Data used for research was derived from the National Postsecondary Student Aid Study (NPSAS) analysis system. A case study was also conducted by the American Council on Education, indicating that 1.5 million students are eligible for a Pell grant but did not apply. NPSAS study outcome showed that there were 1.9 million students eligible for FAFSA, but participants for the study included international students, which caused skewness in the outcome variable.

Gupton (2017) conducted a qualitative research study based on homeless youth's lived experiences enrolled in community colleges to create resources that would provide stability for students. Participants for the study were low-income homeless students attending a community college. Community colleges catalyze expanding access to post-secondary education (Gupton, 2017). The core foundation of community colleges was born out of a demand for increased access to post-secondary education to train a workforce of service members returning from war; thus, a network of community colleges came into existence. The Obama administration followed suit with community colleges' foundational concepts by responding to the economy's demand, moving to increase college completion rates to five million students by 2020 through the College

Completion Challenge policy. Under the Obama administration, America's College Promise Plan created an aggressive initiative that made community colleges more affordable by removing tuition fees for the first 2 years of college attendance. Support for expanding college access was possible because of initiatives like the College Completion Challenge and America's College Promise Plan, which reveal the importance of community colleges' place in society as a critical component for developing a more skilled workforce. Findings from the study support that homeless youth yield positive benefits from being enrolled in college.

Student Loan Debt

Smith (2012) brought forth the challenges in Great Britain's higher education system worthy of being further evaluated. The researcher incorporated this overview into this research study to compare problems colleges encounter in the United States compared to Great Britain's higher education system. During the 1960s, higher education was accessible to a small group of middle-class people. Smith (2012) mentioned that increased student loans trigger a toxic climate for finances developed in higher education in place of grant funding, which impacts students in the United States and Great Britain. Who should pay for college? The responsibility of support for higher education is unclear and has been debated for decades. As the climate in higher education continues to shift, so has the responsibility to transition from majority state-supported to majority funding supported by the federal government. Students now have a wide range of choices when selecting a college to attend. The increase in options for continued education created competition among higher education institutions to attract students based on their programs' quality and efficiency. Institutions are reviewed based on their performance data, which can determine if an institution will experience an increase or decline in enrollment along with an increase or decrease in retention rates. If an institution's data indicate downward

enrollment trends and low retention rates, it will significantly impact resources used for operational budgets, academic programs, staffing, scholarships, and other resources available to students. Those who benefit from higher education are left to pay for the privilege of obtaining a college degree by having access to minimal opportunities for grants and increased dependency on loans to cover college tuition costs.

Loans were first introduced in 1990 to students in England to assist with college living expenses (Crawford et al., 2014). Currently, student loans have replaced funding for low-income students to cover the cost of tuition fees. Public spending in the United Kingdom (Britain) for higher education is under tight fiscal constraints. Spending allocated toward student loans is a situation open to many unanswered questions concerning the overall impact this has on government spending (Crawford et al., 2014). The government incurs long-run costs related to loans not being repaid, loan repayment being subject to write off, and interest paid by borrowers is far less than the government's interest rates to carry the debt. A clear understanding of the influence of public government's role in student loan's long-run cost requires review to determine if an increase in public debt will occur or if more substantial tax increases could be a solution to offset the price for the government (Crawford et al., 2014). In the United Kingdom, the average cost for college attendance per student is $40,286; this equates to each student receiving $17,433 in loans to cover the college tuition cost. The overall cost for covering college attendance by loan estimates for 300,000 full-time students total $5.2 billion in Britain. Estimating the cost of loan repayment is difficult; the process includes earnings that can fluctuate depending on other factors. Based on the research study, earnings are calculated based on experience a 1.1% growth; if the earning remains flat and no change occurred, then loan rates would increase from $17,443 to $18,859 (Crawford et al., 2014). The two types of loans

available in England are fee loans and maintenance loans, but they are subject to specific requirements. Fee loans are available to English students and first-time undergraduates working toward obtaining the first degree, and the loan covers costs associated with college attendance. Maintenance loans are available for full-time English students who have not reached 60; increasing the availability of student loans to encompass college tuition fees increased public debt by 30% of the national income. The methodology for the research study included student population data from the National Pupil Database (NPD) and the Higher Education Statistics Agency (HESA), calculation of student's eligibility for resources, the profile of students earnings through Destination of Leavers from Higher Education (DLHE), and National Child Development Study (NCD) estimation of debt based on future earnings of students used to calculate patterns of repayment, and stimulated earning profiles based on dynamics and distribution.

A research study conducted by Ulbrich and Kirk (2017) reviewed the rising cost of tuition for medical students in the pharmacy program and the large amount of student loan debt they carry. Why is it so important for colleges to play a significant role in their students' financial education? Currently, Americans owe over 1.3 trillion dollars in student loan debt (Ulbrich & Kirk, 2017). Looming issues of student loan debt continue to have a tremendous impact on college graduates' ability to enter the workforce. Having excessive student loan debt impacts an individual's ability to save money for retirement, lessens the ability to give back to the college, and alters their career choice, which can harm the quality of life (Ulbrich & Kirk, 2017). Thirty-eight percent of adults in the United States who are repaying loan debt cannot contribute to their retirement. According to the United States Survey of Medicine residency program's internal medicine residents' results, the symptoms associated with adverse life quality

are burnout, depression, and emotional distress. From 2009 to 2017, graduates attending pharmacy school have seen increases in loan borrowing patterns ranging from $120,270 to 163,497 dollars compared to those who graduated from private colleges who had loan amounts averaging 189,317 dollars. A graduate student survey by the American Association of Colleges of Pharmacy (AACP) posed one question to participants: If you borrowed money to assist with college expenses in the PharmD program, please estimate how much you owe at the point of graduation? Most of the participants did not have a clear understanding of the question as they incorporated total debt from undergraduate to the end of graduation from graduate school for living expenses. The base cost of attending pharmacy school is an average cost of 20,000 dollars, and if the students take out $20,000 in loans for living expenses to cover the duration of the 4-year program, this equates to 160,000 dollars. The interest for an unsubsidized loan is much higher at the point of graduation with a 6% interest rate total of 180,000 dollars that requires a 10-year repayment program with payments of 1,998 dollars monthly. Findings encourage students to be cautious with their borrowing habits for attending college, seeking other tuition assistance alternatives other than student loans such as family, applying for scholarships, and utilizing earnings from work. Considering other options to assist with tuition costs is a broad statement to make when the likelihood that family contributions are not available, scholarships are not available, and earning for work is used to support the family. Although tuition increases are of great concern, there is a need to cut tuition costs and explore other opportunities available beyond reducing tuition. Now is the time to bring forward more awareness about educating students on financing their education.

Johnson et al. (2016) conducted a research study to determine students' borrowing patterns when using student loans to finance their education. The average student loan debt at

graduation has been increasing over the last two decades. Student loan debt is one of the highest debts owed in the United States, surpassing the debt correlated with credit cards, auto loans, and home equity lines of credit. In 2012, the average student loan debt for college graduates was $29 400 dollars. To date, 1.3 million students graduating from a 4-year college have accumulated student loan debt, which increased by 24% since 2013. Currently, more than two-thirds of college students graduate owing 35,000 dollars in student loan debt. The study's collection of data were via the online student portal Desire2Learn (D2L) from the time frame of November 2014 through April 2015, which used questionnaires and focus groups. Criteria for individuals participating in the research study were that students had to be at least 18 years old and received at least one loan.

The first sample of students for a research study came from a global research agency, Survey Sampling International that registered 142 participants; eleven students completed the focus group. The second sample of students attended six different land grant universities: University of Georgia, Pennsylvania State University, Purdue University, Rutgers University, South Dakota State University, and Utah State University. There were 123 participants registered study, and 77 of the students completed a focus group.

Zerquera et al. (2017) conducted a research study utilizing experiential learning theory (ELT) to evaluate the perception of undergraduates' experiences with debt based on three points: (a) perceived versus the actual cost of attendance; (b) feelings about carrying debt, centering on perceived reality and burden of debt; and (c) effects of debt on students, highlighting implications of debt on students' postgraduate decision. College students have incurred more student loan debt now than they have in prior years. Borrowing patterns among students is a reaction connected to the rise in college tuition and trends in federal support for high education

fluctuating from grant aid to student loans. Student loan debt has become a growing concern for key stakeholders because of the long-term implications that debt has on an individual's socioeconomic strata. The basis of the foundational aspects of ELT was developed based on six propositions. Due to this study's confinements focusing on only two schemes, the first proposition brought forward beliefs and ideas of students about certain factors. The second proposition focuses on plans based on the individual and their environment, and learning occurs between the person and their situation. This process means an individual can connect current ideas with previous conceptions or lived experiences**.**

Research participants for this study included students enrolled in college during the fall semester of 2012. There were five focus groups involving selecting 31 undergraduate students across four institutions from the same college whom student affairs assisted in recruiting. Participants received a stipend for being a part of the study via a $10 Visa gift card (Zerquera et al., 2017). Participants in the study encompassed a broad perspective toward debt; some were able to correlate their experiences to instances of unexpected family emergencies and unplanned transitions in work status, and absence of family support. The outcome of the study revealed that students held different views about debt. Students' views consisted of avoiding debt, correlated debt with loans, emotional suffering, academically suffering, viewed as a burden, harming family lifestyle, uncertainty towards the value of a degree, and graduate school as an option to delay loan repayment. An identified gap in the study existed for undergraduate students not having adequate resources on campus and staff information to ensure students have a clear understanding of debt and developing functional strategies for borrowing.

Retention Issues in Higher Education

College retention rates continue to be an issue in higher education, which is often vital in determining institutional budgets (Hagedorn, 2005). Attrition rates at colleges have been problematic for decades (Burke, 2019). Solving issues related to retention has been met with a high degree of complexity for many colleges because many factors can contribute to students' decisions to stop out of college. Consequently, 30% of United States students stop out of college during their freshman year of college due to internal or external factors that prevent students from matriculate (Wolf et al., 2017).

Kim (2015) conducted a correlational research study to evaluate the impact of cognitive, demographic, and socioeconomic variables have on predicting a college student's GPA. A sample population from Midwestern University consisted of 7,045 students. Theoretical framework hinged on Tinto's theory of student departure that evaluated gender, ethnicity, family social status, goals, commitment, integration into college, and high school performance to determine a student's likelihood of dropping out of college. Approximately 59% of first-time first-year students enrolled in college completed their undergraduate degree within six years. Only one-third of the first-time freshman cohort from 2011 remained enrolled in college. Admissions criteria for college entrance vary depending upon each college and university institutional policies. Still, typically high school GPA and standardized test scores from SAT and ACT exams are a part of determining the admissibility of students in college (Kim, 2015). Some colleges have incorporated policies within their admissions processes to accept students who do not meet the standard admissions criteria. Adjustments within admissions policies is a process in place to protect the reputation and quality of the institution. The college admissions policies are special admissions categories that vary in definition depending upon institutions but are

traditionally referred to as admit statuses of limited admit, presidential exception, and conditional admit. These special admissions categories offer opportunities to expand college entrance for those considered a part of the underprivileged population. The students are at risk due to low standardized test scores and high school GPA. Retention can take on multiple meanings; commonly, retention defines an at-risk population as non-traditional and commuter student. The views on predictors of college GPA; consider high school GPA (HSGPA) and standardized test scores; others believe HSGPA is the strongest predictor for determining a student's academic achievement in college. Colleges are now faced with high demands to uphold institutional effectiveness and accountability because they are critical components for assessing an institution's effectiveness and curriculum.

Variables tested in the research study utilized descriptive statistical analysis, inferential statistical analysis, and multiple regression. The descriptive statistical analysis helped summarize the frequency of dependent variables, inferential statistical analysis reviewed research questions, and multiple regression assisted in determining the relationship between the variables. The study's outcome indicated a significant difference among students admitted under regular admission (RA) policies and special admission (SA) policies. There was a strong relationship between mean HSGPA and ACT scores for RA students. The RA students' academic performance was better than SA students, and RA students had higher retention probable. Statistical testing methods of Pearson correlation coefficients reviewed the variables of regular admissions (RA) and special admissions (SA) groups variables gender, ethnicity, Pell grant status, HSGPA, and ACT scores variables using person correlation coefficients. Among the variables high school, GPA had more of an influence than ACT scores. A significant correlation between gender and GPA exists, but there was a significantly negative correlation between

dependent variables retention and performance. A significant influence exists between HSGPA and ACT scores impacting college GPA, when all other variables in the study controlled, such as gender, ethnicity, and Pell grant status. The overall outcome is that HSGPA has the most influence on predicting college GPA.

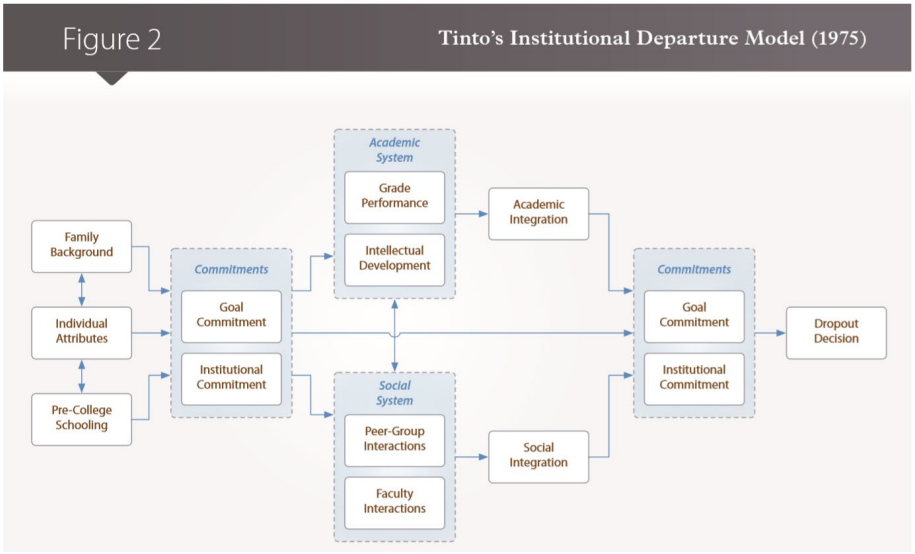
The number of students attending college has doubled; more than half will not reach the goal of completing their college degree (Tinto, 2015). Developing and implementing effective retention programs is at the focal point for many universities and colleges on a national level. Tinto (2015) charged colleges with discovering methods for retaining students but pointed out that students themselves are not actively pursuing the option of being maintained by colleges is of importance. For a student, completing a college degree at their home institution is not held in high regard to complete the degree. Some students enter college under the likelihood of transferring to another college before completing their degree program based on their experiences in the college environment. For years, Tinto's theoretical framework supported that if students are engaged and connected to campus culture, they are more likely to perform better academically than those that do not (Tierney & Sablan, 2014). A student's personal experiences in college have the power to determine their level of motivation toward completing goals. Those experiences connect to a student's interaction toward goals, self-efficacy, sense of belonging, and the value placed on the curriculum. An individual's personal experiences can impact the individual's belief that they can succeed, their connection to their feelings of being a part of a community, and the value they hold toward educational studies. Tinto (2006) brought forward great concern about trends of low retention rates and emphasized a large volume of students were not achieving academic success. There is a need for continued research to evaluate the

impact of academic performance on students' social needs and their views about a college drop out.

Tinto (1975) assumed the entrance process for first-year college students, as the transitional phase for students that left their family, high school, and hometown to enter an unfamiliar environment. The college's unique setting is unknown to students, but it exposes them to new values, priorities, and behavior that they must know. The systems of social and academic areas require a level of commitment from the student to achieve success. Educational responsibility is connected to grades and graduation; the social system is related to students' institutional commitment to social networking and school pride. Tinto's theories are widely used in research efforts focusing on retention, and his methods are used in current research studies (see Figure 2).

Figure 2

Tinto's Institutional Departure Model (1975)



Theoretical Framework

This research study is conceptualized according to some elements included in Spady's (1977) undergraduate dropout process model. Spady's undergraduate dropout process model

states that for students to achieve success in college, students must detach from their prior social communities to transition into the new environment of college**.** Previous research studies indicated that African Americans have a higher probability of experiencing homelessness and being faced with housing insecurities in college.

Summary of Literature Review

Key stakeholders within the higher education industry realm must collaborate in a united effort to address the critical needs of students once they enter college related to homelessness, academic performance, and being a college dropout. Many of the barriers' students encounter while maneuvering through college affect their SES and create financial hardships due to paying for college being placed solely on the students or parents. The condition of homelessness among students enrolled in colleges has steadily increased more rapidly among the African American population but is more probable among African American women over the last ten years. Research studies support the statues of homelessness, housing insecurities, and food disparities that interrupt a students' ability to be successful academically and enroll to the point of graduation. State, local, and federal governments all play a critical role in developing the policies that shape higher education but require drastic measures to meet current college students' needs.

Are we addressing the full needs of the American people as a nation when considering higher education? One can interfere that many of the barriers college students face are due to unmet needs present during their entry into K–12 school systems that were not addressed. So how can we fix strategic issues working in silos or as independent agents? There are community colleges, 4-year colleges, public and private under the higher education unit, which all occupy a diverse population of students with lingering needs overlooked for decades. Widening the lens to investigate the full aspect that affects the upward mobility within our great nation has been long

linked to disparities in the K–12 school education sector. Many students in K–12 areas are impacted by homelessness and food disparities during this phase that continues after they graduate from high school. Therefore, these students migrated into colleges with those same issues but are not identified or tracked, which leaves their basic needs for food and adequate shelter left unresolved. How can there be one educational program that fits all at a point in time where the critical foundational learning aspects for children are at risk? As a part of this research study, the plan is to reveal that the issue present at colleges related to increased college dropout instances and low academic performance could be related to housing insecurities and unmet financial needs. The utilization of data samples gained from a 4-year private college will identify the need for institutions to analyze their data using variables other than academic GPA as early predictors for connecting students to resources. The state of homelessness in the United States about non-academic needs early in the college entrance process is beneficial in assisting higher education with creating programs and allocating resources to improve existing support resources for students related to non-academic factors.

Chapter III: Methodology

Higher education has been seen as a pathway from the lines of poverty to the means of a better way of life for 50 years (Baum et al., 2013). In the 1960s, the public perception toward higher education was strong. People believed in the possibilities gained through higher education (Baum et al., 2013). There has been a demand placed on colleges and universities' key stakeholders to improve the academic outcomes for college students. The academic progress of students has been researched from several perspectives, which considers parents' educational level, income level, and cost of tuition influence. However, there is not a single research study that has considered the type of high school students come from and how this impacts their progression once enrolled in college. To the best of the author's knowledge there is scarce research that has considered the type of high school (Title I versus non-title I) students come from and how this impacts their academic performance and progression once enrolled in college.

Purpose Statement

The purpose of this quantitative study is to investigate the variables of social stratification [as measured by Title I status of high school], academic performance [as measured by college semester GPA], and amount FAFSA loans granted to students [as measured by college credits completed] to determine the effect of those variables on a student's decision to continue their course work and attendance in the college.

Research Questions

Research Question 1: What is the overall impact of high school GPA on semester GPA irrespective of Title I versus non-Title I?

Research Question 1.1: What is the impact of high school GPA, from a Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Research Question 1.2: What is the impact of high school GPA, from a non-Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Research Question 2: What is the overall impact of high school GPA on a freshman student's academic performance as measured by college cumulative GPA irrespective of Title I versus non-Title I?

Research Question 2.1: What is the impact of high school GPA, from a non-Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Research Question 2.2: What is the impact of high school GPA, from a Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Research Question 3: What is the overall impact of earned credit hours on registered credit hours (measure of continued attendance) irrespective of Title I versus non-Title I high school?

Research Question 3.1: What is the impact of earned credit hours on registered credit hours (measure of continued attendance) for Title I?

Research Question 3.2: What is the impact of earned credit hours on registered credit hours (measure of continued attendance) for non-Title I schools?

Research Question 4: What is the relationship between financial aid available and earned credit hours?

Research Question 5: What is the relationship between financial aid available and registered credit hours?

Research Design

The quantitative correlational design was used for this study because we are using retrospective analysis to determine how much influence social stratification has on semester GPA, the continuation of college attendance, the number of earned credit hours, and the amount of FAFSA loans received. This study would utilize a retrospective, correlational research design. Data for this study were retrospectively collected from past student records who were enrolled at the college in 2018-2019, 2019-2020, and 2020-2021 academic years.

There are two primary reasons that correlational studies are used in educational research: to explore the relationships between variables of interest and determine which variables can predict essential characteristics of a specific group that will not occur until later (Hahs-Vaughn & Lomax, 2013). Researcher is not utilizing casual comparative randomized control or quasi experimental research design because there are no experimental and controlled groups for which the students are assigned based upon pre-existing conditions or other types of interventions. Correlational research is used to explore the relationships and/or quantitatively assess the impact of independent variables(s) on dependent variable under investigation. In this study, the independent variables are high school GPA (Title I versus non-Title I school), amount of FAFSA loans available to the student in college, and number of earned/completed credit hours toward satisfying degree requirements, continued enrollment in college.

Population & Sample Selection

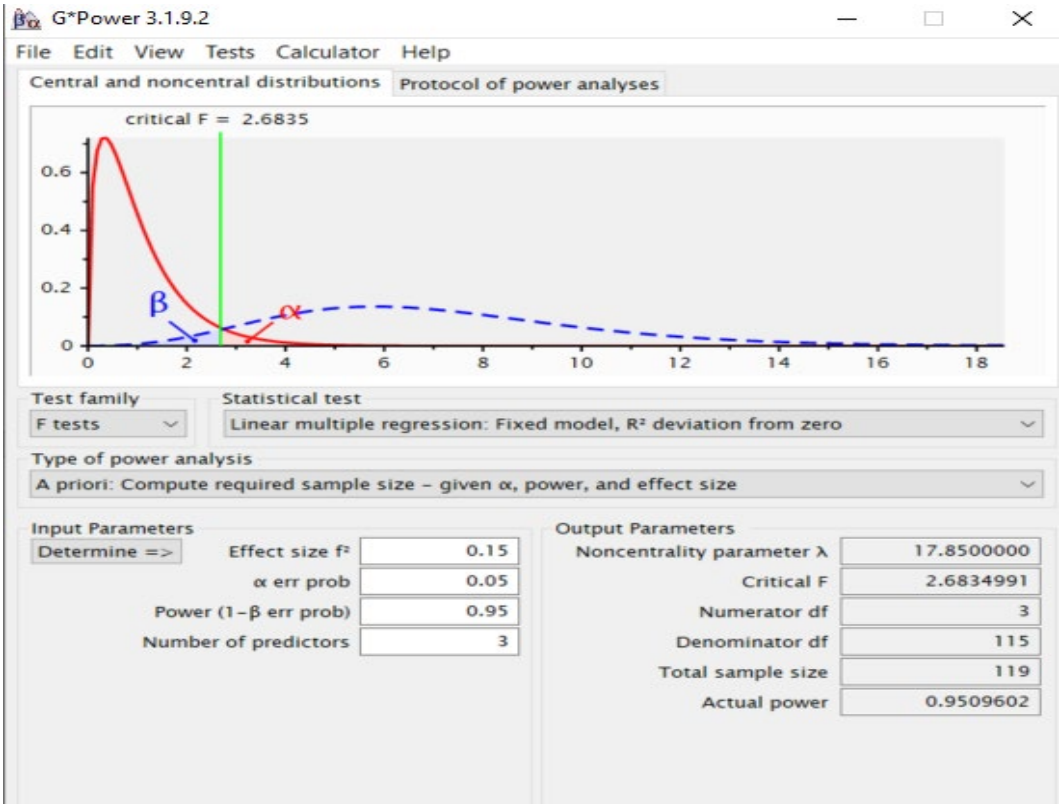
The participants for this study came from a population of 960 first time freshman college students enrolled in college during the 2018-2021 academic calendar years, which include spring-fall 2018-2019, spring-fall 2019-2020, and spring-fall 2020 2021 semesters. The selection criteria for participants in research study, includes students residing in on campus housing for at

least two semesters along with high school status of title I status and non-title I status. The participants for this study are first-time freshman college students from diverse backgrounds comprised of male and female genders. Selecting first-time college freshman students allows for determining if the type of high school a student graduates from impacts their academic progress and college attendance. Data were restricted to only include students who graduated from high schools that are considered Title I Status and Non-Title I status, which allowed for determining if common characteristics exist among student performing below academic standards. A high academic failure rate among first-time college freshman students has a negative effect on college retention rates. Transfer students, readmit students, and graduate students were excluded from sample participants because the high failure rate noted among first-time college freshman students.

G-Power analysis was used to calculate the minimum sample size for statistical analysis. Statistical power is the ability of a test to correctly reject a false null hypothesis. In other words, power determines whether there is a true impact or not of the independent variables on the dependent variable. The power is the assumed probability that the researcher will reject the null hypothesis when it should be rejected. The minimum power of a statistical test should be minimum 0.80 to correctly identify a statistically significant relationship or impact. The rese4archer used an a priori power analysis in G*Power 3.1.9.7 to compute the required sample size for an effect size(f2) of 0.05, a power (1- β error probability) of 0.95, and three predictors or independent variables (Faul et al., 2009). The required sample size was 119. Figure3 shows the a priori power analysis.

Figure 3

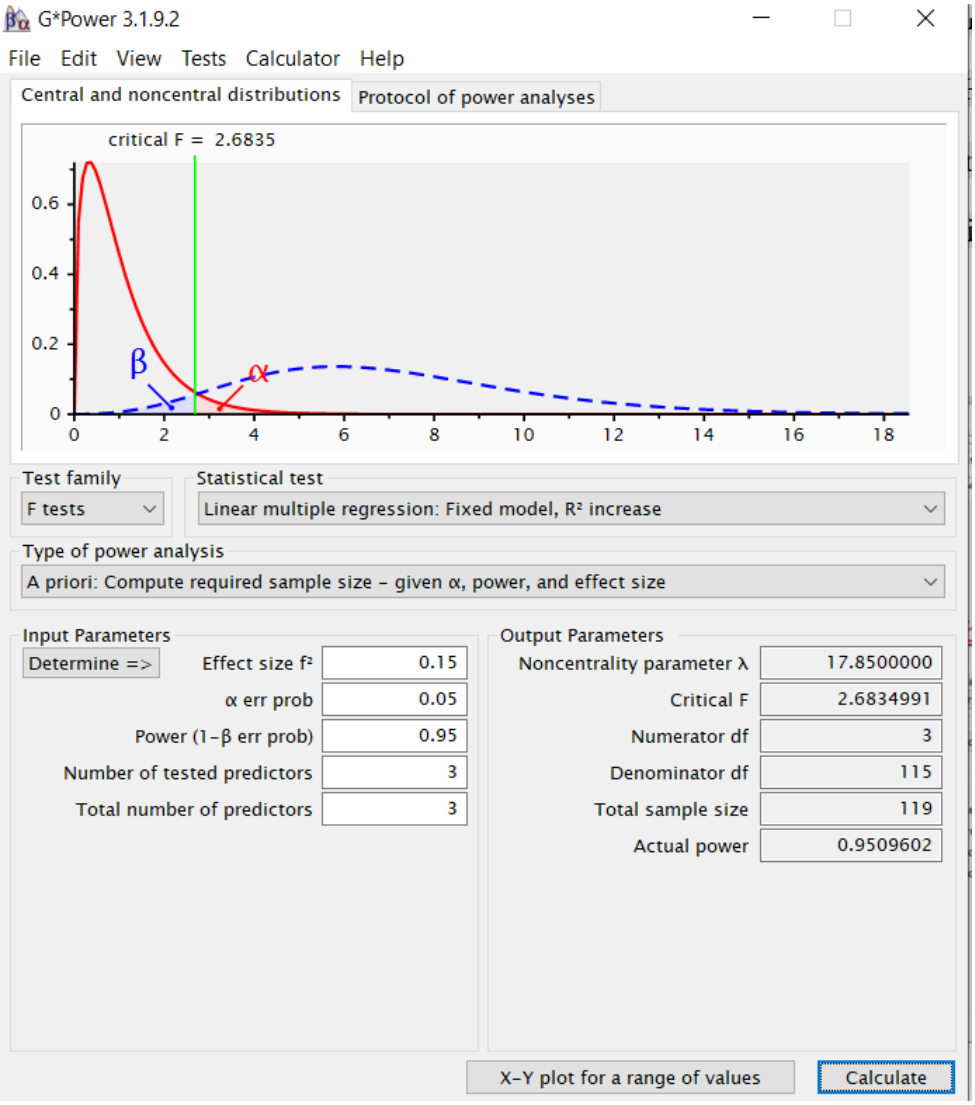
G-Power Analysis for Fixed Model Multiple Regression



The linear regression fixed model, R^2 increase was also used because this is a hierarchy regression model. In hierarchy regression model the independent variables are added one by one in the model. The minimum sample size for fixed model, R^2 increase was used to calculate the minimum sample size for hierarchical regression analysis. The effect size (f2) is set at 0.15 (small effect), an error probability of 0.05, a power (1-β error probability) of 0.95, three tested predictors and three total predictors (Faul et al., 2009). The required sample size was 119. Figure 2 shows the a priori power analysis was used to calculate the minimum sample size for hierarchical regression analysis.

Figure 4

G-Power Analysis for Hierarchical Regression Model



The equation for comparing the variance is F=S2 1/S2 2. The statistical test, Linear multiple regressions: fixed model, R^2 deviation from zero shows the null hypothesis is that the proportion of variance in the outcome explained by the predictor (R^2) equals zero. The type of power analysis is a priority power to compute the minimum required sample sized needed to achieve the desired level of power, give level of alpha and effect size for the study (Cohen, 1992). The

effective size measures the strength of relationship between two variables. An independent variable will usually have a large impact on the dependent variable if the former is strongly correlated with the latter (Ferguson, 2016). The table below shows low, medium, and large effect sizes for the correlation coefficient which is used in computing the standardized coefficients in the regression model. As shown in Table 1, an effect size between 0.1 to 0.3 is small positive effect. Effect size between -0.1- to -0.3 is small negative effect. The effect size is calculated by dividing the difference between the means of two or more variables. The effect size is the measure of the magnitude of study effect. The larger the effect size the stronger the relationship between two variables. The Type I error rate (alpha -err prob) of .05 is a low probability that here is a mistaken rejection of the true hypothesis: meaning the researcher willing to accept a% change that the results are due to change rather than the study. The statistical power (1-B err prob) is .95, which is the likelihood that the study will detect an effect when there is an actual effect to be detected. Beta is a Type II error, which is the accept a null hypothesis.

Table 1

Strength Association Effect Size

Coefficient, r strength of association	Positive	Negative
Small	.1 to.3	-.1 to -0.3
Medium	.3 to .5	-.3 to -.5
Large	.5 to 1	-.5 to -1.

Data Collection & Instrumentation

Data were collected from student's retrospective records, which are housed within the mass enrollment reports from the Power Campus database system. This system contains the primary records that is used to store student academic records within registrar's office. Student records were extracted starting spring 2018 to spring of 2021 semester based on the selection

criteria described in the population and sample section. Three database systems were used to create the research report: the student database system (Power Campus), the Financial Aid database system (PowerFaids), and the National Center for Education Statistics (NCES) system. The sample variables included in the report reside in multiple systems, which required creating a script to gather all variables into one report. A script was created to gather all variables into one report as the independent and dependent variables reside within the three systems. The script consisted of the following data points people code, academic session, academic year, academic term, enrolled status, transcript detail for academic term data, and student financial aid data. Data were conjoined after the data report is extracted from PowerFaids and Power Campus. Duplicate records were excluded by utilizing the excel duplicate removal function. The high schools' status data were manually added to the report after high school status is retrieved from the NCES website. A sampling process was conducted to isolate all students who graduated from Florida high schools, and to have a good mix from Title I and Non-Title I status schools in the study sample. Restricting the sample data to include only graduates from high school in Florida, I hoped to gain a clearer understanding of the large volume of first-time freshman who experience academic failure.

The retrospective data used for this dissertation were collected from the students' database housed within the registrar's office. Multiple checks were applied to extract the data based on the sample selection criteria. The data includes the following key variables.

- Student semester GPA the students' academic performance of student based on current term attendance outcome.
- Student ID number is the unique identifier assigned to all enrolled college students for tracking and maintaining academic records.

- Term/year of Attendance the year of attendance and term (Spring, Summer, and Fall semester terms)
- Demographic variables gender, ethnicity, age, first-generation student.
- Registered hours represent the number of credit hours a student is enrolled during a semester term or quarter term.
- Earned credits, the total number of credit hours a student completed with a passing grade.
- Cumulative grade point average (Cum_GPA) is the overall GPA a student has earned that includes all grades
- School type, High school (HSDP) or College (ASC)
- School GPA – High school grade point average that is calculated based on students weighted and unweighted GPA.
- Term grade point average (Term GPA) the outcome of grades earned during one semester or quarter term
- Number of credit hours completed based on Title I status and non-title I status high school
- High school is coded based on status of Title I and Non-Title I status.
- FAFSA amount loans are granted to students based on earned credit hours each semester.
- Housing(dorm) student that resides in on-campus housing and are enrolled in at least 12 or more credits hours/full-time status.

Data Analysis

Multiple linear regression was used for this study because there was more than one independent variable that could influence a single dependent variable. Utilizing the multiple linear regression model allowed for determining the overall fit of the model and establish each independent variables contribution to total variance.

All the data analysis was conducted in SPSS. Descriptive statistics were conducted for all the demographic variables. The data were checked for missing values, skewness, and kurtosis. All assumptions were checked before implementing correlational and regression analysis. Normality assumption was checked through the Kolmogorov-Smirnov Test, and Shapiro's Wilk Test. The null hypothesis for this test stated that normality assumption was met. The research hypothesis for this test stated that normality was not met. The skewness and kurtosis were checked. The skewness and kurtosis values below 2.1 and 7.1 respectively indicate approximately normally distribution (West et al., 1995). Homoscedasticity was checked by using the Q-Q plots. Outliers or extreme values were checked through the scatter plots. Linear relationships between the variables were checked through the scatter plots where a straight line would indicate linearity. Independence of observations were checked through the Durbin Watson test. The test statistic value should be in between 1.5 and 2.5, which indicates independence of observations (Field, 2013).

A Pearson correlation coefficient was calculated for each pair of independent and dependent variable. The coefficient ranges from -1 to +1. The coefficient provides information on strength and direction of the relationship between the two variables and serves as a measure of effect size. A positive correlation occurs when the coefficient approaches +1, which indicates a linear increase in the scores of one variable with the linear increase in the scores of the other

variable. A negative correlation occurs when the coefficient approaches -1, which indicates a linear decrease in the core of one variable with the linear increase in the core of the other variable. An inverse relationship exists between two variables when the correlation coefficient is negative. No or minimal correlation is indicated the coefficient is close to zero. Correlation coefficients have a low (.05), moderate (005-0.7), and high range (above 0.7-0.9), which shows strength of the relationship between the variables (Field, 2013).

A regression analysis was utilized to study the impact of the independent variables on the dependent variable. According to Johnson and Christensen (2019), regression analysis is a set of statistical procedures used to explain or predict the values of dependent variable based on the values of one or more independent variables. The researcher planned to conduct multiple linear and hierarchical linear regression analyses. The independent variables are high school GPA (Title I versus non-Title I school), amount of FAFSA loans available to the student in college and, number or earned/completed credit hours. The dependent variables are college semester GPA, earned credit hours toward satisfying degree requirements, continued enrollment in college. The coefficient of determination (R2) is used as a measure of effect size and evaluates the contribution of all the independent variables in the model towards explaining the variance in the dependent variable scores. In multiple linear regression model, all the independent time in each step to assess the statistically significant change in variance of dependent variable scores with the addition of a new independent variable (Field, 2013).

Regression assessed whether the predictor variables accounted for variability in dependent variable. The regression analysis is sensitive to outliers and these outliers were identified by standardizing the scores and checking the standardized score for absolute values. When the regression was conducted, an R2 statistic coefficient of determination was computed.

The R2 was interpreted as the percent of variance in the outcome variable which was explained by the ser of predictor variables.

After the evaluation of R^2 it is important to evaluate the regression beta coefficients. These coefficients can be negative or positive and they have a t-value, which test for statistically significant. If the *p*-value is less than .05 it is significant and if larger than .05 it is not significant. The beta coefficient degree of change in the outcome variable for every one unit of change in the predictor variable. The *t*-test evaluates the beta coefficient and if it's statistically significant. If the beta coefficient was not statistically significant (i.e., the *t*-value was not significant), the variable would not significantly predict the outcome. If the beta coefficient was significant, the researcher examined the sign of the beta. If the beta coefficient was positive, the interpretation is that for every 1- unit increase in the predictor variable, the outcome variable increased by one beta coefficient. If the beta coefficient was negative, the interpretation is that for every 1-unit increase in the predictor variable, the outcome variable decreased by the beta coefficient variable. To check for homoscedasticity and homogeneity of variance and the Levene's test used. The skewness value of less than 2 and kurtosis less than 7 indicates that the scores are following the normal distribution (Tabachnick et al., 2007). Independence of observation states that the variables in a model are not dependent on one another and that a degree of independence exist among the variables in the model. The standardized residual histogram should have points that form a bell shape and have a mean close to zero. In the regression model, it is important to examine the intercept and standardized regression beta coefficients to assess the influence of each individual independent variable on the dependent variable scores. The intercept is the point on vertical y-axis (plots the value of dependent variable scores) when the independent variable (plotted on the horizontal x-axis) value equals zero. The

beta coefficients can be negative or positive and have a t-value associated with it. A statistically significant t-value would indicate that the independent variable has a true impact on the dependent variable and the coefficient is significantly different from zero. The beta coefficient represents the degree of change in the dependent variable for every 1-unit of change in the independent variable. A positive beta coefficient that is statistically significant indicates that for every 1-unit increase in the independent variable scores, the dependent variable increases by the beta coefficient value. A negative beta coefficient that is statistically significant indicates that for every 1-unit increase in the independent variable scores, the dependent variable decreases by the beta coefficient value. The regression equation is constructed from the intercept and beta coefficients value (Field, 2013). All statistical tests were conducted at .05 significance value.

Role of Researcher

The role of researcher for this study measured aspects of the research problems to gain an understanding of the relationship that exist among those variables. Before the data collection process began, the researcher obtained Institutional Research Board (IRB) approval. The researcher also prepared a letter requesting permission to conduct research study utilizing the university's data were sent to internal IRB chair for approval. The researcher utilized retrospective data from institutional database system, which did not require an inform consent. No data collection was conducted that requires physical or verbal contact with students, faculty, staff, or administrators. The appropriate research design and methods were used to conduct the research study. There was no conflict of interest that exist with the researcher because the researcher serves as university registrar, and data were collected in an unbiased manner.

Limitations

This study's researcher intended to understand the influence of social stratification (as measured by students' attendance at a Title I status high school (as measured by FAFSA loans granted) on students' semester GPA and their likelihood of continued attendance in college. Several other variables worthy of research could impact college students' academic performance while in college, such as work schedule, grades in college courses, financial aid, demographic characteristics, and other psychological attributes. Some form of stress impacts 33% to 70% of college students due to financial burdens (Fosnacht & Dong, 2013). To counteract tuition costs, students work full-time, interfering with their time from studying and attending classes. A negative correlation was found between grades and the number of hours students work, which affects their grades (see Kara et al., 2009). External validity was limited because only one college was evaluated, limiting the generalizability of study findings. It was difficult to establish causality.

The researcher considered data from only one HBCU institution in Florida. Retrospective data are collected at a one-time point only, which limits the study findings. The rationale for selecting one HBCU institution and reviewing its publicly accessible records was to gain a clearer understanding of what is happening within the student population, which is causing high academic failure rates among students. The reason this student population was chosen was to bring awareness about the unique needs of students in Florida high schools and influence school districts to form a stronger collaboration with colleges and university to serve in the development of process improvement initiatives that will help improve educational outcomes for students in college. A study of this type is selected to gain more insight into the student populations' background to discover the impact of high school on students' academic performance in college.

Although general information is available through IPEDS data for this institution, it does not provide details about the population of students to assist with identifying variables that impact students' academic outcomes, which can provide opportunities for building strategies and support resources.

Summary

The collection of retrospective data determined if there was a difference in students' academic performance in college that graduate from a title I status high school and non-title I status high school. Utilizing institutional data allowed for a deeper learning about the student population enrolled within an institution which allows for developing programs and allocating resources toward addressing the unique needs of first-time college freshman students in hopes of improving their educational outcomes. This study allowed for opportunities to collaborate with high schools in Jacksonville Florida district aimed at increasing college preparedness among students at risk. The study does not consider the current trends in student's academic performance. The characteristics of the study sample may change since retrospective data are collected. The study results could be of more significance if data from two or more HBCU colleges or universities from other geographical locations were included in the sample population. This research study could add more validity to the study findings. The study findings cannot be generalized to research universities and private institutions of higher education.

Chapter IV: Results

Higher education key stakeholders need to learn more about how high academic performance impact college academic performance. This study investigated students' performance at the college level and considered the high the student graduated from Title I status high school or Non-Title I status high school. In this chapter, I first researched the demographic of students enrolled in Title I and Non-Title I high schools. I presented the results of the descriptive statistics for the variables of high school GPA, college cumulative GPA, semester GPA, registered credit hours, earned credit hours, financial aid budget, and financial aid used. The inferential analysis was used to perform regression to answer the research study question 1, question 2, question 4, and question 5. The repeated measures ANOVA was used to answer research question 3.

Participants' Demographic Data

The dataset included 4,597 students who had duplicate records. All duplicate records were removed from the dataset using the student's name, term of attendance, and year of attendance. After removing the duplicate records, 1,590 students remained in the dataset. The adjustments to the dataset resulted in 225 students being excluded from the dataset that did not meet the high school status criteria of attending a Non-Title I status high school or Title I status high school. The students who attended college, private high school, alternative high school, charter high school, and non-high school graduates were removed from the dataset. Our primary focus was to discover the impact of Title I status high school and Non-Title I status high school impact on academic performance in college. There were 1,325 students in the research study who attended either a Title I status high school or a Non-Title I status high school.

The descriptive statistics were not analyzed separately for Title I status high schools and Non-Title I status high schools because most students were from a Title I status high school. The original dataset included 1,325 high school students, and 191of those students attended a Non-Title I status high school. In Table 6, the descriptive statistics between high school GPA and college level GPA in term 6 (1.55), the kurtosis is slightly higher, which means the tail end of the distribution is heavy; this is because a few students' GPAs are in the range of 0.00 to 1 and 5.0 GPA range. The sample size was reduced to 1,279 by utilizing the "What If" function in SPSS. The "What If" function allowed specific cases to were selected in the dataset based on high school GPA criteria greater than or equal to 1 and less than or equal to 4.0.

Demographic Results of the Student Population in College

As seen in Table 2, more males (42.3%) are a part of this research study than females (38.2%). The remaining students in the research study's genders are considered unknown (2.7%). The unknown gender data points: indicated that students are voluntarily omitting the question related to gender in the admissions application. Suppose a college or university would like to avoid missing data. In that case, a required data field can be assigned to specific questions within an admissions application that will restrict submitting applications with blank fields.

Table 2

Student Demographics

Gender	Frequency	Percent	Valid Percent
Female	610	48.4	46
Male	672	42.3	50.7
Unknown	43	2.7	3.2

As seen in Table 3, African American or Black (70.9%) are among the largest group of students in the research study. Hispanics represent (3%), Whites represent (3.8%), Multi-cultural

represent (2.5%), and Unknown represents (2.8%). The remaining students in the research study consist of the following ethnicity groups Indian (.3%), Asian (.1%), and Islander (.1%). The less than (1%) representation among the ethnicities indicates the need for more diversity in recruitment strategies aimed at recruiting students from a more diverse population of students and Title I status high schools.

Table 3

Students' Ethnicity

Ethnicity	Frequency	Percent	Valid Percent
Asian	1	.1	.1
Black	1127	70.9	85.1
Hispanic	47	3	3.5
Indian	4	.3	3
Multicultural	39	2.5	2.9
White	60	3.8	4.5
Unknown	45	2.8	2.4
Islander	2	.1	.2

As seen in Table 4, more freshman-status-level students (43.3%) are enrolling in college, but by sophomore status level (12.1%), the student's enrollment begins to decline.

Table 4

Freshman Versus Transfer

Student status	Frequency	Percent	Valid Percent
Freshman	689	43.3	52
Sophomore	193	12.1	14.6
Junior	153	9.6	11.5
Senior	290	18.2	21.9

The decline in students' enrollment is often related to students stopping out of college for academic reasons, such as performing below academic standards, or for non-academic factors, such as gaining employment. Although a trend of decline is seen in student enrollment, an increase occurs between the junior status level (9.6%) and senior status level (18.2%). The

increase at the senior status level could be related to students becoming more familiar with the academic rigor of courses and their ability to manage non-academic factors that impact academic performance.

Descriptive Results for High School GPA and College-Level Variables

Numerous research studies have sought to determine how cognitive, demographic, and SES impacts students' college semester GPA (Kim, 2015; Tierney & Sablan, 2014). As seen in Table 5, the college level mean cumulative GPA increased in semester 1 (2.49), semester 2 (2.56), semester 3 (2.65), semester 4 (2.81), and semester 5(2.84). The trend of increase seen in the mean GPAs; indicates that students' academic performance is improving as they remain in college. A slight decrease occurred in mean GPA 6 (2.74), which could be related to non-academic factors such as students gaining employment or unforeseen family obligations. The college-level GPA 1 skewness was (-.932); when there is a negative sign in the data output, the data points are considered negatively skewed. The data points are negatively skewed; this indicates that more points are above the average mean and that the tail of the distribution is more to the left.

Table 5

High School GPA and College Level GPA

Variable	HS-GPA	CGPA1	CGPA2	CGPA3	CGPA4	CGPA5	CGPA6
Valid	1279	1278	1010	594	489	267	191
Mean	2.84	2.49	2.56	2.65	2.81	2.84	2.74
SD	.5	.93	.79	.74	.61	.56	.68
Skewness	.138	-.932	.696	-1.013	-.716	-.349	.-943
Kurtosis	-.526	.649	.605	1.36	1.38	.355	1.55

Note. HS=High school. CGPA-Cumulative Grade Point Average. 1 = Semester 1; 2 = Semester 2; 3 = Semester 3; 4 = Semester 4; 5 = Semester 5; 6 = Semester 6; SD = Standard Deviation

The college-level GPA 2 (.696) is positively skewed; this means that more data points are below the average mean and that the tail end of the distribution is shifted to the right. A high kurtosis is seen in data points for college-level GPA 1 (.649), indicating a leptokurtic kurtosis. When a leptokurtic kurtosis is present, the distribution's tail end represents a high frequency of outliers in the data points.

As seen in Table 6, the cumulative college mean GPA for year 1 (2.30) is slightly above the minimum GPA standard of 2. The trend seen between the mean GPA year 2 (2.56) is steadily increasing for GPA year 3 (2.65), GPA year 4 (2.81), and GPA year 5 (2.84). The data points with the highest negative skewness are seen in mean GPA year 3 (-1.12); when data points are negatively skewed, the points are aligned to the left side of the distribution. When data is aligned to the left side of the distribution, the points are above the average mean. The college mean GPA year 5 (.355) has the lowest negative kurtosis; the data points are platykurtic, indicating a low frequency of outliers.

Table 6

College Cumulative Term GPA

Variable	Cum College GPA_1	Cum College GPA_2	Cum College GPA_3	Cum College GPA_4	Cum College GPA_5	Cum College GPA_6
Valid	1006	594	488	267	191	1275
Mean	2.3	2.53	2.61	2.67	2.46	2.14
SD	1.19	1.15	1.14	.99	1.02	1.26
Skewness	-.603	-.87	-1.12	-1.01	-.64	-0.42

Note. CUM=Cumulative. GPA = Grade Point Average. 1 = Year 1; 2 = Year 2; 3 = Year 3; 4 = Year 4; 5 = Year 5; 6 = Year 6; SD = Standard Deviation

The number of registered course credit hours was benchmarked at 14 credit hours. As seen in Table 7, the mean registered hours for term 1 was (13.79) credit hours. The trend seen in the registered credits is that as students continue to enroll in college, the number of means

registered hours increases for term 2 (14.30), term 3 (14.26), term 4 (14.34), term 5 (14.44), and term 6 (14.46). The increase in mean registered hours indicates; that a vast majority of students enrolled in college are attending as full-time students. Overall, the data points representing freshman vs. transfer registered hours were negatively skewed. The highest level of skewness exists in term 1 (-1.35), and the lowest level of skewness exists in term 6 (-.29). A negative skewness indicates that the tail end of the distribution is more to the left, which means there are more data points are above the average mean. The data points are leptokurtic kurtosis for term 2 (5.38), which means the frequency of outliers is high.

Table 7

Registered Credit Hours

Variable	Reg. hrs. term_1	Reg. hrs.term_2	Reg. hrs.term_3	Reg. hrs.term_4	Reg. hrs.term_5	Reg. hrs.term_6
Valid	1279	1010	594	489	267	191
Mean	13.79	14.3	14.26	14.34	14.44	14.46
SD	2.77	2.45	2.47	2.73	2.28	2.52
Skewness	-1.35	-1.25	-.87	-.5	-.76	-.29
Kurtosis	3.47	5.38	2.84	3.15	2.98	2.67

Note. Reg. Hrs. = registered hours; *SD = standard deviation*

As seen in Table 8, students' mean earned credit hours per semester were below 12 credit hours. The lowest mean earned credit hours was for term 1 (9.36). The low range of earned credit hours in term 1, could be linked to students not being familiar with academic rigor and encountering non-academic barriers, which can impact a student's academic progress. A steady increase can be seen in mean earned credit hours for term 2 (10.23), term 3 (10.93), term 4 (10.88), term 5 (11.70), and term 6 (12.06). The increase in mean earned credit hours as students continue to enroll in college; indicates that students are becoming more familiar with academic rigor. All data points are skewed with a value of less than 3; this indicates negatively skewed data points, which means more points are above the average mean. The data points for term 1 (-

1.18) are considered platykurtic kurtosis, which indicates a low frequency of outliers in data points.

Table 8

Earned Credit Hours by Semester Term

Variable	Ear. hrs. term_1	Ear. hrs. term_2	Ear. hrs. term_3	Ear. hrs. term_4	Ear. hrs. term_5	Ear. hrs. term_6
Valid	1276	1007	594	488	267	191
Mean	9.36	10.23	10.93	10.88	11.7	12.06
SD	5.71	5.44	5.43	5.47	4.45	4.51
Skewness	-.32	-.49	-.65	-.59	-.87	-.89
Kurtosis	-1.18	-.85	-.62	-.47	.21	.69

Note. Ear. hrs. = earned hours; *SD* = standard deviation

Table 9 refers to the yearly financial aid budget allocated to students based on the expected family contribution (EFC), which determines if a student is eligible to receive regulated federal funds to assist with college tuition and fees. The students enrolled in college over the 6-year time frame; the financial aid budget increased as their enrollment in college continued. The mean financial aid budget was highest for year 5 ($29,348) and the average mean financial aid budget was the lowest in year 1 ($25,442). This trend seen in the mean financial aid budget being less in year 1 could be related to the students' academic status (first-year, second-year, junior and senior). The financial aid budget for college year 6 (26,381) decreased; this could be connected to students being in their final college semester and registering for fewer course credit hours. Overall, the data points have a negative skewness representing that the tail end of the distribution is shifting left; this means more data points are below the average mean. The financial aid budget for year 6 has the highest kurtosis. There is one positive skew seen in data points during year 6 (4.18); this means the tail end of the distribution is shifting right, indicating more points above the mean.

Table 9

Financial Aid Budget by Year for Students

Variable	Year_1_budget	Year_2_ budget	Year_3_ budget	Year_4_ budget	Year_5_ budget	Year_6_ budget
Mean	25442.3	27628.5	27135.29	28815.86	29348.4	26381.41
Standard deviation	.49	.262	.3	.87	.36	.53
Skewness	-1.02	-.8	-.41	-.17	-0.46	1.44
Kurtosis	.77	2.46	2.48	0.98	1.85	4.18

Note. Year 1= Financial aid budget for year 1.

The students financial use during the first term of enrollment is below the financial aid threshold of $20,000. As seen in Table 10, there is a slight increase in the mean financial aid budget in year 2 ($20,709), year 3 (20,802), year 4 (21,772), and term 5 ($22,629). The increase in the financial aid budget can be related to the number of increased credit hours students take over the semester term. The lowest mean financial aid budget was in term 1 ($16,796); this could be related to the student registering for fewer course credit hours. The data points were negatively skewed in year 1 (-1.02), indicating the tail end of distribution shifting to the left, which means there are more points above the average mean. The dataset has a negative kurtosis of less than 3, representing a low frequency of outliers and is considered platykurtic kurtosis.

Table 10

Financial Aid Used by Term Enrolled

Variable	Term 1 aid used	Term 2 aid used	Term 3 aid used	Term 4 aid used	Term 5 aid used	Term 6 aid used
Mean	16796.37	20709.82	20802.95	21722.16	22629.17	16796.37
SD	.22	.33	.63	.25	.18	.22
Skewness	-.18	-.57	-.49	-.3	-.43	-.18
Kurtosis	-1.01	.16	-.12	-.18	-.34	-1.01

Correlation And Regression Results

The correlation and regression results and interpretation are first presented as combined for both Title I and non-Title I schools in research questions 1, 2 and 3. The results are then presented separately for Title I and non-Title I schools.

Research Question 1

What is the overall impact of high school GPA on college semester GPA irrespective of Title I versus non-Title I schools?

As seen in Table 11 the correlation coefficients for high school GPA and college semester GPA have the highest correlation between term GPA 5 (.297) and college semester GPA 3 (.448). Overall, the results indicate a minimal to the low-medium relationship between high school GPA and college semester GPA. The shared variance between high school GPA and semester GPA are statistically correlated approximately 4.8% to 8.8%.

Table 11

Correlations Between High School GPA and Semester GPA Title I and Non-Title I

Variable	HS GPA	CS 1 GPA	CS2 GPA	CS3 GPA	CS4 GPA	CS5 GPA	CS 6 GPA
College Term GPA	1						
CS 1 GPA	.232**	1					
CS 2 GPA	.219**	.286**	1				
CS 3 GPA	.288**	.26**	.351**	1			
CS 4 GPA	.232**	.236**	.231**	.382**	1		
CS 5 GPA	.297**	.242**	.235**	.448**	.392**	1	
CS 6 GPA	.240**	.139*	0.065	.231**	.184**	.153	1

Note. HS= High School; CS= College Semester; GPA = Grade Point Average.

**Correlations significant at $p < .01$
* Correlations significant at $p < .05$.

Each column in Table 12 represents one regression model where the independent variable (IV) is constant, that is, high school (HS) GPA and the dependent variable (DV) college semester GPA changes. The standardized β coefficients show the change in the dependent variable scores for every one unit change in the college semester GPA scores. There are six regression models, one for each term GPA. Multicollinearity is not an issue for a simple linear regression model because there is only one independent variable in the model. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2. In the first regression model, the standardized β coefficient of .232 indicates an increase of .232 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The first regression model was statistically significant $F\ (1, 5) = 75.31$, $p < .001$ with an adjusted R^2 of .053, indicating that 5.3% of the variance in the college semester one GPA scores are explained by high school GPA. In the second regression model, the standardized β coefficient of .219 indicates an increase of .219 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant $F\ (1, 5) = 52.65$, $p < .001$ with an adjusted R^2 of .047, indicating that 4.7% of the variance in the college semester one GPA scores are explained by high school GPA.

In the third regression model, the standardized β coefficient of .288 indicates an increase of .288 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The third regression model was statistically significant $F\ (1, 5) = 56.43$, $p < .001$ with an adjusted R^2 of .082, indicating that 8.2% of the variance in the college semester

one GPA scores are explained by high school GPA. In the fourth regression model, the standardized β coefficient of .232 indicates an increase of .232 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fourth regression model was statistically significant F (1, 5) = 29.10, p <.001 with an adjusted R^2 of .052, indicating that 5.2% of the variance in the college semester one GPA scores are explained by high school GPA.

In the fifth regression model, the standardized β coefficient of .297 indicates an increase of .297 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 26.79, p <.001 with an adjusted R^2 of .085, indicating that 8.5% of the variance in the college semester one GPA scores are explained by high school GPA. In the sixth regression model, the standardized β coefficient of .240 indicates an increase of .240 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 12.09, p <.001 with an adjusted R^2 of .053, indicating that 5.3% of the variance in the college semester one GPA scores is explained by high school GPA.

Table 12

Regression results for HS GPA as IV and College Semester (CS) GPAs as DV

Statistics	CS GPA 1	CS GPA 2	CSGPA 3	CS GPA 4	CS GPA 5	CS GPA 6
Adjusted R^2	.053	.047	.082	.052	.085	.053
Durbin Watson	1.92	2.02	1.86	2.1	1.98	1.91
F-values	75.31***	52.65***	56.43***	29.1***	26.79***	12.09***
Standard β coefficient	.232	.219	.288	.232	.297	.24

Note. CS= college semester; GPA = grade point average ***p<.001, **p<.01, *p<.05.

Research Question 1.1

What is the impact of high school GPA, from a Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Table 13 shows the correlation coefficients between Title I status high school GPA and semester college GPA. The strongest correlation between the high school GPA and college semester GPA is 5, r (248) = .308 r^2 = .10, p <.01. The shared variance between the college semester GPA and Title I status high schools were correlated 4.1% to 9.5%. The shared variance indicates that there is a low to moderate positive correlation between high school GPA and college term GPA representing a small effect size. The strongest correlation between the high school GPA and college semester GPA is 1, r (248) = .307 r^2 = .09, p <.01. The shared variance between the college semester GPA and Title I status high schools were correlated 4.1% to .8%. The shared variance indicates that there is a low to moderate positive correlation between high school GPA and college term GPA representing a small effect size. The strongest correlation between the high school GPA and college semester GPA is 3, r (248) = .342 r^2 = .12, p <.01. The shared variance between the college semester GPA and Title I status high schools were correlated 3.1% to 11.7%. The shared variance indicates that there is a low to moderate positive correlation between high school GPA and college term GPA representing a small to medium effect size.

Table 13

Correlations Between High School GPA College Semester GPA by Title I Status

Variable	HS GPA	CS 1 GPA	CS 2 GPA	CS 3 GPA	CS4 GPA	CS 5 GPA	CS 6 GPA
HS GPA	1						
CS 1 GPA	.219**	1					
CS 2 GPA	.202*	.307**	1				
CS 3 GPA	.265**	.236**	.324**	1			
CS 4 GPA	.218**	.228**	.233**	.342**	1		
CS 5 GPA	.308**	.257**	.196*	.41**	.379**	1	
CS 6 GPA	.214**	.089	.028	.175*	.153*	.129	1

Note. CS=college semester; GPA = Grade Point Average. **correlation significant at p <.01* correlation significant at p <.05.

The strongest correlation between the high school GPA and college semester GPA is 4, r (248) = .379 r^2 = .14, p <.01. The shared variance between the college semester GPA and Title I status high schools were correlated 2.3% to 14.4%. The shared variance indicates that there is a small to medium effect size.

Each column in Table 14 represents one regression model where the independent variable (IV) is high school (HS) GPA which is constant, and the dependent variable (DV) is term GPA that changes with each regression model. There are six regression models, one for each term GPA. The adjusted r^2 value is .047, indicating that 4.7% of the variance in term 1 GPA can be accounted for among term semester GPA scores are explained by college term GPA. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2.

In the first regression model, the standardized β coefficient of .219 indicates an increase of .219 units in the college semester one GPA scores for every one-unit change in the high

school GPA scores. The first regression model was statistically significant F (1, 5) = 59.93, p <.001 with an adjusted R^2 of .047, indicating that 4.7% of the variance in the college semester one GPA scores is explained by high school GPA. In the second regression model, the standardized β coefficient of .202 indicates an increase of .202 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant F (1, 5) = 38.34, p <.001 with an adjusted R^2 of .04, indicating that 4% of the variance in the college semester one GPA scores is explained by high school GPA.

In the third regression model, the standardized β coefficient of .265 indicates an increase of .265 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The third regression model was statistically significant F (1, 5) = 40.80, p <.001 with an adjusted R^2 of .069, indicating that 6.9% of the variance in the college semester one GPA scores are explained by high school GPA. In the fourth regression model, the standardized β coefficient of .218 indicates an increase of .218 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fourth regression model was statistically significant F (1, 5) = 22.34, p <.001 with an adjusted R^2 of .045, indicating that 4.5% of the variance in the college semester one GPA scores are explained by high school GPA.

In the fifth regression model, the standardized β coefficient of .308 indicates an increase of .308 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 25.78, p <.001 with an adjusted R^2 of .091, indicating that 9.1% of the variance in the college semester one GPA scores is explained by high school GPA.

Table 14

Regression Results for High School GPA as IV and Semester GPAs as DV by Title I Status

Statistic	CS GPA 1	CS GPA 2	CS GPA 3	CS GPA 4	CS GPA 5	CS GPA 6
Adjusted r^2	.047	.04	.069	.045	.091	.04
Durbin Watson	1.86	2.04	1.83	2	1.97	1.95
F-values	59.93***	38.34***	40.8***	22.34***	25.78***	8.22***
Standard β coefficient	.219	.202	.265	.218	.308	.214

Note. CS=college semester; GPA = grade point average. *p****<.001; *p***<.01; p*<.05.

In the sixth regression model, the standardized β coefficient of .214 indicates an increase of .214 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 11.28, p <.001 with an adjusted R^2 of .04, indicating that 40% of the variance in the college semester one GPA scores are explained by high school GPA.

Research Question 1.2

What is the impact of high school GPA, from a non-Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

Table 15 showed the strongest correlation coefficients between Non-Title I status high school GPA and semester college GPA is 1, r (191) = .31 r^2 = .10, p <.01. The shared variance between the college term GPA and Non-Title I status high schools were correlated 4.7% to 19.4%. The shared variance indicates that there is a low to moderate positive correlation between high school GPA and college term GPA representing a medium effect size. The correlation between high school GPA and cumulative GPA 2 is, r (151) =.31, r^2 = .10, p< .01. The correlation between high school GPA and cumulative GPA is 3, r (83) =.441, r^2 = .2. The correlation between high school GPA and cumulative GPA 4 is, r (67) =.315, r^2 = .22, < .01. The correlation between high school GPA and cumulative GPA is 6 r (26) =.418, r^2 = .18, p< .01.

Table 15

Correlations Between High School and Semester GPA for Non-Title I Status

Variable	HS GPA	CS 1 GPA	CS 2 GPA	CS 3 GPA	CS 4 GPA	CS 5 GPA	CS 6 GPA
HS GPA	1						
CS 1 GPA	.31**	1					
CS 2 GPA	.31**	.14**	1				
CS 3 GPA	.441**	.408**	.55**	1			
CS 4 GPA	.315**	.286**	.299**	.666**	1		
CS 5 GPA	.215*	.128	.54**	.673**	.474**	1	
CS 6 GPA	.418**	464	401*	.603**	404*	.315	1

Note. HS-high school; CS= College Semester; GPA= grade point average. **Correlation significant at p <.01; * correlations significant at p <.05.

Each column in Table 16 represents one regression model where the independent variable (IV) is high school (HS) GPA that is constant, and the dependent variable (DV) is term GPA which changes with each regression model. There are six regression models, one for each term GPA. The adjusted r^2 value is .091, indicating that 9.1% of the variance in term 1 GPA can be accounted for among term semester GPA scores are explained by college term GPA. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates negative autocorrelation because all the values are between 2 to 4.

In the first regression model, the standardized β coefficient of .31 indicates an increase of .310 units in the college semester one GPA scores for every one unit change in the high school GPA score for Non-Title I status high school. The first regression model was statistically

significant F (1, 5) = 20.12 p <.001 with an adjusted R^2 of .091, indicating that 9.1% of the variance in the college semester one GPA scores is explained by high school GPA. In the second regression model, the standardized β coefficient of .31 indicates an increase of .31 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant F (1, 5) = 15.8, p <.001 with an adjusted R^2 of .09, indicating that 9% of the variance in the college semester one GPA scores are explained by high school GPA.

In the third regression model, the standardized β coefficient of .441 indicates an increase of .441 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The third regression model was statistically significant F (1, 5) = 19.53, p <.001 with an adjusted R^2 of .184, indicating that 18.4% of the variance in the college semester one GPA scores are explained by high school GPA. In the fourth regression model, the standardized β coefficient of .315indicates an increase of .315 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fourth regression model was statistically significant F (1, 5) = 7.15 p <.001 with an adjusted R^2 of .085, indicating that 8.5% of the variance in the college semester one GPA scores are explained by high school GPA.

Table 16

Regression Results for High School GPA as IV and College Semester GPA as DV by Non-Title I Status

Statistics	CS GPA 1	CS GPA 2	CS GPA 3	CS GPA 4	CS GPA 5	CS GPA 6
Adjusted r^2	.091	.09	.184	.085	.015	.14
Durbin Watson	1.76	2.18	2.26	1.94	2.25	1.54
F-values	20.12***	15.8***	19.53***	7.15***	1.46***	5.07***
Standard β Coefficient	.31	.31	.441	.315	.215	.418

Note. CS=college semester; GPA = grade point average. ***p<.001; p**<.01; p*<.05

In the fifth regression model, the standardized β coefficient of .315 indicates an increase of .315 units in the college semester one GPA scores for every one unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 1.46, p <.001 with an adjusted R^2 of .015, indicating that 1.5% of the variance in the college semester one GPA scores is explained by high school GPA. In the sixth regression model, the standardized β coefficient of .418 indicates an increase of .418 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 5.07, p <.001 with an adjusted R^2 of .14, indicating that 14% of the variance in the college semester one GPA scores is explained by high school GPA.

Research Question 2

What is the overall impact of high school GPA on a freshman student's academic performance as measured by college cumulative GPA irrespective of Title I versus non-Title I? Table 17 shows the correlation coefficients between Title I status high school GPA and cumulative college GPA. The strongest correlation between the high school GPA and college term GPA 4 is, r (515) = .359r^2 = .13, p <.01.

Table 17

College High School GPA and Cumulative GPA Title I and Non-Title I

Variable	HS GPA	CUM 1 GPA	CUM 2 GPA	CUM 3 GPA	CUM 4 GPA	CUM 5 GPA	CUM 6 GPA
HS GPA	1						
CUM GPA 1	.216**	1					
CUM GPA 2	.231**	.35**	1				
CUM GPA 3	.251**	.318**	.243**	1			
CUM GPA 4	.359**	.328**	.362**	.351**	1		
CUM GPA 5	.402*	.436**	.371**	0.072	.76	1	
CUM GPA 6	.269**	.24**	.145*	.289**	.302**	.272**	1

Note. HS=high school. CUM= cumulative GPA. **Correlation significant at p <.01 * Correlation significant at p <.05.

The shared variance between the cumulative college GPA and high school was statistically correlated 4.7% to 12.9%. This range in the correlation between Title I status high school and cumulative college GPA indicates a small to medium effect. The correlation between the high school GPA and college semester GPA is 5, r (280) =.402, r^2 = .15, p< .01. This range in the correlation between Title I status high school and cumulative college GPA indicates a small to medium effect. The shared variance between the cumulative college GPA and high school was statistically correlated 4.7% to 16%

Each column in Table 18 represents one regression model where the independent variable (IV) is constant high school (HS) GPA and the dependent variable (DV) cumulative GPA is changing. There are six regression models, one for each term GPA. The adjusted R^2 value is .051, indicating that 5.1% of the variance in the high school 1 GPA can be accounted for among term semester GPA explained by college cumulative GPA. The examination of Durbin Watson

Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. Durbin Watson statistic is slightly above 1, which indicates positive autocorrelation. A statistically significant model was found ($F = 64.39$, $p < .001$). For every 1 unit increase in HS GPA, the term 1 GPA increases by .216 units. In the first regression model, the standardized β coefficient of .216 indicates an increase of .216 units in the cumulative college GPA for every one-unit change in the high school GPA. The first regression model was statistically significant $F\ (1, 5) = 64.39$, $p < .001$ with an adjusted R^2 of .046, indicating that 4.6% of the variance in the college semester one GPA scores are explained by high school GPA. In the second regression model, the standardized β coefficient of .231 indicates an increase of .231 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant $F\ (1, 5) = 59.05$, $p < .001$ with an adjusted R^2 of .052, indicating that 5.2% of the variance in the cumulative college one GPA scores are explained by high school GPA. In the third regression model, the standardized β coefficient of .251 indicates an increase of .251 units in the college cumulative one GPA scores for every one unit change in the high school GPA scores. The third regression model was statistically significant $F\ (1, 5) = 41.83$, $p < .001$ with an adjusted R^2 of .062, indicating that 6.2% of the variance in the college cumulative one GPA scores are explained by high school GPA. In the fourth regression model, the standardized β coefficient of .359 indicates an increase of .359 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The fourth

regression model was statistically significant F (1, 5) = 75.7, p <.001 with an adjusted R^2 of .127, indicating that 12.7% of the variance in the college cumulative one GPA scores are explained by high school GPA. In the fifth regression model, the standardized β coefficient of .402 indicates an increase of .402 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 53.66, p <.001 with an adjusted R^2 of .159, indicating that 15.9% of the variance in the college cumulative one GPA scores is explained by high school GPA.

Table 18

Regression Results for High School GPA and Cumulative GPA Title I and Non-Title

Statistics	CUM GPA 1	CUM GPA 2	CUM GPA 3	CUM GPA 4	CUM GPA 5	CUM GPA 6
Adjusted r^2	.046	.052	.062	.127	.159	.068
Durbin Watson	1.97	2.05	1.85	2.01	1.9	2.01
F-values	64.39***	59.05***	41.83***	75.7***	53.66***	15.41***
Standard β Coefficient	.216	.231	.251	.359	.402	.269

Note. CS=college semester GPA. ***p<.001, **p<.01, *p<.05

In the sixth regression model, the standardized β coefficient of .269 indicates an increase of .269 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 15.41, p <.001 with an adjusted R^2 of .068, indicating that 6.8% of the variance in the college cumulative one GPA scores is explained by high school GPA.

Research Question 2.1

What is the impact of high school GPA, from a non-Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Table 19 shows the correlation coefficients between high school GPA and cumulative GPA. The strongest correlation between high school GPA and cumulative GPA is 5, r (26) =

.541 r^2 = .29, p <.01. The range in the correlation between high school GPA and cumulative GPA indicates a small to large effect. The shared variance between the high school GPA and college term GPA ranges from 4% to 29.3%. The correlation between high school GPA and cumulative GPA is 5, r (32) = .479 r^2 = .23, p <.01. The range in the correlation between high school GPA and cumulative GPA indicates a small to large effect. The shared variance between the high school GPA and college term GPA ranges from 4% to 23%. The correlation between high school GPA and cumulative GPA is 3, r (83) =.464, r^2 = .22, p <.01. The range in the correlation between high school GPA and cumulative GPA indicates a small to large effect. The shared variance between the high school GPA and college term GPA ranges from 4% to 22%. The correlation between high school GPA and cumulative GPA is 4, r (67) =.361, r^2 = .16, p <.01. The shared variance between the high school GPA and college term GPA ranges from 4% to 16.2%. The shared variance indicates a small to low medium effect.

Table 19

Correlations Between High School GPA and Cumulative GPA for Non-Title I

Variable	HS GPA	CU 1 GPA	CU 2 GPA	CU 3 GPA	CU 4 GPA	CU 5 GPA	CU 6 GPA
HS GPA	1	1					
CU 1 GPA	.243**	.331**					
CU 2 GPA	.2*	.309**	1				
CU 3 GPA	.464**	.345**	.369**	1			
CU 4 GPA	.361**	.505**	.424**	.461**	1		
CU 5 GPA	.479**	.587**	.649**	.484**	.929**	1	
CU 6 GPA	.541**	.331**	.616**	.595**	.675**	.6**	1

Note. HS =HIGH SCHOOL; CU = cumulative college GPA; **Correlations significant at p <.01; *Correlations significant at p <.05.

Each column in Table 20 represents one regression model where the independent variable (IV) is high school (HS) GPA which is constant, and the dependent variable (DV) cumulative GPA is changing with each regression model. There are six regression models, one for each term

GPA. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. Durbin Watson statistic is 1.75, which indicates no issues with autocorrelation.

In the first regression model, the standardized β coefficient of .243 indicates an increase of .243 units in the cumulative college GPA for every one-unit change in the high school GPA. The first regression model was statistically significant F (1, 5) = 11.88, p <.001 with an adjusted R^2 of .054 indicating that 5.4% of the variance in the cumulative GPA for year two scores are explained by high school GPA. In the second regression model, the standardized β coefficient of .200 indicates an increase of .200 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant F (1, 5) = 6.21, p <.001 with an adjusted R^2 of .033, indicating that 3.3% of the variance in the cumulative college one GPA scores are explained by high school GPA.

In the third regression model, the standardized β coefficient of .464 indicates an increase of .464 units in the college cumulative one GPA scores for every one unit change in the high school GPA scores. The third regression model was statistically significant F (1, 5) = 22.19, p <.001 with an adjusted R^2 of .205, indicating that 20.5% of the variance in the college cumulative one GPA scores is explained by high school GPA. In the fourth regression model, the standardized β coefficient of .361 indicates an increase of .361 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The fourth regression model was statistically significant F (1, 5) = 9.72, p <.001 with an adjusted R2 of .177, indicating

that 17.7% of the variance in the college cumulative one GPA scores is explained by high school GPA.

In the fifth regression model, the standardized β coefficient of .479 indicates an increase of .479 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 8.95, p <.001 with an adjusted R^2 of .204, indicating that 20.4% of the variance in the college cumulative one GPA scores are explained by high school GPA. In the sixth regression model, the standardized β coefficient of .541 indicates an increase of .541 units in the college cumulative one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 9.92, p <.001 with an adjusted R^2 of .263, indicating that 26.3% of the variance in the college cumulative one GPA scores is explained by high school GPA.

Table 20

Regression Results for HS GPA as IV and Cumulative Term GPAs as DV by Non-Title I Status

Statistics	Term GPA 1	Term GPA 2	Term GPA 3	Term GPA 4	Term GPA 5	Term GPA 6
Adjusted r^2	.054	.033	.205	.177	.204	.263
Durbin Watson	1.75	1.82	1.86	2.06	1.7	2.01
F-values	11.88**	6.21*	22.19**	9.72**	8.95**	9.92**
Standard β coefficient	.243	.2	.464	.361	.479	.541

Note. HS =high school; GPA = grade point average; **Correlations significant at p <.01; *Correlations significant at p <.05.

Research Question 2.2

What is the impact of high school GPA, from a Title I high school on a freshman student's academic performance as measured by college cumulative GPA?

Table 21 shows the correlation coefficients between Title I status high school GPA and cumulative college GPA. The strongest correlation between the high school GPA and college term GPA 4 is, r (448) = .356 r^2 = .13, p <.*01*. This range in the correlation between Title I status high school and cumulative college GPA indicates a small effect. The correlation between the high school GPA and college semester GPA is 5, r (229) =.390, r^2 = .15, p< .01. The shared variance between the cumulative college GPA and high school was statistically correlated 4.5% to 15.2%. Each column seen in Table 23, represents one regression model where the independent variable (IV) is constant high school (HS) GPA and the dependent variable (DV) cumulative year GPA is changing. There are six regression models, one for each term GPA. The adjusted R2 value is .050, indicating that 50% of the variance in term 1 GPA can be accounted for among term semester GPA scores being explained by college term GPA.

Table 21

Correlations Between High School GPA and Cumulative Term GPA for Title I Status

Variable	HS GPA	CU 1 GPA	CU 2 GPA	CU3 GPA	CU4 GPA	CU 5 GPA	CU6 GPA
HS GPA	1						
CU 1 GPA	.211**	1					
CU 2 GPA	.236*	.352**	1				
CU 3 GPA	.216**	.317**	.222**	1			
CU 4 GPA	.356**	.385**	.348**	.328**	1		
CU 5 GPA	.39**	.42**	.33**	.013	.737**	1	
CU 6 GPA	.229**	.187*	.083	.249**	.249**	.003	1

Note. CU = cumulative year; GPA = grade point average. **Correlations significant at p <.01; * Correlations significant at p <.05.

The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2.

Table 22 show the regression results. In the first regression model, the standardized β coefficient of .211 indicates an increase of .211 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The first regression model was statistically significant F (1, 5) = 52.51, p <.001 with an adjusted R^2 of .044, indicating that 4.4% of the variance in the college semester one GPA scores are explained by high school GPA. In the second regression model, the standardized β coefficient of .236 indicates an increase of .236 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The second regression model was statistically significant F (1, 5) = 59.52, p <.001 with an adjusted R^2 of .054, indicating that 5.4% of the variance in the cumulative college one GPA scores is explained by high school GPA.

In the third regression model, the standardized β coefficient of .216 indicates an increase of .216 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The third regression model was statistically significant F (1, 5) = 26.31, p <.001 with an adjusted R^2 of .045, indicating that 4.5% of the variance in the cumulative college one GPA scores is explained by high school GPA. In the fourth regression model, the standardized β coefficient of .356 indicates an increase of .356 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The fourth regression model was statistically significant F (1, 5) = 64.76, p <.001 with an adjusted R^2 of .125, indicating that 12.5% of the variance in the cumulative college one GPA scores is explained by

high school GPA. In the fifth regression model, the standardized β coefficient of .390 indicates an increase of .390 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 44.10, p <.001 with an adjusted R^2 of .149, indicating that 14.9% of the variance in the cumulative college semester one GPA scores is explained by high school GPA.

Table 22

Regression Results for HS GPA as IV and Cumulative GPAs as DV by Title I Status

Statistics	Term GPA 1	Term GPA 2	Term GPA 3	Term GPA 4	Term GPA 5	Term GPA 6
Adjusted r^2	.044	.054	.045	.125	.149	.047
Durbin Watson	1.93	2.05	1.87	2.02	1.88	2.06
F-values	52.51**	52.92**	26.31**	64.76**	44.1**	9.51**
Standard β coefficient	.211	.236	.216	.356	.390	.299

Note. Term=College Term Cumulative GPA. ***p<.001, **p<.01, *p<.05.

In the sixth regression model, the standardized β coefficient of .299 indicates an increase of .299 units in the cumulative college one GPA scores for every one-unit change in the high school GPA scores. The sixth regression model was statistically significant F (1, 5) = 9.51, p <.001 with an adjusted R^2 of .047, indicating that 4.7% of the variance in the cumulative college one GPA scores is explained by high school GPA.

Research Question 3

What is the overall impact of earned credit hours on registered credit hours (measure of continued attendance) irrespective of Title I versus non-Title I high school?

As seen from Table 23 the statistical tests were used to review the trends in correlation between earned credit hours (ECH) and registered credit hours (RCH). The strongest correlation between the ECH from college and registered credit hours for RCH term 1 is, r (1325) = .319, r^2 = .10, p <.01. The shared variance between the college term GPA and high school was

statistically correlated 2% to 10%. The correlation between earned credit hours from college and registered credit hours form college for RCH term 2 is, r (1051) = .396, r^2 = .16, p< .01. The correlation between earned credit hours from college and registered credit hours form college for RCH term 2 is, r *(280) = .393,* r^2 = .15, p <.01. The correlation between earned credit hours from college and registered credit hours form college for RCH term 2 is, r *(280) = .313,* r^2 = .1, p <.01. This range in the correlation between earned credit hours (ERH) and registered credit hours (RCH), indicates a small effect. The shared variance between the registered credit hours and earned credits hours was statistically correlated 1.8% to 16%. The strongest correlation between the earned course credit hours from college and registered course credit hours for RCH term 3 is, r (624) = .538, r^2 = .29, p *<.01*. This range in the correlation between earned credit hours for college and registered credit hours for college, indicates a small effect.

Table 23

Correlation for Registered Hours and Earned Credit Hours Combined (Title I and Non-Title Status)

	RCH-Term 1	ECH-Term 1	RCH-Term 2	ECH-Term 2	RCH-Term 3	ECH-Term 3	RCH-Term 4	ECH-Term 4	RCH-Term 5	ECH-Term 5	RCH-Term 6	ECH-Term 6
RCH Term 1	1											
ECH- Term 1	.319**	1										
RCH- Term 2	.225**	.164**	1									
ECH- Term 2	.146**	.261**	.396**	1								
RCH- Term 3	.145**	.131**	.135**	.061	1							
ECH - Term 3	.217**	.28**	.198**	.274**	.538**	1						
RCH- Term 4	.209**	.313**	.189**	.201**	.088*	.34**	1					
ECH- Term 4	.218**	.216**	.185**	.092*	.04	.213**	.572**	1				
RCH- Term 5	.292**	.077	.393**	.199**	.18**	.229**	.194**	.124*	1			
ECH Term 5	.214**	.227**	.313**	.179**	.115	.31**	.420**	.124*	.564**	1		
RCH- Term 6	.14*	.003	.196**	-.036	.078	.116	.178*	.13	.029	.078	1	
ECH- Term 6	.115	.033	.133	.039	.116	.147*	.214**	.114	.092	.141*	.591**	1

Note. RCH=registered credit hours; ECH=earned credit hours. **Correlations significant at $p<.01$; * Correlations significant at $p<.05$.

The shared variance between the earned credit hours and registered credit hours was statistically correlated 0.2% to 29%. The strongest correlation between the earned course credit hours from college and registered course credit hours for RCH term 5 is, r (280) = .564r^2 = .32, p <.01. This range in the correlation between earned credit hours for college and registered credit hours for college, indicates a small effect. The shared variance between the earned credit hours and registered credit hours was statistically correlated 0.1% to 32%. The strongest correlation between the earned course credit hours from college and registered course credit hours for RCH term 6 is, r (200) = .591 r^2 = .35, p <.01. This range in the correlation between earned credit hours for college and registered credit hours for college, indicates a small effect. The shared variance between the earned credit hours and registered credit hours was correlated 35%.

Each column seen in Table 24 represents one regression model where the independent variable is ECH, and the dependent variable is RCH for a particular semester. There are six regression models, one for each Model. Multicollinearity is not an issue for a simple linear regression model because there is only one independent variable in the model. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2.

Table 24

Regression Results for ECH as IV and as DV Title I and Non-Title I

Statistics	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Adjusted r^2	.101	.203	.288	.326	.315	.345
Durbin Watson	2.05	2.33	2.03	1.92	1.87	2.22
F-values	149.91***	194.54***	252.94***	248.95***	129.35***	106.25***
Standard β coefficient	.319	.396	.538	.572	.564	.591

Note. ***p<.001, **p<.01, *p<.05.

Model 1-Independent variable (IV): number of earned credit hours (ECH) semester 1; Dependent Variable (DV): Registered credit hours (RCH) semester 1
Model 2-IV: ECH semester 2; DV: RCH semester 2
Model 3-IV: ECH semester 3; DV: RCH semester 3
Model 4-IV: ECH semester 4; DV: RCH semester 4
Model 5-IV: ECH semester 5; DV: RCH semester 5
Model 6-IV: ECH semester 6; DV: RCH semester 6

In the first regression model, the standardized β coefficient of .319 indicates an increase of .319 units in the registered credit hours in college for every one-unit change in earned credit hours. The first regression model was statistically significant F (1, 5) = 149.91, p <.001 with an adjusted R^2 of .102, indicating that 10.2% of the variance in registered credit hours is explained by earned credit hours. In the second regression model, the standardized β coefficient of .396 indicates an increase of .396 units in the registered college credit hours for every one-unit change in earned credit hours. The second regression model was statistically significant F (1, 5) = 194.54, p <.001 with an adjusted R^2 of .203, indicating that 20.3% of the variance in registered credit hours is explained by earned credit hours.

In the third regression model, the standardized β coefficient of .538 indicates an increase of .538 units in the registered college credit hours for every one-unit change in earned credit hours. The third regression model was statistically significant F (1, 5) = 252.94, p <.001 with an adjusted R^2 of .288, indicating that 28.8% of the variance in registered credit hours is explained by earned credit hours. In the fourth regression model, the standardized β coefficient of .572 indicates an increase of .572 units in the registered college credit hours for every one-unit change in earned credit hours. The fourth regression model was statistically significant F (1, 5) = 248.95, p <.001 with an adjusted R^2 of .326, indicating that 32.6% of the variance in registered credit hours is explained by earned credit hours.

In the fifth regression model, the standardized β coefficient of .564 indicates an increase of .564 units in the registered credit hours for every one-unit change in earned credit hours. The fifth regression model was statistically significant F (1, 5) = 129.35, p <.001 with an adjusted R^2 of .315, indicating that 31.5% of the variance in registered credit hours is explained by earned credit hours. In the sixth regression model, the standardized β coefficient of .591 indicates an increase of .591 units in registered college credit hours for every one-unit change in earned credit hours. The sixth regression model was statistically significant F (1, 5) = 106.25, p <.001 with an adjusted R^2 of .345, indicating that 34.5% of the variance in registered credit hours is explained by earned credit hours.

Research Question 3.1

What impact does the number of earned credit hours have on registered credit hours (measure of continued attendance) of students from Title I high school?

Table 25 shows the correlation coefficients between earned credit hours form college and registered course credit hours from college, based on students who graduated from Title I status high school. This range in the correlation between earned credit hours from college, and registered credit hours from college, indicates a small effect. The strongest correlation between the earned course credit hours from college and registered course credit hours for RCH term 1 is, r (1131) = .306, r^2 = .09, p <.01. The shared variance between the college term GPA and high school was statistically correlated 1.3% to 9.4%. The strongest correlation between the ECH and RCH term 2 is, r (900) = .369, r^2 = .14, p <.01. The correlation between earned credit hours from college and registered credit hours form college for RCH term 2 is, r (248) = .400, r^2 = .16, p<.01. The correlation between earned credit hours from college and registered credit hours from college for RCH term 2 is, r (248) = .313, r^2 = .098, p<.01.

Table 25

Correlation Table for Registered Credit Hours and Earned Credit Hours (Title I Status)

	RCH-Term 1	ECH-Term 1	RCH-Term 2	ECH-Term 2	RCH-Term 3	ECH-Term 3	RCH-Term 4	ECH-Term 4	RCH-Term 5	ECH-Term 5	RCH-Term 6	ECH-Term 2
RCH TERM 1	1											
ECH-TERM 1	.306**	1										
RCH-TERM 2	.23**	.181**	1									
ECH-TERM 2	.138**	.259**	.369**	1								
RCH-TERM 3	.117**	.107*	.122**	.047	1							
ECH -TERM 3	.193**	.25**	.168**	.248**	.543**	1						
RCH--TERM 4	.212**	.204**	.196**	.089	.049	.219**	1					
ECH-TERM 4	.236**	.3**	.173**	.185**	.08	.323**	.582**	1				
RCH-TERM 5	.28**	.066	.4**	.154*	.15*	.223**	.142*	.193**	1			
ECH TERM 5	.196**	.217**	.313**	.147*	0.078	.272**	.14*	.425**	.566**	1		
RCH-TERM 6	.115	-.039	.235**	-.039	0.084	.106	.114	.183*	.034	.093	1	
ECH-TERM 6	.142	-.009	.157*	.037	.101	.099	.11	.19*	.086	.133	.576**	1

Note. RCH-registered credit hours; ECH-earned credit hours. **Correlation significant at $p<.01$; * Correlation significant at $p<.05$.

This range in the correlation between earned credit hours from college and registered credit hours from college, indicates a small effect. The shared variance between the college term GPA and high school was statistically correlated 1.5% to 16%. The strongest correlation between the earned credit hours and registered credit hours for RCH term 3 is, r (541) = .543 r^2 = .32, p <.01. This range in the correlation between earned credit hours and registered credit hours, indicates a small effect. The shared variance between the college term GPA and high school was statistically correlated 1% to 29.5%. The strongest correlation between the earned credit hours and registered credit hours for RCH term 4 is, r (447) = .582 r^2 = .34, p <.01. This range in the correlation between earned credit hours from college and registered credit hours from college, indicates a small effect. The shared variance between the college term GPA and high school was statistically correlated 1.2% to 33.9%. The correlation between the earned course credit hours and registered course credit ours for RCH term 5 is, r (248) = .566 r^2 = .32, p <.01.

The strongest correlation between the earned course credit hours and registered course credit hours for RCH term 5 is, r (248) = .400 r^2 = .32, p <.01. The shared variance between the college term GPA and high school was statistically correlated .1% to 16%. This range in the correlation between earned credit hours and registered credit hours from college, indicates a small to medium effect. The strongest correlation between the earned course credit hours and registered course credit hours for RCH term 6 is, r (174) = .576 r^2 = .332, p <.01. This range in the correlation between earned credit hours and registered credit hours from college, indicates a large effect. The shared variance between the college term GPA and high school was correlated 33.2%.

Each column in Table 26 represents one regression model where the independent variable is ECH, and the dependent variable is RCH for a particular semester. There are six regression

models, one for each Model. Multicollinearity is not an issue for a simple linear regression model because there is only one independent variable in the model. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2.

Table 26

Regression Results for Earned Credit as IV and Registered Credit Hours as DV by Title I Status

Statistics	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Adjusted r^2	.093	.135	.294	.338	.318	.328
Durbin Watson	1.95	2.03	1.89	1.98	2.03	1.91
F-values	116.96**	141.57**	225.83**	228.23**	.115.98**	85.39**
Standard β Coefficient	.306	.369	.543	.582	.566	.576

Note. ***p<.001, **p<.01, *p<.05.
Model 1-Independent variable (IV): number of earned credit hours (ECH) semester 1; Dependent Variable (DV): Registered credit hours (RCH) semester 1
Model 2-IV: ECH semester 2; DV: RCH semester 2
Model 3-IV: ECH semester 3; DV: RCH semester 3
Model 4-IV: ECH semester 4; DV: RCH semester 4
Model 5-IV: ECH semester 5; DV: RCH semester 5
Model 6-IV: ECH semester 6; DV: RCH semester 6

In the first regression model, the standardized β coefficient of .306 indicates an increase of .306 units in registered college credit hours for every one-unit change in earned college credit hours. The first regression model was statistically significant F (1, 5) = 116.96, p <.001 with an adjusted R^2 of .093, indicating that 93% of the variance in registered credit hours is explained by earned credit hours. In the second regression model, the standardized β coefficient of .369 indicates an increase of .369 units in registered college credit hours for every one-unit change in earned college credit hours.

The second regression model was statistically significant F (1, 5) = 141.57, p <.001 with an adjusted R^2 of .135, indicating that 13.5% of the variance in registered credit hours is explained by earned credit hours.

In the third regression model, the standardized β coefficient of .543 indicates an increase of .543 units in registered college credit hours for every one-unit change in earned college credit hours. The third regression model was statistically significant F (1, 5) = 225.83, p <.001 with an adjusted R^2 of .294, indicating that 29.4% of the variance in registered credit hours is explained by earned credit hours. In the fourth regression model, the standardized β coefficient of .582 indicates an increase of .582 units in the registered college credit hours for every one-unit change in earned college credit hours. The fourth regression model was statistically significant F (1, 5) = 228.23, p <.001 with an adjusted R^2 of .338, indicating that 33.8% of the variance in registered credit hours is explained by earned credit hours.

In the fifth regression model, the standardized β coefficient of .566 indicates an increase of .566 units in the registered college credit hours for every one-unit change in earned college credit hours. The fifth regression model was statistically significant F (1, 5) = 115.98, p <.001 with an adjusted R^2 of .318, indicating that 31.8% of the variance in registered credit hours is explained by earned credit hours. In the sixth regression model, the standardized β coefficient of .576 indicates an increase of .576 units in registered college credit hours for every one-unit change in earned college credit hours. The sixth regression model was statistically significant F (1, 5) = 85.39, p <.001 with an adjusted R^2 of .328, indicating that 32.8% of the variance in registered credit hours is explained by earned credit hours.

Research Question 3.2

What is the impact of earned credit hours on registered credit hours (measure of continued attendance) for non-Title I schools?

Table 27

Correlation Table for Registered Credit Hours and Earned Credit Hours

	RCH-Term 1	ECH-Term 1	RCH-Term 2	ECH-Term 2	RCH-Term 3	ECH-Term 3	RCH-Term 4	ECH-Term 4	RCH-Term 5	ECH-Term 5	RCH-Term 6	ECH-Term 6
RCH TERM 1	1											
ECH-TERM 1	.39**	1										
RCH-TERM 2	.21**	.096	1									
ECH-TERM 2	.185*	.258**	.545**	1								
RCH-TERM 3	.307**	.281*	.213	.163	1							
ECH -TERM 3	.361**	.48**	.388**	.47**	.502**	1						
RCH-TERM 4	.181	.263**	.298*	.071**	-.012	.150	1					
ECH-TERM 4	.115	.401*	.108	.323	.134	.455**	.51**	1				
RCH-TERM 5	.383*	.113	.356*	.616**	.401*	.263	-.079	.206	1			
ECH TERM 5	.328	.311	.318	.428*	.339	.562**	-.013	.388*	.557**	1		
RCH-TERM 6	.272	.224	.004	-.047	.065	.171	.234	.152	-.025	-.025	1	
ECH-TERM 6	-.057	.334	-.008	.04	.234	.484*	.15	.407*	.131	.194	.709**	1

Note. RCH=registered credit hours; ECH-earned credit hours. **Correlations significant at $p<.01$; * Correlations significant at $p<.05$.

Table 27 shows the correlation coefficients between earned credit hours and registered course credit hours, based on students who graduated from Title I status high school. The correlation between the ECH for term 1 and RCH for term 3 is, r (87) = .307, r^2 = .09 p <.01. This range in the correlation between earned credit hours and earned credit hours indicates a small to medium effect. The shared variance ranged from 4.4% to 9.4%. The strongest correlation between ECH for term 5 is, r (32) = .383, r^2 = .15, p <.01. This range in the correlation between earned credit hours and earned credit hours indicates a small to medium effect. The shared variance ranged from 4.4% to 14.7%. The strongest correlation between the ECH and RCH for term 2 is, r (151) = .545, r^2 = .30, p <.01. The correlation between ECH and RCH for term 2 is, r (229) = .388, r^2 = .15, p<.01. This range in the correlation between earned college credit house, based on student who graduated from Title I status high school and registered college credit hours indicates a small to medium effect. The shared variance ranged from 1% to 13%. The strongest correlation between the ECH and RCH for term 3 is, r (83) = .502, r^2 = .25, p <.01. This range in the correlation indicates a small to large effect. The shared variance ranged from 2.3% to 29%. The strongest correlation between the ECH and RCH for term 5 is r (32) = .557 r^2 = .31, p <.01. This range in the correlation between ECH and RCH from college, indicates a large effect. The shared variance between ranged from .1% to 32%. The strongest correlation between ECH and RCH for RCH term 6 is, r (26) = .709, r^2 = .50, p <.01. This range in the correlation between earned credit hours and registered credit hours from college, indicates a large effect. The shared variance between the college term GPA and high school was statistically correlated 35%.

Each column seen in Table 28 represents one regression model where the independent variable is ECH, and the dependent variable is RCH for a particular semester. There are six

regression models, one for each Model. Multicollinearity is not an issue for a simple linear regression model because there is only one independent variable in the model. The examination of Durbin Watson Statistic, P-P plots, q-q plots, and scatter plots reveal that assumptions of independence of observations, linearity and homoscedasticity were also met. The Durbin-Watson statistic indicates no significant autocorrelation because all the values are close to 2.

Table 28

Regression Results for Earned Credit as IV and Registered Credit Hours as DV

Statistics	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Adjusted r^2	.147	.293	.243	.249	.287	.481
Durbin Watson	2.12	2.33	1.96	2.2	1.9	1.74
F-values	33.81**	63.02**	27.35**	22.83**	13.5**	24.1**
Standard β coefficient	.39	.545	.502	.51	.557	.709

Note. ***p<.001, **p<.01, *p<.05.
Model 1-Independent variable (IV): number of earned credit hours (ECH) semester 1; Dependent Variable (DV): Registered credit hours (RCH) semester 1
Model 2-IV: ECH semester 2; DV: RCH semester 2
Model 3-IV: ECH semester 3; DV: RCH semester 3
Model 4-IV: ECH semester 4; DV: RCH semester 4
Model 5-IV: ECH semester 5; DV: RCH semester 5
Model 6-IV: ECH semester 6; DV: RCH semester 6

In the first regression model, the standardized β coefficient of .226 indicates an increase of .226 units in the earned credit hours in college for every one-unit change in registered hours. The first regression model was statistically significant F (1, 5) = 33.82, p <.001 with an adjusted R^2 of .147, indicating that 14.7% of the variance in registered credit hours is explained by earned credit hours. In the first regression model, the standardized β coefficient of .226 indicates an increase of .226 units in the earned credit hours in college for every one-unit change in the registered credit hours in college is explained by college attendance. In the second regression model, the standardized β coefficient of .545 indicates an increase of .545 units in the earned

college credit hours for every one-unit change in registered credit hours. The second regression model was statistically significant F (1, 5) = 63.02, p <.001 with an adjusted R^2 of .293, indicating that 29.3% of the variance in registered credit hours is explained by earned credit hours. In the third regression model, the standardized β coefficient of .502 indicates an increase of .502 units in the earned college credit hours for every one-unit change in the registered credit hours. The third regression model was statistically significant F (1, 5) = 27.35, p <.001 with an adjusted R^2 of .243, indicating that 24.3% of the variance in registered credit hours is explained by earned credit hours. In the fourth regression model, the standardized β coefficient of .510 indicates an increase of .510 units in the earn college credit hours for every one-unit change in the high college registered hours. The fourth regression model was statistically significant F (1, 5) = 22.83, p <.001 with an adjusted R^2 of .249, indicating that 24.9% of the variance in registered credit hours is explained by earned credit hours.

In the fifth regression model, the standardized β coefficient of .557 indicates an increase of .557 units in the college semester one GPA scores for every one-unit change in the high school GPA scores. The fifth regression model was statistically significant F (1, 5) = 24.10, p <.001 with an adjusted R^2 of .287, indicating that 28.7% of the variance in registered credit hours is explained by earned credit hours. In the sixth regression model, the standardized β coefficient of .709 indicates an increase of .709 units in the earned credit hours for every one-unit change in the registered credit hours. The sixth regression model was statistically significant F (1, 5) = 24.10, p <.001 with an adjusted R^2 of .481, indicating that 48.1% of the variance in registered credit hours is explained by earned credit hours.

Research Question 4

What is the relationship between financial aid available and earned credit hours?

Table 29 shows that the strongest correlation is between the number earned credit hours (NEH) from college and financial aid used term 4 is, r (280) = .420, r^2 = .18, p <.01. The shared variance between ECH and financial aid used correlated 17.6%. This range in the correlation between number of earned college credit hours and financial used indicates a small effect. The strongest correlation between ECH and financial aid used in term 1 is r (514) = .313, r^2 = .10, p <.01. The shared variance between ECH and financial aid used correlated 9.8%. This range in the correlation between ECH and financial used indicates a small effect. The strongest correlation between the number earned credit hours from college and financial aid used term 3 is, r (514) = .340, r^2 = .12, p <.01. The shared variance between ECH and financial aid used correlated 11.6%. This range in the correlation between ECH and financial used indicates a small effect. The strongest correlation between the number earned credit hours (NEH) from college and financial aid used term 4 is, r (280) = .420, r^2 = .18, p <.01. The shared variance between ECH and financial aid used correlated 17.6%. This range in the correlation between number of earned college credit hours and financial used indicates a small effect.

Table 29

Correlation Table for Number of Earned Credit Hours (Title I and Non-I Status)

	NECH Term1	FA Term 1	NECH Term2	FA Term 2	NECH-Term 3	FA Term 3	NECH Term 4	FA Term 4	NECH Term 5	FA Term 5	NECH Term 6	FA Term 6
NECH TERM 1	1											
FA-TERM 1	.161**	1										
NECH-TERM 2	.261**	.081**	1									
FA-TERM 2	.063*	.563**	.118**	1								
NECH-TERM 3	.280**	.135**	.274**	.17**	1							
FA -TERM 3	.048	.413**	.008	.544**	.062	1						
NECH-TERM 4	.313**	.123**	.201**	.141**	.34**	-.015	1					
FA-TERM 4	.084	.563**	.004	.728**	.144**	.417**	.166**	1				
NECH-TERM 5	.227**	.142*	.179**	.2**	.31**	.05	.420**	.163**	1			
FA TERM 5	.107	.321**	.112	.821**	.136*	.6**	.142*	.461**	.184**	1		
NECH-TERM 6	.033	-.022	.039	.013	.147*	-.069	.214**	-.022	.141*	.013	1	
FA TERM 6	-.024	.375**	-.069	.559**	-.046	10**	-.091	.375**	-.034	.559**	-.069	1

Note. NECH=Number of earned credit hours for college. FA=financial used per semester. **Correlations significant at $p<.01$; * Correlations significant at $p<.05$.

Research Question 5

What is the relationship between financial aid available and registered credit hours?

The strongest correlation in Table 30 between the registered credit hours (RCH) in college and financial aid used (FA) term 2 is, r (280) = .393, r^2 = .15, p <.01. The shared variance between the college term GPA and high school was statistically correlated 1.3% to 15.4%. This range in the correlation between earned college credit hours, based on student who graduated from Title I status high school and registered college credit hours indicates a small to medium effect. This range in the correlation between earned credit hours from college and registered credit hours from college, indicates a small effect. This means that the amount of financial aid is not having much effect on number of registered credit hours taken per semester.

Table 30

Correlation Table for Registered Credit hours and Financial Used

	RCH-Term 1	FA Term 1	RCH Term 2	FA Term 2	RCH Term3	FA Term 3	RCH Term 4	FA Term 4	RCH Term 5	FA Term 5	RCH Term 6	FA Term 6
RCH Term 1	1											
FA- Term 1	.254**	1										
RCH- Term 2	.225**	.159**	1									
FA- Term 2	.118**	.563**	.253**	1								
ECH- Term 3	.145**	.063	.135**	.055	1							
FA - Term 3	.071	.413**	.153**	.544**	.061	1						
ECH- Term 4	.209**	.148**	.185**	.156**	.040	-.063	1					
FA- Term 4	.128**	.563**	.154**	.728**	.080	.417**	.252**	1				
ECH- Term 5	.292**	.143*	.393**	.135*	.180**	.069	.124*	.043	1			
FA-Term 5	.105	.321**	.191**	.821**	-.001	.600**	.108	.461**	.163**	1		
ECH- Term 6	.140*	.007	.196**	-.007	.078	.040	.130	.007	.029	-.007	1	
FA- Term 6	.078	.375**	.112	.559**	.146*	10**	-.091	.375**	.088	.559**	.040	1

Note. RCH=registered credit hours for college; FA=Financial used per semester. **Correlation significant at $p<.01$; * Correlations significant at $p<.05$.

Summary

The correlation coefficient test was conducted to determine the impact of Financial Aid budget on the number earned college credit hours per semester. As seen in Table 28 there is very minimal correlation taking place between the variables of earned college credit hours and Financial Aid budget. Therefore, a second correlation coefficient test was conducted using the registered college credit hours and Financial Aid budget. As seen in Table 29 there is very minimal correlation taking place between the registered credit hours and Financial Aid budget. We can confer that the financial aid budget does not have an impact on the number of earned credits hours or number of registered for college students. There was not a separate analysis conducted to further evaluate financial budget-based Title I high school status and Non-Title I high school status due to the extremely low correlation within the overall population of students in the research study.

The statistical results from the various correlation and linear regression tests prove that college semester GPA, cumulative college GPA and high school GPA have some level of impact on a students' academic performance in college. There are trends of increase in mean GPA seen for the semester GPAs and cumulative college GPAs. However, financial aid had very minimal influence on the amount of earned credit hours and amount of registered credit hours for students in college.

Chapter V: Discussion

The current study's researcher sought to determine if the effects of social stratification, measured by students' attendance at Title I status high schools that qualify for free and reduced lunch, impact college GPA. More than 22 million students in the United States received breakfast and lunch at a reduced rate through National School Lunch programs (Ralston & Guthrie, 2018; 'Turner et al., 2019). Participants were graduates of a Title I status high school and Non- Title I status high school, who are undergraduate students enrolled in a historically Black private college in the southern region of Florida. This quantitative study's researcher aimed to examine the variables of social stratification as measured by Title I status of high school and academic performance measured by college GPA (based on the status of academic warning, probation, and suspension). Academic progress was compared as a 3-year longitudinal study, with data collection from 2018-2021. Academic terms included the fall 2018- fall 2020, fall 2021 semester, spring 2019-2021 semester, and summer semester 2019-2021.

Students' academic progress has been researched from several perspectives, considering parents' educational level, income level, and cost of tuition influence. However, there is not a single research study that has considered the type of high school students come from and how this impacts their progression once enrolled in college. To the best of the author's knowledge, scarce research has considered the type of high school (Title I versus non-title I) students come from and how this impacts their academic performance and progression once enrolled in college. Higher education has been seen as a pathway from the lines of poverty to the means of a better life for 50 years (Baum et al., 2013). In the 1960s, public perception toward higher education was vital, and people believed in the possibilities gained through higher education (Baum et al.,

2013). There has been a demand placed on colleges and universities key stakeholders to improve the academic outcomes for college students.

The COVID-19 pandemic caused 55.1 million students to receive educational instruction through distance learning. In addition, the COVID-19 pandemic was responsible for school closures nationally, affecting students' academic growth (Kuhfeld et al., 2020). Southern states are expected to experience a 10%-25% decline in K–12 sector schools due to the COVID-19 pandemic (Tinubu Ali & Herrera, 2020). The COVID-19 pandemic caused many schools to swiftly transition to a distance learning format for classroom instruction, adjust teaching contact hours, and expand school nutrition programs (Tinubu Ali & Herrera, 2020). As a result, students' growth in reading will likely increase by 70%, and students' growth in math is expected to decline by 50%.

Students' academic progress has been researched from several perspectives, considering parents' educational level, income level, and cost of tuition influence. However, there is not a single research study that has considered the type of high school students come from and how this impacts their progression once enrolled in college. To the best of the author's knowledge, scarce research has considered the type of high school (Title I versus non-title I) students come from and how this impacts their academic performance and progression once enrolled in college.

Summary of Results

The researcher utilized correlation bivariate and linear regression tests to interpret the various data points within the research study. The research variables, high school GPA, semester GPA, cumulative GPA, earned college credit hours, and registered college credit hours, were first analyzed based on the combined Title I and Non- Title status of students; then the research

variables were further analyzed based on the student's high school attendance at Title I and Non-Title I status high school.

The main trends seen between Title I and Non-Title I status high schools, is that the academic performance of students from Non-Title I status high GPAs are higher than students who attended Title I status high schools. In the statistical output for correlation and linear regression we are seeing stronger effect size for Non-Title I status high schools in companion to Title I status high school students. This is mainly because most students who attend a Title I status high school often come from a low social economic background; where their home conditions require them to work while in college, which leads to decreased studying time for college courses, minimize time to seek academic supports services available on college campus, and minimize time to connect with faculty for other educational support, and guidance. However, there is one common trend shared between students from Title I and Non- Title status high schools that are parallel, is that students are enrolled in college at full-time status. The status of high school did not have an impact on the number of credit hours a student enrolled in per semester.

Research Question 1

What is the impact of high school GPA, from a Title I status high school, on the freshman student's academic performance, as measured by college semester GPA?

The correlation coefficient test and linear regression test were used to address the quantitative

Research Question 1.1

The correlation coefficient was used to compare the high school GPA and college semester GPA to determine if there was a significant difference between GPA scores.

First, the correlation coefficient test was used to compare the combined high school GPA and college semester GPA based on Title I and Non-Title I status high schools. Test trends showed a minimal correlation between high school GPA and college semester GPA; the highest correlation is seen between GPA 5 (2.97) and college semester GPA 3 (4.88). The combined linear regression trend showed that up to 10% of the college semester was explained by high school GPA. Second, the correlation coefficient and regression test were used to compare high school GPA and college semester GPA based on Title I status high schools. The trends in data points indicate a small effect size exist between high school GPA and college semester GPA which coincide with liner regression results. Table 12, 14, 16 indicates that college GPA in semester 3 had the highest adjusted R^2 values (R^2 = .085 [combined]; R^2 = .091 [Title I], and *R2* = .184 [Non-Title I]) and corresponding β coefficient values (β = .297 [combined]; β = .308 [Title I], and β = .441 [Non-Title I]).

Research Question 1.2

What is the impact of high school GPA, from a non-Title I high school, on a freshman student's academic performance as measured by college semester GPA?

The correlation coefficient test and linear regression test were used to address the quantitative Research Question 2. The correlation coefficient was used to compare the high school GPA (Non-Title I status) and college semester GPA to determine if there was a significant difference between GPA scores. The highest level of correlation is seen between GPA 3 (.441) and college semester GPA 1 (.385). The trends in data points indicate a medium effect size exist between high school GPA and college semester GPA which coincide with liner regression results.

Research Question 2

What impact does the number of completed credit hours have on students continued enrollment (as measured by cumulative GPA) in college?

Research Question 2.1

What impact does the number of completed credit hours have on students from Non-Title I status high school continued enrollment (as measured by cumulative GPA) in college?

The correlation coefficient test and linear regression test were used to address the quantitative Research Question 2. The correlation coefficient was used to compare the high school GPA and cumulative college semester GPA to determine if there was a significant difference between GPA scores.

First, the correlation coefficient test was used to compare the combined high school GPA and cumulative college semester GPA based on Title I and Non-Title I status high schools. Test trends showed a minimal correlation between high school GPA and college cumulative GPA; the highest correlation is seen between GPA 5 (4.02). The combined linear regression trend showed that up to 12% of the college cumulative GPA is explained by high school GPA. Tables 18, 20, and 22 indicates that college GPA in semester 3 had the highest adjusted R^2 values (R^2 = .159 [combined]; R^2 = .149 [Title I], and $R2$ = .263 [Non-Title I]) and corresponding β coefficient values (β = .402 [combined]; β = .39 [Title I], and β = .541 [Non-Title I]).

Research Question 2.2**:** What impact does the number of earned credit hours have on students from Title I status high school continued enrollment (as measured by cumulative GPA) in college?

The correlation coefficient test and linear regression test were used to address the quantitative Research Question 2. The correlation coefficient was used to compare the high

school GPA and cumulative college semester GPA to determine if there was a significant difference between GPA scores. The trends in data points; indicates a medium effect size exist between high school GPA and cumulative college semester GPA which coincide with liner regression results. The regressions results are highest for semester GPA 5, adjusted R^2 .159, β coefficient of .402.

Research Question 3

What impact does the number of earned credit hours have on student's continued enrollment in college (as measured by registered credit hours taken)?

Research Question 3.1

What impact does the number of earned credit hours have on students from a Title I status high school continued enrollment in college (as measured by registered credit hours taken)?

First, the correlation coefficient test was used to compare the combined earned college credit hour sand registered college credit hours based on Title I and Non-Title I status high schools. Test trends showed although some correlation is taking place it is very minimal. There were only seven data points that met the criteria of .3 threshold to be interpreted. The correlation is strongest in term 6, (.576). Tables 24, 26, and 28 indicate that the registered hours and earned credit hours adjusted R^2 values (R^2 = .345 [combined]; R^2 = .328 [Title I], and *R2* = .481 [Non-Title I]) and corresponding β coefficient values (β = .591 [combined]; β = .576 [Title I], and β = .709 [Non-Title I]). The low correlation can be associated with students have the obligation to work full time, not having much time to study for academic courses, and not have access to academic advisement resources.

Research Question 3.2

What impact does the number of earned credit hours have on students from a Non-Title I status high school continued enrollment in college (as measured by the number of registered credit hours taken)?

The correlation coefficient and regression test were used to compare earned college credit hours and registered college credit hours based on Non-Title I status high school attendance. The trends in data points indicate that there is slightly stronger correlation taken place, which coincides with the linear regression results and there is more distribution among the data points in comparison to Title I status high schools. The highest correlation for registered credit hours is Term 6, (.709). The trend seen in increased correlation can be associated with students not having to work full-time, having more time to study, and time available to access support resources on college campus.

Research Question 4

What is the impact of the amount of FAFSA loans available to the student, influence on the number of earned credit hours toward satisfying degree requirements?

The correlation and regressions tests were used based on overall population of students regardless of high status. The data points were not tested separately as it relates to Title I and Non-Title I status because, the variables of FAFSA loans available and earned credit hours have some correlation. This means that FAFSA loans available does not have some impact on the number of earned credit hours students complete in college.

Research Question 5

What is the impact of the amount of FAFSA loans available to the student, influence on the number of registered credit hours toward satisfying degree requirements?

The correlation and regressions tests were used based on overall population of students regardless of high status. The data points were not assessed separately as it relates to Title I and Non-Title I status because there was only a small effect seen between FAFSA loans available and registered credit hours. This means that FAFSA loans available does not have a strong impact on the number of earned credit hours students complete in college.

Study Implications

In the United States and other countries, the impact of social stratification has been a growing concern in higher education (Davis-Kean, 2005; Wu, 2017; Zhimin & Yao, 2015). Davis-Kean (2005) cross-functional study identified that status of parents' income and education played a critical role in determining the students' success in grade school. Although parents from high-income families and low-income families shared the exact high expectations and beliefs toward education, the children from the low-income range of academic performance did not match their parent's expectations. However, mothers with high academic achievement held higher expectations for their children and positively impacted their children's academic performance. The study aimed to understand the level of influence that race and the parent's SES have on children's development in middle school. There are minimal research studies that take into consideration achievement expectations and efficacy.

Bastedo and Jaquette's (2011) research study states that SES in higher education has improved for low-income students related to academic performance. However, they still lag behind compared to families from higher economic status. This research was based on the correlation between SES and attendance at selective colleges. The study indicates that institutional stratification exists among colleges, creating barriers for high-achieving, low-income students to compete for admissions slots at selective colleges. Low (SES) African

American students face obstacles in college, have less interaction with faculty outside of classroom instruction time, have less time to study, work more hours than their peers, and have less involvement in student organizations (Walpole, 2008). The low (SES) African Americans continue to be underrepresented in 4-year colleges and universities, although degree completion rates have increased (Walpole, 2008). There is limited research study on all students' college application process; gaining more knowledge will help discover if patterns exist related to SES. Currently, the institution has implemented an early intervention component through QEP, which has developed a writing placement plan that captures students in English Composition I that are at risk of failing at midterm with a grade of D or F. Also, a plan is being implemented to capture students enrolled in entry-level college math, such as College Algebra, which will assist students at risk of failing at midterm with a grade of D or F. The is also a voluntary component that will allow the student to enroll based on baseline test scores for ACT/SAT but students who did not voluntarily enroll in the specialized course will be automatically selected at mid-term based on academic performance.

In this study, the researcher sought to address the social stratification of students in college by considering the students' high school status of Title I and Non-Title I. However, previous research studies support that the SES of parents and their education level impact on students' academic performance in grade school. Very few research studies take into consideration a student's high school academic performance level of impact on college academic performance. The study addressed the gap in the literature by taking a step back and evaluating high school's effect on college academic performance. Students face various barriers in high school related to housing insecurities and food disparities, which their families receive specialized assistance for, such as housing vouchers, TANF benefits, and free or reduced pricing

for meals in school. These students will likely not have access to the same educational resources available to students who attend Title I status high schools.

Quantitative analysis included descriptive and inferential statistics for participant demographic results. The descriptive and inferential tests revealed that 1,325 students were included in the research study, and 191 graduated from Non-Title I status high schools. The statistical tests performed were correlation coefficient and linear regression. The tests support that there is a significant difference between high school GPA, college semester GPA, and college cumulative GPA in respect to Title I and Non-Title I high school attendance. In (RQ1), Non-Title I student's semester GPA 3 (R2 = .184) was higher in comparison to a Title I student's semester GPA 3 (R2 = .069). The Non-Title I student's first semester GPA 1 (R2 = .091) also experienced a higher level of increase than Title I status first semester GPA 1 (R2 = .047). This trend in GPA increases could be linked to Title I students needing to work part-time or full-time jobs to assist with tuition and living expenses.

The quantitative analysis included a correlation coefficient test and linear regression tests. The correlation and regression test were statistically significant; the examination of Durbin Watson statistics, P-P plots, q-q plots, and scatter plots reveal that the assumption of independence observations, linearity, and homoscedasticity was met. The Durbin-Watson statistics indicate no significant auto autocorrelation because all the values are close to 2. There is minimal correlation between the high school GPA and college semester GPA for students who graduated from a Title I status high school. Only one variable met the interpretation criteria of .3 term 6 (r = .418, r2 =.18, $p < .01$). The regression r2 values were also low, indicating that college semester GPA and high school GPA are not correlated much. The dataset was further evaluated based on students' attendance at Non-Title I status high schools. The correlation coefficient and

linear regression tests were analyzed. There was a high correlation between high school GPA and college semester GPA. Most of the data points for college semesters were correlated .3 or higher, which is considered moderately correlated with high school GPA. The Title I status high school GPA had one variable that was statistically correlated with semester GPA and College semester GPA. The slight correlation of (r = .308 r2 = .10, p<.01) indicates a small effect of correlation .1% to 20%. The correlation for non-Title status high school GPA and college semester GPA is more correlated with a small to medium effect size term 1, r (191) = .31 r2 = .10, p <.01, this trend is seen throughout the distribution of college semester GPA term 1- GPA them 6. This means that high school GPA moderately correlates with the college semester GPA. The statistically significant difference seen between Non-Title I status schools having more correlation can be associated with the small sample size of students in the research study.

Reindl's (2007) research study focused on the changing demographics of students in college due to the demand on the workforce. In the United States, there is a demand to fill jobs considered high-skill jobs, which are predicted to exceed low-skill jobs. The population of African Americans and Latinos between 18-44 years old is expected to increase by 10 million between 2000 to 2025. The increase of African Americans and Latinos means an increase in college enrollment numbers can be expected among people from minority groups, non-traditional college students, and low-income families to meet the workforce demand. The study's overall outcome indicates that for the United States to remain competitive and close degree attainment gaps among minority groups and low-income families, higher education must promote cost-effectiveness and bridge the gap between K–12 sectors to post-secondary institutions.

The demographic of student population results performed by the researcher revealed that participants in the study African Americans (70%) and Hispanics (3%), were enrolled in college

in comparison to other ethnic groups such as Indians (1%), Multicultural (2.5%), Whites (3.8%), Unknown (2.8%) and Islander (.1%). The increase in enrollment will require colleges to strengthen their academic support resources such as peer tutoring, supplemental instruction courses, work-study programs, financial aid counselor support, and academic advisor support. Students from low SES rely on financial student aid to gain college access.

Approximately 65% percent of full-time students that attended community college were eligible for Pell Grant (McKinney & Roberts, 2012). Colleges have known issues regarding counselor-to -student ratio, which impacts students' access to the resources to meet their needs (McKinney & Roberts, 2012). Students from low SES backgrounds are more likely to have attended a high school that provided minimal guidance for college and are more likely to come from families with limited knowledge about navigating through the college life cycle processes (McKinney & Roberts, 2012). Students from low SES encounter barriers related to the complexity of financial aid processes and lack a clear understanding of financial literacy (Greenfield, 2015). Although federal student aid has begun to simplify its application processes, many students and parents still struggle to complete the FAFSA application because of the complex questions related to family financial earnings, savings, assets, and criminal background status. Colleges and Universities can assist students and parents through college preparation programs to educate them about financial aid processes, the cost of college, and how to pay for college (Greenfield, 2015). Higher education and high schools can create partnerships before students enter college, so they can engage in workshops with parents to begin the learning process about financing college and other resources available for college.

The correlation coefficient test was used to evaluate FAFSA available to students based on earned college credit hours. The variables were not assessed separated by Title I and Non-

Title I status high school because the overall sample population did not have much correlation between the two variables. Although there was a very minimal correlation between FAFSA available to students and registered credit hours, there was some mild correlation between earned credit hours and FAFSA available to students. The mild correlation means that the amount of financial aid available did not impact the number of registered credit hours a student took on a semester base. However, the amount of FAFSA available to students was mildly correlated with earned college credit hours. The number of earned credit hours per semester can impact the amount of FAFSA a student receives based on academic completion rate, which considers the semester GPA and cumulative GPA. The correlation results indicate that financial aid available to students does not impact the number of registered credit hours per semester. However, the number of registered credit hours and earned hours combined could affect a student's enrollment based on their completion rate per semester. The number of credit hours students earn per semester can impact their satisfactory academic progress (SAP)in college, significantly influencing their continued access to financial aid. The students could benefit from having access to academic support services that could improve their semester GPA and cumulative GPA.

The researcher confirmed through the descriptive and inferential tests that student academic status levels of freshman, sophomore, junior, and senior; show signs of decline in student enrollment. In addition, as students matriculate through college from freshman status level (43.4%t) to senior status level (18.2%), their enrollment declines. The decline among freshman-status students reveals that they are encountering instances of stopping out of college before reaching senior-level status, which could be related to the type of high school attended. Kim's (2015) correlational study hinged on Tinto's theory of student departure from college considered the impact of gender, ethnicity, family social status, goals, commitment, college

integration, and high school performance having an effect on students' likelihood of dropping out of college. According to a study conducted by Klitzman (2017), 60,000 students who completed a Federal financial aid application reported themselves as homeless. Thirty-six percent of students who applied for financial aid at the community and university levels experienced housing insecurities while enrolled in college. Many colleges encounter barriers when left to deal with the hardships of homeless students enrolled in college. The result is that homeless students' needs are left unmet, and they struggle to remain enrolled in college. Several factors were addressed in the field study: academic preparation, personal needs, academic support, financial considerations, patterns of interaction, non-academic initiatives, student, government, and college agencies. There were minimal research studies that considered achievement expectations and efficacy.

As noted, many students in the research study graduated from a Title I status high school; and are now enrolled in college. A large number of Title I status students enrolled in college, means the level of at-risk students make up a majority of the entire student population. The students could benefit from having access to academic support services that could improve their educational outcomes. Although admissions standards are in place to expand opportunities for under privilege populations of people to have equal access to educational opportunities (Kim, 2015), colleges must create fluid recruitment strategies to ensure diversity among the student population on their college campus. Having a diverse population of students allows for creating college learning communities that can assist the students with the concept of peer approach to learning and studying. Also, colleges could benefit from increasing their academic support staff to ensure enough staff members are available to assist the large population of at-risk students

needing academic support services. This will help shift the distribution to be more evenly distributed with Title I and Non-Title I status students and improve academic retention outcomes.

Contribution of The Study

In the United States and other countries, the impact of social stratification has been a growing concern in higher education (Davis-Kean, 2005; Wu, 2017; Zhimin & Yao, 2015). Davis-Kean (2005) cross-functional study identified that status of parents' income and education played a critical role in determining the students' success in grade school. Although parents from high-income families and low-income family range shared the same high expectations and beliefs toward education, the children from the low-income range academic performance did not match their parent's expectations. However, mothers with high academic achievement held higher expectations for their children and made a positive impact on their children's academic performance. The study aimed to gain a clear understanding of the level of influence that race and the parent's SES have on children's development in middle school.

Limitations

This study intends to understand the influence of social stratification (as measured by student's attendance at a Title I high school) as measured by students' institutional GPA and their likelihood of dropping out of college. Several other variables worthy of research could impact college students' academic performance while in college, such as work schedules, grades in college courses, financial aid, demographic characteristics, and other psychological attributes. Some form of stress impacts approximately33% to 70% of college students due to financial burdens (Fosnacht & Dong, 2013). Retrospective data were used for the study, with no real-time data or purposive sampling; other factors such as students' working status, psychological and attitudinal variables, family background; support services; instruction by college faculty were

included. External validity is limited because only one college is being evaluated, limiting the generalizability of study findings. It is difficult to establish causality.

The researcher considered data from only one HBCU in Florida. Retrospective data are collected at a one-time point, limiting the study findings. A study of this type is selected to gain more insight into the student population's background to discover the impact of high school on students' academic performance in college. Although general information is available through IPEDS data for this institution, it does not provide details about the population of students to assist with identifying variables that impact students' academic outcomes, which can provide opportunities for building strategies and support resources. The collection of retrospective data will help to determine if there is a difference in students' academic performance in college who graduated from a title I status high school or a non-title I status high school. The utilization of institutional data would allow for learning more about the student population enrolled within an institution which allows for developing programs and resources to address the unique needs of those students in hopes of improving their educational outcomes. The study does not consider the current trends in students' academic performance. The characteristics of the study sample may change since retrospective data are collected. The study results could be of more significance if data from two or more HBCU colleges from other geographical locations were a part of the sample population. This research study could add more validity to the study findings. The study findings cannot be generalized to research universities and private institutions of higher education.

Recommendations for Future Research

This research study could benefit from being replicated through a Mixed-methods study. The quantitative section of the study can be a Likert-based survey and the qualitative section can

be interviews. Survey and interview data can be collected from students who were from Title I status schools on their experiences, challenges, and type of academic support services they need to enhance the academic performance in college. The mixed-methods study could also be utilized to incorporate comparison between two or more public or private white colleges. The incorporation of other variables in the research study that have an influence on students' academic performance in college (e.g., work hours, family life-conflict, and support from faculty) could add further insights. Other additional variables that are worthy of research is how early college interventions in the form of English and Math support could influence students' performance from Title-I status schools. Conducting future research studies on these topics could help key stakeholders in higher education to resolve the issues of retention among students in college, particularly those belonging to the minority backgrounds and expand support resources that could help these students in progressing through college. This will in turn improve the academic outcomes for students and assist researchers as well as practitioners to better meet the needs of these students. Future studies can also explore the partnerships that exists between Title I high school personnel and staff from academic support services in higher education (e.g., enrollment, financial aid, admissions) in terms of knowledge-sharing, and decision-making to better support the students transition from high school to college.

Dissemination of the Findings

The findings from the research study can be published in local and national conferences (AERA special interest groups-research focus on black education). These results can also be shared with the institutional leadership, where a proposal for changes regarding the support structures and services for students who graduated from Title-I status high schools. The study results will be presented to the leadership team at the institution, including financial aid,

enrollment management, and academic support services so that steps can be taken to make the necessary changes that could support students coming from Title-I status high schools. The researcher intends to present the findings of the current study at the annual meeting of the Florida Association of Community Colleges and the annual public conventions of the Florida College Systems Activities Association.

Conclusion

This quantitative correlational study focused on students' academic performance at 4-year private HBCU who graduated from a Title I or Non-Title I status high schools. The students' college performance was measured against their high school GPA and college GPA, number of registered credit hours, number of earned credit hours, and available FAFSA loans. The variables revealed that there were differences in student academic performance compared to high school status. Some variables provided higher correlation than others, such as semester GPA, cumulative GPA, registered credit hours, and earned credit hours for student who graduated from Non-Title-I- status high schools. The students that graduated from Title I status high schools revealed lower correlations in statistical output for variables. Based on statistical testing results, we could identify that the amount of FAFSA loans available to students did not impact the number of credit hours a student enrolled in on a semester base. The minimal impact could be related to students coming from low SES, not being knowledgeable about financial literacy, and having high aspirations toward obtaining a college degree. The results of this study are significant because not much is known about all the variables impacting students from low socioeconomic background performance in college based on high school status and academic performance.

References

Ball, S. J. (1997). Policy sociology and critical social research: A personal review of recent education policy and policy research. *British Educational Research Journal*, *23*(3), 257–274. https://doi.org/10.1080/0141192970230302

Barr, A., & Turner, S. (2013). Expanding enrollments and contracting state budgets. *The Annals of The American Academy of Political and Social Science*, *650*(1), 168–193. https://doi.org/10.1177/0002716213500035

Bastedo, M. N., & Jaquette, O. (2011). Running in place: Low-income students and the dynamics of higher education stratification. *Educational Evaluation and Policy Analysis*, *33*(3), 318–339. https://doi.org/10.3102/0162373711406718

Baum, S., Kurose, C., & McPherson, M. (2013). An overview of American higher education. *The Future of Children*, *23*(1), 17–39. https://doi.org/10.1353/foc.2013.0008

Baum, S., & Ma, J. (2012). Trends in college pricing, 2012. *College Board Advocacy and Policy Center*. https://files.eric.ed.gov/fulltext/ED536571.pdf

Bell, D. N., & Blanchflower, D. G. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, *27*(2), 241–267. https://www.econstor.eu/bitstream/10419/52080/1/666568758.pdf

Bennett, D., McCarty, C., & Carter, S. (2015). The impact of financial stress on academic performance in college economics courses. *Academy of Educational Leadership Journal*, *19*(3), 25–30. https://www.proquest.com/openview/e40fac0fb7c32606487a6c256baad15d/1?pq-origsite=gscholar&cbl=38741

Bishop, S. (2018). “Nobody can take our story”: Competing representational narratives of immigrants without legal status. *Comunicación y Sociedad*, *31*(3), 159–173. https://doi.org/10.15581/003.31.3.159-173

Blevins, D. (2018). Experiences with housing insecurity among African American women in community college. *Journal of Applied Research in the Community College*, *25*(1), 61–68. https://cceal.org/wp-content/uploads/2021/02/Housing-Insecurity-African-American-Women.pdf

Bloom, D., Kuhn, M., & Prettner, K. (2017). Africa’s prospects for enjoying a demographic dividend. *Journal of Demographic Economics*, *83*(1), 63–76. https://www.nber.org/system/files/working_papers/w22560/w22560.pdf

Broton, K., Frank, V., & Goldrick-Rab, S. (2014). Safety, security, and college attainment: An investigation of undergraduates’ basic needs and institutional response. *Wisconsin Hope Lab*. https://d1wqtxts1xzle7.cloudfront.net/38697182/APPAM.Draft.10.28.2014-libre.pdf?1441679389=&response-content-disposition=inline%3B+filename%3DSafety_Security_and_College_Attainment_A.pdf&Expires=1671754164&Signature=CVpz5tZ~ysBXI-7l-pXHXh4igo2aazT3GNzcpQl

Broton, K., & Goldrick-Rab, S. (2013). Housing instability among college students. *Center for Financial Security*. University of Wisconsin. https://wiscape.wisc.edu/docs/WebDispenser/wiscapedocuments/hcm-housing-policy-memo.pdf.

Broton, K., & Goldrick-Rab, S. (2018). Going without: An exploration of food and housing insecurity among undergraduates. *Educational Researcher*, *47*(2), 121–133. https://doi.org/10.3102/0013189x17741303

Burke, A. (2019). Student retention models in higher education: A literature review. *College and University*, *94*(2), 12–21. https://www.proquest.com/openview/3801c2272f50c82853ddee876e93347d/1?pq-origsite=gscholar&cbl=1059

Chan, M., Kwon, J., Nguyen, D. J., Saunders, K. M., Shah, N., & Smith, K. N. (2019). Indebted over time: Racial differences in student borrowing. *Educational Researcher*, *48*(8), 558–563. https://doi.org/10.3102/0013189X19864969

Chingos, M. M., & Blagg, K. (2017). Do poor kids get their fair share of school funding. *Urban Institute*. https://www.urban.org/sites/default/files/publication/90586/school_funding_brief.pdf

Clark, A. (2018). The role of residential mobility in reproducing socioeconomic stratification during the transition to adulthood. *Demographic Research*, *38*, 169–196. https://doi.org/10.4054/DemRes.2018.38.7

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin*, *112*(1), 155–159. https://doi.org/10.1037//0033-2909-112.1.155 Crawford, C., Crawford, R., & Jin, W. (2014). *Estimating the public cost of student loans* (No. R94). IFS Report. https://doi.org/10.1920/re.ifs.2014.0094

Crain, R. L., & Mahard, R. E. (1978). School racial composition and black college attendance and achievement test performance. *Sociology of Education*, 81–101. https://doi.org/10.2307/2112241

Crawford, C., Crawford, R., & Jin, W. (2014). *Estimating the public cost of student loans* (No. R94). IFS Report. https://doi.org/10.1920/re.ifs.2014.0094

D'Amico, M. M., Dika, S. L., Elling, T. W., Algozzine, B., & Ginn, D. J. (2014). Early integration and other outcomes for community college transfer students. *Research in Higher Education*, *55*(4), 370–399. https://doi.org/10.1007s11162-013-931-5

Davis-Kean, P. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, *19*(2), 294–304. https://doi.org/10.1037/0893-3200.19.2.294

Dortch, C. (2017). GI bills enacted prior to 2008 and related veterans' educational assistance programs: A primer. CRS report R42785, version 12. Updated. *Congressional Research Service*. https://files.eric.ed.gov/fulltext/ED597856.pdf'

Dynarski, S., & Scott-Clayton, J. (2013). *Financial aid policy: Lessons from research*. https://www.nber.org/system/files/working_papers/w18710/w18710.pdf

Edirisooriya, G. (2003). State funding of higher education: A new formula. *Higher Education Policy*, *16*(1), 121–133. https://files.eric.ed.gov/fulltext/ED459675.pdf

Enriquez, L. E., Burciaga, E. M., Cardenas, T., Cha, B., Delgado, V., Lopez, M. G., Millan, D., Mireles, M., Hernandez, M. M., Ramirez, E., Ro, A., & Vera, D. V. A. (2019). How can universities foster educational equity for undocumented college students: Lessons from the University of California. https://irle.ucla.edu/wp-content/uploads/2019/02/Final-Enriquez-Report.pdf

Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: A case of secondary school level. *Journal of quality and technology management*, *7*(2), 1–14.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149

Ferguson, C. J. (2016). An effect size primer: A guide for clinicians and researchers. In A. E. Kazdin (Ed.), *Methodological issues and strategies in clinical research* (pp. 301–310). American Psychological Association. https://doi.org/10.1037/14805-020

Fethke, G. (2018). Offsets in state appropriations challenge "pay-what-you-can-afford" tuition policies at public universities. *Psychosociological Issues in Human Resource Management*, 6(2), 7–28. https://doi.org/10.22381/pihrm6220181

Field, A. (2013). Regression. *In Discovering statistics in SPSS* (pp. 262–292). SAGE Publications.

Forman, M. R., Mangini, L. D., Dong, Y. Q., Hernandez, L. M., & Fingerman, K. L. (2018).Food insecurity and hunger: Quiet public health problems on campus. *Journal of Nutrition and Food Sciences*, 8(2), 668. https://doi.org/10.4172/2155-9600.1000668

Fosnacht, K., & Dong, Y. (2013, November). *Financial stress and its impact on first-year students' college experiences*. Association for the Study of Higher Education Annual Conference. https://hdl.handle.net/2022/23905

Freeland, R. (2018). Yes, higher ed is a business, but it's also a calling. *The Chronicle of Higher Education*. https://www.chronicle.com/article/yes-higher-ed-is-a-business-but-its-also-a-calling

Frotman, S. (2018). Broken promises: How debt-financed higher education rewrote America's social contract and fueled a quiet crisis. *Utah Law Review,* 811. https://dc.law.utah.edu/ulr/vol2018/iss4/1

Garritzmann, J. (2017). The partisan politics of higher education. *PS, Political Science and Politics, 50*(2), 413–417. https://doi.org/10.1017/S1049096516002924

Goldrick-Rab, S., Richardson, J., Schneider, J., Hernandez, A., & Cady, C. (2018). *Still hungry and homeless in college*. Wisconsin HOPE Lab.

Greenfield, J. S. (2015). Challenges and opportunities in the pursuit of college finance literacy. *The High School Journal*, *98*(4), 316–336. https://doi.org/10.1353/hsj.2015.0010

Gupton, J. T. (2017). Campus of opportunity: A qualitative analysis of homeless students in community college. *Community College Review*, *45*(3), 190–214. https://doi.org/10.1177/0091552117700475

Hagedorn, L. S. (2005). How to define retention. College student retention formula for student success. *College Student Retention*, 90–105. https://files.eric.ed.gov/fulltext/ED493674.pdf

Hahs-Vaughn, D., & Lomax, R. (2013). *An introduction to statistical concepts*. Routledge.

Hall, E., Chai, W., & Albrecht, J. A. (2016). Relationships between nutrition related knowledge, self-efficacy, and behavior for fifth grade students attending Title I and non-Title I schools. *Appetite*, *96*, 245–253. https://doi.org/10.1016/j.appet.2015.09.033

Hallett, R. E., & Crutchfield, R. (2018). *Homelessness and housing insecurity in higher education: a trauma-informed approach to research, policy, and practice: ASHE higher education report*. John Wiley & Sons.

Handel, S. J. (2011). Increasing higher education access and success using new pathways to the baccalaureate: The emergence of a transfer-affirming culture. In *Proceedings of the 1st International Australasian Conference on Enabling Access to Higher Education* (pp. 408–419). University of South Australia, Causal Productions. https://secure-

media.collegeboard.org/digitalServices/pdf/rd/StephenJHandel-IncreasingHigherEducationAccess.pdf

Hearn, J. C. (1991). Academic and nonacademic influences on the college destinations of 1980 high school graduates. *Sociology of Education*, *64*(3), 158–171. https://doi.org/10.2307/2112849

Johnson, C. L., O'Neill, B., Worthy, S. L., Lown, J. M., & Bowen, C. F. (2016). What are student loan borrowers thinking? Insights from focus groups on college selection and student loan decision making. *Journal of Financial Counseling and Planning*, *27*(2), 184–198. https://files.eric.ed.gov/fulltext/EJ1161822.pdf

Johnson, E. (2013). *Factors associated with non-traditional and traditional undergraduate alumni giving to alma maters* (Publication No. 3573438) [Doctoral dissertation, Mercer University]. ProQuest Dissertations and Theses Global.

Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications.

Kantrowitz, M. (2019). FAFSA facts. *Journal of Financial Planning*, 32(2), 22–25. https://www.proquest.com/openview/a08c87e59a25156ba25876f3f417cb49/1?pq-origsite=gscholar&cbl=4849

Kara, O., Bagheri, F., & Tolin, T. (2009). Factors affecting students grades in principles of economics. *American Journal of Business Education (AJBE)*, *2*(7), 25–34. https://clutejournals.com/index.php/AJBE/article/download/4581/4672

Karen, D. (2002). Changes in access to higher education in the United States: 1980-1992. *Sociology of Education*, *75*(3), 191–210. https://doi.org/10.2307/3090265

Kim, J. (2015). Predictors of college retention and performance between regular and special admissions. *Journal of Student Affairs Research and Practice*, *52*(1), 50–63. https://doi.org/10.1080/19496591.2015.995575

Kingston, P. W., & Lewis, L. S. (Eds.). (1990). *High status track, the: Studies of elite schools and stratification*. Suny Press.

Klein, M. W. (2015). Settling a US senatorial debate: Understanding declines in state higher education funding. *Journal of Education Finance*, *40*(1), 1–29. https://www.jstor.org/stable/24459298

Klitzman, C. (2017). College student homelessness: A hidden epidemic. *Columbia Journal of Law & Social Problems*, *51*(4), 587–619. http://jlsp.law.columbia.edu/wp-content/uploads/sites/8/2018/08/Vol51-Klitzman.pdf

Kofoed, M. S. (2017). To apply or not to apply: FAFSA completion and financial aid gaps. *Research in Higher Education*, *58*(1), 1–39. https://doi.org/10.1007/s11162-016-9418-y

Koricich, A., Chen, X., & Hughes, R. P. (2018). Understanding the effects of rurality and socioeconomic status on college attendance and institutional choice in the United States. *The Review of Higher Education*, *41*(2), 281–305. https://doi.org.10.1353/rhe.2018.0004

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the potential impact of COVID-19 school closures on academic achievement. *Educational Researcher*, *49*(8), 549–565. https://doi.org/10.3102/0013189X20965918

Lee, J. M., & Keys, S. W. (2013). Land-grant but unequal: State one-to-one match funding for 1890 land-grant universities. *APLU Office of Access and Success publication*, (3000-

PB1). https://www.aplu.org/library/executive-summary-land-grant-but-unequal-state-one-to-one-match-funding-for-1890-land-grant-universities/file

Leonard, W. P. (2014). Higher education's flawed recession response. *International Journal of Educational Management, 28*(2), 257–264. https://doi.org/10.1108/IJEM-08-2012-0098

Levin, C., & Bohannon, M. (2013). Assessing the true cost of student housing for community colleges. *Planning for Higher Education*, *41*(4), 1–5. https://programmanagers.com/wp-content/uploads/2016/12/2411198.pdf

Long, B. T. (2014). The financial crisis and college enrollment: How have students and their families responded?. In H*ow the financial crisis and Great Recession affected higher education* (pp. 209–233). University of Chicago Press.

Lucas, S. R. (2001). Effectively maintained inequality: Education transitions, track mobility, and social background effects. *American Journal of Sociology*, *106*(6), 1642–1690. https://doi.org/10.1086/321300

Mahan, S. M. (2011). *Federal Pell grant program of the higher education act: Background, recent changes, and current legislative issues.* Congressional Research Service. https://www.everycrsreport.com/files/20110804_R41437_5927f67d7c34c7c389ecc8e23b2975a8ff57669c.pdf

Malkus, N., Hoyer, K. M., & Sparks, D. (2015). Teaching vacancies and difficult-to-staff teaching positions in public schools. Stats in brief. NCES 2015-065. *National Center for Education Statistics*. https://files.eric.ed.gov/fulltext/ED561224.pdf

Matsudaira, J. D., Hosek, A., & Walsh, E. (2012). An integrated assessment of the effects of Title I on school behavior, resources, and student achievement. *Economics of Education Review*, *31*(3), 1–14. https://doi.org/10.1016/j.econedurev.2012.012

McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., Diliberti, M., Cataldi, E. R., Mann, F. B., & Barmer, A. (2019). The condition of education 2019. NCES 2019-144. *National Center for Education Statistics*. https://files.eric.ed.gov/fulltext/ED594978.pdf

McGonigal, E. (2020). A comparison of ratings of bands from Title I schools vs Non-Title I schools at the Florida Music Performance Assessment. *Research Perspectives in Music Education*, *21*(1), 64–74. https://www.ingentaconnect.com/contentone/fmea/rpme/2020/00000021/00000001/art00006?crawler=true&mimetype=application/pdf

McKinney, L., & Roberts, T. (2012). The role of community college financial aid counselors in helping students understand and utilize financial aid. *Community College Journal of Research and Practice*, *36*(10), 761–774. https://doi.org/10.1080/10668926.2011.585112

Mitchell, M., Leachman, M., & Masterson, K. (2016). *Funding down, tuition up. State cuts to higher education threaten quality and affordability at public colleges*. https://vtechworks.lib.vt.edu/handle/10919/97764

Najib, N. U. M., Yusof, N., & Tabassi, A. A. (2015). Living in on-campus student housing: students' behavioural intentions and students' personal attainments. *Procedia-Social and Behavioral Sciences*, *170*, 494–503. https://doi.org/10.1016/j.sbspro.2015.01.052

National Center for Education Statistics. (n.d.). *Undergraduate retention and graduation rates*. https://nces.ed.gov/programs/coe/pdf/2021/ctr_508c.pdf

Olfert, M. D., Hagedorn-Hatfield, R. L., Houghtaling, B., Esquivel, M. K., Hood, L. B., MacNell, L., Soldavini, J., Berner, M., Savoie Roskos, M. R., Hingle, M. D., Mann, G. R., Waity, J. F., Knol, L. L., Walsh, J., Kern-Lyons, V., Paul, C., Pearson, K., Goetz, J.

R., Spence, M., . . . Coleman, P. (2021). Struggling with the basics: food and housing insecurity among college students across twenty-two colleges and universities. *Journal of American College Health*, 1–12. https://doi.org/10.1080/07448481.2021.1978456

Ong, S. E., Petrova, M., & Spieler, A. (2013). Demand for university student housing: An empirical analysis. *Journal of Housing Research*, *22*(2), 141–164. https://doi.org/10.1080/10835547.2013.12092073

Osam, E. K., Bergman, M., & Cumberland, D. M. (2017). An integrative literature review on the barriers impacting adult learners' return to college. *Adult Learning*, *28*(2), 54–60. 'https://doi.org/10.1177/1045159516658013

Packer, T. (2008). College Cost Reduction and Access Act: A good step, but only a step. *North Carolina Banking Institute, 12*, 221. https://scholarship.law.unc.edu/ncbi/vol12/iss1/10

Paul, C. A. (2016). Elementary and Secondary Education Act of 1965. *Social Welfare History Project*. https://socialwelfare.library.vcu.edu/programs/education/elementary-and-secondary-education-act-of-1965/

Perna, L. W., Rowan-Kenyon, H. T., Thomas, S. L., Bell, A., Anderson, R., & Li, C. (2008). The role of college counseling in shaping college opportunity: Variations across high schools. *The Review of Higher Education*, *31*(2), 131–159. https://doi.org/10.1353/rhe.2007.0073

Pierotte, L. M., Xie, M., & Baumer, E. P. (2018). Recent shifts in the volume, nature, and scope of state immigration policies in the United States. *Migration Letters*, *15*(2), 266–283. https://doi.org/10.33182/ml.v15i2.373

Podgursky, M., & Springer, M. (2011). Teacher compensation systems in the United States K–12 public school system. *National Tax Journal*, *64*(1), 165–192. https://doi.org/10.17310/ntj.2011.1.07

Ralston, K., & Guthrie, J. (2018). High-poverty schools are more likely to adopt the community eligibility provision of the USDA school meal programs. *Amber Waves: The Economics of Food, Farming, Natural Resources, and Rural America*, *2018*(1490-2020-673). https://www.ers.usda.gov/amber-waves/2018/september/high-poverty-schools-are-more-likely-to-adopt-the-community-eligibility-provision-of-the-usda-school-meal-programs/

Reed, M., & Cochrane, D. (2012). Student debt and the class of 2011. *Project on Student Debt*. https://files.eric.ed.gov/fulltext/ED537338.pdf

Reindl, T. (2007). Hitting home: Quality, cost, and access challenges confronting higher education today. *Lumina Foundation for Education*. . https://files.eric.ed.gov/fulltext/ED497037.pdf

Romano, R. M., Losinger, R., & Millard, T. (2011). Measuring the cost of a college degree: A case study of a SUNY community college. *Community College Review*, *39*(3), 211–234. https://ecommons.cornell.edu/bitstream/handle/1813/74627/cheri_wp135.pdf?sequence=1

Sackett, C. (2015). Barriers to success: Housing insecurity for US college students. Insights into housing and community development policy. *US Department of Housing and Urban Development, Office of Policy Development and Research*. https://www.huduser.gov/portal/periodicals/insight/insight_2.pdf

Smith, P. (2012). *The trouble with higher education: A critical examination of our universities*. Routledge.

Spady, W. G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, *2*(3), 38–62. https://doi.org/10.1007/BF02282469

Stichter, J. P., Stormont, M., Lewis, T. J., & Schultz, T. (2009). Rates of specific antecedent instructional practices and differences between Title I and non-Title I schools. *Journal of Behavioral Education*, *18*(4), 331–344. https://doi.org/10.1007/s10864-009-9094-5

St. John, E. P. (2003). [Review of *Tuition rising: Why college costs so much*, by R. G. Ehrenberg]. *Academe*, *89*(5), 99–100. https://doi.org/10.2307/40253401

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5, pp. 481–498). Pearson. Tierney, W. G., & Sablan, J. R. (2014). Completing college: Rethinking institutional action. *The Journal of Higher Education*, *85*(2), 280–282. https://doi.org/10.1353/jhe.2014.0008

Terenzini, P. T., Cabrera, A. F., & Bernal, E. M. (2001). Swimming against the Tide: The poor in American higher education. Research Report No. 2001-1. *College Entrance Examination Board*. https://files.eric.ed.gov/fulltext/ED562879.pdf

Tierney, W. G., & Sablan, J. R. (2014). Completing college: Rethinking institutional action. *The Journal of Higher Education*, *85*(2), 280–282. https://doi.org/10.1353/jhe.2014.0008

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, *45*(1), 89–125. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=772891a6a2955f4927d16c9e8690419e75d54310

Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory and Practice*, *8*(1), 1–19. https://doi.org/10.2190/4ynu-4tmb-22dj-an4w

Tinto, V. (2015). Through the eyes of students. *Journal of College Student Retention*: R*esearch, Theory & Practice*, *19*(3), 254–269. https://doi.org/10.1177/1521025115621917

Tinubu Ali, T., & Herrera, M. (2020). Distance learning during COVID-19: 7 Equity considerations for schools and districts. Issue Brief. *Southern Education Foundation*. https://files.eric.ed.gov/fulltext/ED605744.pdf

Turcios-Cotto, V. Y., & Milan, S. (2012). Racial/ethnic differences in the educational expectations of adolescents: Does pursuing higher education mean something different to Latino students compared to White and Black students? *Journal of Youth and Adolescence*, 42(9), 1399–1412. https://doi.org/10.1007/s10964-012-9845-9

Turner, L., O'Reilly, N., Ralston, K., & Guthrie, J. F. (2019). Identifying gaps in the food security safety net: the characteristics and availability of summer nutrition programmes in California, USA. *Public Health Nutrition*, *22*(10), 1824–1838. https://doi.org/10.1017/S1368980019001150

Ulbrich, T. R., & Kirk, L. M. (2017). It's time to broaden the conversation about the student debt crisis beyond rising tuition costs. *American Journal of Pharmaceutical Education*, *81*(6).'. https://doi.org/10.5688/ajpe816101

Vernaza, N. A. (2012). Teachers' perceptions of high-stakes accountability in Florida's Title I elementary schools. *Current Issues in Education*, *15*(1). http://cie.asu.edu/ojs/index.php/cieatasu/article/download/870/282

Walpole, M. (2008). Emerging from the pipeline: African American students, socioeconomic status, and college experiences and outcomes. *Research in Higher Education*, *49*(3), 237–255. https://doi.org/10.1007/s11162-007-9079-y

West, S., Finch, J., & Curran, P. (1995). Structural equation models with non-normal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling*: *Concepts, issues, and applications* (pp. 56–75). SAGE Publications.

Wheatle, K. I. (2019). Neither just nor equitable. *American Educational History Journal*, *46*(2), 1–20. Information Age Publishing.

Wolf, D. A. P. S., Perkins, J., Butler-Barnes, S. T., & Walker, T. A., Jr. (2017). Social belonging and college retention: Results from a quasi-experimental pilot study. *Journal of College Student Development*, *58*(5), 777–782. https://doi.org/10.1353/csd.2017.0060

Wood, J., Harris, F., III, & Delgado, N. (2017). *Struggling to survive-strive to succeed: Food and housing insecurities in the community college*. Community College Equity Assessment Lab (CCEAL). https://cdn.kpbs.org/news/documents/2016/12/05/STRUGGLING_TO_SURVIVE_-_STRIVING_TO_SUCCEED.pdf

Wu, X. (2017). Higher education, elite formation, and social stratification in contemporary China: Preliminary findings from the Beijing College Students Panel Survey. *Chinese Journal of Sociology*, *3*(1), 3–31. https://doi.org/10.1177/2057150x16688144

Zerquera, D., McGowan, B. L., Ferguson, T. L., & Torres, V. (2017). The burden of debt: Undergraduate students' experiences with paying for their education. *College Student Affairs Journal*, *35*(2), 140–152. https://doi.org/10.1353/csj.2017.0019

Zhimin, L., & Yao, G. (2015). Family capital social stratification, and higher education attainment—An empirical study based on Jiangsu province. *Chinese Education and Society*, *48*(3), 218–230. https://doi.org/10.1080/10611932.2015.1085773

Zumeta, W., Breneman, D. W., Callan, P. M., & Finney, J. E. (2012). *Financing American higher education in the era of globalization*. Harvard Education Press.

Appendix

Appendix A: IRB Application

Human Research Application

SECTION A: PROJECT INFORMATION

1. **Title of Project:** The Effect of Social Stratification on College Students' Academic Performance and Progress

2. **Application Type:**

   ☒ New Project
   ☐ Resubmission of Withdrawn Project
   ☐ Continuing Project (Previous IRB number: ___)

3. **Principal Investigator:**
   (There is only one principal investigator. List the primary contact person as the PI. Include a copy of human subjects research training certificate in the addendum.)

   Name: Detrenyona Chester

   Title: Graduate Student

   Department Name: Department of Education

   Mailing Address: 5140 Gate Parkway Apt. 5109- Jacksonville FL 32256

   Phone: 229-869-2164 E-Mail: chester_detrenyona@columbustate.edu

4. **Co-Principal Investigator:**
   (For student project, thesis, or dissertation, the faculty supervisor serves as the Co-PI. If you are not affiliated with CSU, then you must list a faculty member as the Co-PI. Include a copy of human subjects research training certificate in the addendum.)

   Name: Dr. Parul Acharya

   Title: Assistant Professor

   Department Name: Department of Education and Leadership

   Mailing Address: Columbus State University, 1127 Broadway" Frank D. Brown Hall Room 3104"-Columbus, GA 31901

   Phone: 706-507-8523 E-Mail: acharya_parul@columbusstate.edu

5. **Indicate whether personnel from an approved lab setting will be involved in this research.**

   ☐ Yes ☒ No

   B) If *Yes*, identify the name of the approved lab:

6. **Other Personnel of the Research Team:**
(If additional space is needed, insert more rows in the table. Include a copy of human subjects research training certificates for all listed personnel in the addendum.)

Name	Email

7. **A) Do any of the Investigators or Other Personnel listed in this application have a real, potential, or perceived conflict of interest associated with this study?** (See the FAQ webpage for more information.)

☐ Yes ☒ No

B) If *Yes*, identify the individual(s) and explain:
(The conflict must be disclosed in the informed consent process.)

8. **What is the expected duration of the project?**

Fall 2022

SECTION B: PROJECT SUMMARY

Within 100 words, clearly describe the purpose of the study using lay terminology.

The purpose of this quantitative research study is to take a more in dept look at variables of social stratification effects on a student's academic performance and progress at the college level. The researcher seeks to determine if the effects of social stratification, as measured by students' attendance at Title I status high school that qualify for free and reduced lunch and non-Title I status high school impact on college GPA. I hope that this study brings awareness about the level of impact school resources plays on a student's academic outcome in college and create opportunities for improved resources to assist in meeting the needs of students.

SECTION C: HUMAN RESEARCH PARTICIPANTS

1. **Number (or Range) of Participants Needed:** 500

2. **Age of Participants:**

   ☐ under 18 (Specify age(s): ___)
   ☒ 18 to 64
   ☐ 65 and older

3. **Identify the criteria for including, or selecting, participants.**

   Students must be first time freshman residing in on-campus housing for two consecutive semesters.

4. **A) Are there any criteria for excluding potential participants?**

   ☒ Yes ☐ No

   B) If *Yes*, identify the criteria for excluding potential participants.

   Participants are excluded if they are graduate students, sophomore, junior, and senior.

5. **A) Indicate whether any of these groups will be targeted participants.** (Check all that apply.)

   ☐ Pregnant women, neonates, or fetuses
   ☐ Prisoners
   ☐ Individuals who are cognitively impaired
   ☒ Individuals who are economically disadvantaged
   ☐ Individual who are mentally ill
   ☐ Individuals who are terminally ill
   ☐ Individuals who have HIV or AIDS
   ☐ Individuals who have limited English proficiencies

   B) Explain the justification for targeting the group(s) checked above in this research project.

   I'm examining high school students that are graduating from title I high school to see the role of socio-economic status in freshman students' retention at college.

C) What additional safeguards will be added to protect the rights and welfare of these groups?

Retrospective institutional data is being used. The students personal identifying information will be assigned codes, this will protect the identity and welfare of participants.

6. A) Do you plan to target individuals who belong to a particular gender, racial, or ethnic group?

☐ Yes ☒ No

B) If *Yes*, specify the targeted group(s) and explain the justification for targeting the particular group(s) in this research project.

N/A

7. What is your current and/or future relationship to the participants?

Currently, I do not have any relationship with any participants and will not have any relationship with participants in the future.

SECTION D: RECRUITMENT PROCEDURES

1. How will the participants be recruited? (Check all that apply.)

☐ In person ☐ Printed Materials ☐ Television/Radio

☐ Phone call ☐ Letters Listserv/Email ☐

☐ Social Media/Web- ☐ based SONA ☐ Other ☒ (Specify: The data report extracted from institutional database)

2. Describe when, where, and how participants will be initially contacted for each method selected in #1 above. (Attach a copy of any printed and/or electronic materials that will be used for recruiting in the addendum.)

The participants will not be contacted because retrospective data will be used that is extracted from institutional mass data reports. Data collection will be conducted after IRB approval during summer 2022 to onward. The time frame to retrospectively collect data will be 2018-2022 semesters.

3. **Describe any follow-up recruitment procedures for each method selected in #1 above.** (Attach a copy of any printed and/or electronic materials that will be used for recruiting in the addendum.)

   No follow up recruitment is required.

4. **A) Will participants receive any incentives and/or compensation for their participation?**

   ☐ Yes ☒ No

   B) If *Yes*, describe amount and quantity:

   N/A

SECTION E: INFORMED CONSENT PROCESS

1. **Describe the specific procedures (i.e., how, where, and when) for obtaining informed consent.** (Use provided templates available on the CSU IRB website to create an informed consent form(s) and attach a copy in the addendum. Studies involving minor participants must include parental consent and minor assent.)

   Informed consent is not feasible because the data being collected retrospectively from student education records stored within institutional data base system. Edward Waters University Institutional IRB has already approved the retrospective data and study [Approval letter is attached].

2. **If applicable, provide justification for requesting a waiver to document informed consent.** (*See the FAQ webpage for more information.*)

SECTION F: OUTSIDE PERFORMANCE SITE

1. **A) Does this project involve any collaborating institution and/or performance site outside of the CSU campus (e.g., local public school, participants' workplace, military base, or hospital)?**

   ☒ Yes ☐ No

   B) If *Yes*, list all institutions and sites involved with this research project. (If additional space is needed, attach a separate sheet as an addendum. For each listed site, attach a Letter of Cooperation **written on the institution's letterhead** and signed by the appropriate authorized official(s) in the addendum. See the FAQ webpage for more information.)

Name of Institution	Location (City, State)	written permission and/or current IRB approval
Edward Waters University	Jacksonville, Fl	☒Attached ☐Pending
		☐Attached ☐Pending
		☐Attached ☐Pending
		☐Attached ☐Pending
		☐Attached ☐Pending

SECTION G: METHODS

1. **Basic Design and Procedures**

Outline the research project procedures in concise and sequential lay terminology. The outline should include the basic design and the sequence of procedures the participants will follow from their entry through their completion of the project.

Data collection will take place during summer 2022 after IRB approval from Edward Waters University and Columbus State University. The design that will be used for this research study is Correlational Design. The data collection will be collected retrospectively from the institution data base which contain all students' academic information. Data analysis will include Multiple Linear Regression, analysis will tentatively take place fall 2022 semester

2. **Description of Data Collection / Instrumentation**

For each item selected, you must address all of the required components. (Check all that apply.)

☐ Physiological, Anthropometric, Specimen, or related Measurements (e.g., EEG, body composition, blood, and urine)

Describe the procedure used to conduct each measurement. For specimen samples (e.g., blood) make sure to include the frequency of collection, amount for each collection, and total volume to be collected.

☒ Document and Artifact Collection

Describe any documents or artifacts (e.g., historical papers, educational records, or student writing samples) that will be collected and used.

Retrospective educational records will be used for the research study which include the following data below:

- Student semester GPA the students' academic performance of student based on current term attendance outcome.

- Student ID Number, this is the unique identifier assigned to all enrolled college students for tracking and maintaining academic records. The student ID number is used in place of the social security number.

- Student first name and last name, this personal identifying information that will be coded to protect the identity of participants.

- Academic term and year of attendance, the timeline will be reflected based on spring semester, summer semester, fall semester and year. (e.g., spring 2018, fall 2019 etc.…).

- Demographic Variables will include gender, ethnicity, age, first-generation student.

- Registered hours represent the number of credit hours a student is enrolled during a semester term or quarter term.

- Earned Credits, the total number of credit hours a student completed with a passing grade.

- Cumulative Grade Point Average (Cum_GPA) is the overall GPA a student has earned that includes all grades o School Type, High school (HSDP) or College (ASC) o School GPA – High school grade point average that is calculated based on students weighted and unweighted GPA.

- Term Grade Point Average (Term GPA) the outcome of grades earned during one semester or quarter term o Number of credit hours completed based on Title I status and non-title I status high school o High school is coded based on status of Title I and Non-Title I status.

- FAFSA amount loans are granted to students based on earned credit hours each semester.

- Housing(dorm) student that resides in on-campus housing and are enrolled in at least 12 or more credits hours/full-time status.

☐ Behavioral Observations (e.g., classroom observations)

Describe the

- *focus,*
- *duration,*
- *number of observations,*

- *and how the observations will be recorded.*

☐ Survey, Interviews, and Questionnaires (Attach a participant copy of each measure in the addendum. If your survey, interviews, and questionnaires will be administered online, you must answer the Internet Surveys and Research section below.) *For each measure, describe*

- *setting,*
- *mode of administration, • and anticipated duration.*

☐ Internet Surveys and Research

Describe the measures

- *that will be taken to ensure security of data transmitted over the internet (e.g., internet surveys)*
- *to remove IP addresses*
- *and to protect from unauthorized access.*

☐ Audio or Video Recording

Describe the setting and anticipated duration.

3. Is it possible for any of the collected data to be used for future research projects?

☒ Yes ☐ No

SECTION H: RISKS AND BENEFITS

1. A) Estimate the level of risk for participants.

Potential Risk	Not applicable	No More than Minimal Risk	Greater than Minimal Risk
A. Physical	☒	☐	☐
B. Psychological	☒	☐	☐
C. Social or Economic	☒	☐	☐
D. Use of deceptive technique	☒	☐	☐
E. Other (Specify: _____)	☒	☐	☐

B) If any of the above risks are greater than minimal risk, describe the severity and likelihood of the indicated risk(s).

N/A

2. Explain what steps will be taken to reduce the impact of the indicated no more than minimal and/or greater than minimal risks and protect the participant's welfare.

N/A

3. **Describe the potential benefits to the participants as a direct result of this research project. (*Note:* Compensation is not considered a benefit).**

   N/A

4. **Describe the potential benefits to research or practitioner community a direct result of this research project.**

   The potential benefit of this study is to identify variables that could impact a student's progression based on their high school status before entering college, which could be beneficial in developing resources at K–12 level to better prepare these title I students for college level course work.

SECTION I: CONFIDENTIALITY OF DATA

1. **A) Will demographic information be collected?**

   ☒ Yes ☐ No

   B) If *Yes*, list all demographic information that will be collected. (Check all that apply.)

   ☒ gender ☒ racial ☒ classification ☒ age ☒
   ☐ education level ☐ employment status ☐ Other (Specify:___)

   C) If *Yes*, describe how the information will be used.

   The information of race, gender, age, and racial classification will not be used in the research study.

2. **A) Indicate the degree of confidentiality.** (See the FAQ webpage for more information.)

   ☐ De-identified
   ☐ Anonymous
   ☒ Coded – Indirect
   ☐ Coded – Direct
   ☐ Data will not be confidential.

   B) If the *data will not be confidential*, explain the rationale. Not applicable.

C) If the *data will be de-identified*, explain the procedures for completing that process.

Not Applicable.

D) If *indirect or direct coding*, indicate

- **in what format (e.g., paper, or electronic files) will the data be kept,**
- **where will the data will be stored,**
- **how long will the data will be stored,**
- **and how the data will be destroyed.**

Once data is collected it will be stored electronically as on the researcher personal computer as data file. The data will be retained on researcher's personal computer for the timeframe until final defense is complete [Tentatively fall 2022]. The electronic data file will be deleted once final defense is complete.

E) If *indirect or direct coding*, explain why it is necessary to keep indirect or direct identifiers.

That indirect coding is necessary because the students' progression through the degree program need to be tracked across multiple semesters.

F) If *indirect or direct coding*, identify who will have access to the coding and/or individually identifiable information.

Principal Investigator will have access to indirect coding.

SECTION J: ELECTRONIC SIGNATURES

The Research Team, including the Principal Investigator, Co-Principal Investigator, and other personnel, must read and comply with all Columbus State University Institutional Review Board (IRB) Policies and Procedures. In addition, they must abide by all federal, state, and local laws regarding protection of human subjects in research. As the Principal and Co-Principal Investigators, if applicable, you agree to follow these governing guidelines that include, but not limited to, the following policies and procedures. Failure to follow these guidelines may result in delays with the processing of this application and/or future applications.

1. Complete the Human Subjects Research training and submit a training certificate as an addendum.
2. Merge all addendums into one file.
3. Begin recruitment and data collection after receiving notification of final IRB approval.
4. Obtain approval from the IRB prior to instituting any change in project protocol.
5. Obtain informed consent from all participants, and legal parent or guardian, prior to commencing this research study when applicable.

6. Maintain copies of all records and signed consent forms, if required, from each participant for the duration of the project.
7. Notify the IRB regarding any adverse events, unexpected problems, or incidents that involve risks to participants and/or others.
8. Submit the Final Report Form within 12 months from the date of IRB approval using the template available on the CSU IRB website (if applicable).

If this research study is a student-led project, the Co-Principal Investigator, the student's faculty supervisor, must agree to complete the following tasks prior to the submission of the Human Research Application:

- Collaborate with the student to develop the research study.
- Read and review this application with its addendums for content and clarity.
- Guide and oversee the procedures outlined in this application.
- Ensure that all the Research Team responsibilities are fulfilled.

Principal Investigator's Email Address as an electronic signature. (For authentication purposes, the email address must match the email address on file with Columbus State University.)

Email Address: chester_detrenyona@columbusstate.edu Date: 05-16-2022

Co-Principal Investigator's Email Address as an electronic signature. (For authentication purposes, the email address must match the email address on file with Columbus State University.)

Email Address: acharya_parul@columbusstate.edu Date: 05-16-2022