

Duquesne University

Duquesne Scholarship Collection

Electronic Theses and Dissertations

Summer 8-5-2023

EQUITY OF ACCESS TO HIGHER EDUCATION: AN EXAMINATION OF RACIAL MINORITY AND SOCIOECONOMIC STATUS STUDENT ENROLLMENT TRENDS

Jason Stack

Follow this and additional works at: <https://dsc.duq.edu/etd>



Part of the [Educational Leadership Commons](#), and the [Higher Education Commons](#)

Recommended Citation

Stack, J. (2023). EQUITY OF ACCESS TO HIGHER EDUCATION: AN EXAMINATION OF RACIAL MINORITY AND SOCIOECONOMIC STATUS STUDENT ENROLLMENT TRENDS (Doctoral dissertation, Duquesne University). Retrieved from <https://dsc.duq.edu/etd/2171>

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection. For more information, please contact beharyr@duq.edu.

EQUITY OF ACCESS TO HIGHER EDUCATION: AN EXAMINATION OF RACIAL
MINORITY AND SOCIOECONOMIC STATUS STUDENT ENROLLMENT TRENDS

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Education (Ed.D.)

By

Jason A. Stack

August 2023

Copyright by

Jason A. Stack

2023

EQUITY OF ACCESS TO HIGHER EDUCATION: AN EXAMINATION OF RACIAL
MINORITY AND SOCIOECONOMIC STATUS STUDENT ENROLLMENT TRENDS

By

Jason A. Stack

Approved June 23, 2023

Dr. Gibbs Kanyongo
Professor
(Committee Chair)

Amy Olson, Ph.D.
Associate Professor
(Committee Member)

Tara Abbott, Ph.D.
School of Education
Clinical Assistant Professor
(Committee Member)

Christy Mikolaj, Ed.D.
Adjunct Professor
(Committee Member)

Gretchen Givens Generett, Ph.D.
Dean, School of Education
Professor

Rick McCown, Ph.D.
Chair, Department of Educational
Foundations and Leadership

ABSTRACT

EQUITY OF ACCESS TO HIGHER EDUCATION: AN EXAMINATION OF RACIAL MINORITY AND SOCIOECONOMIC STATUS STUDENT ENROLLMENT TRENDS

By

Jason A. Stack

August 2023

Dissertation supervised by Dr. Gibbs Kanyongo

The purpose of this quantitative research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. The study concentrated on two student populations over a five-year period at a four-year private institution in western Pennsylvania, enrolled and accepted but not enrolled students of various racial minorities and socioeconomic backgrounds. The research was informed by the theoretical frameworks of Human Capital Theory, Meritocracy Theory, and Net Price Theory. The research questions that guided the study were the following: What are the enrollment trends for racial minority students at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021? What are the enrollment trends for students from various socioeconomic statuses at a four-year

private higher education institution in western Pennsylvania during the period of 2017-2021?

After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021? The data collected to answer the research questions came from two public domains and an internal department at a four-year private institution in western Pennsylvania. Using descriptive statistical analysis, the data was observed and analyzed, and the emerging trends were utilized to make recommendations to higher education administrators regarding access to higher education institutions.

DEDICATION

This is dedicated to my beautiful daughters Chloe, Geana, and Willow. This should serve as evidence that any task you undertake is achievable. I wish you success in all of your future endeavors! Love, Dad!

ACKNOWLEDGEMENT

I would like to thank all of the people who have been supportive to me throughout this journey. First and foremost, my beautiful and loving wife, Bekki. You have been supportive of me since I first had this idea of pursuing a doctoral degree. I appreciate all of the love, support, and sacrifices along the journey you have made for me. I could not have done it without you.

Over the past three years, my daughters Chloe, Geana, and Willow have not fully comprehended what I have been doing and why I have been attending school. You have been helpful to me throughout this entire procedure. I deplore the time we lost together during this voyage, but I value our time together even more now.

To my cohort 2023 colleagues who have been therapeutic and wonderful for venting and complaining. You have all become wonderful companions, and I appreciate everyone's mutual support. Beginning in 2020, we were all strangers who have since become close companions and scholars. I could not have had the same experience without all of your support. Thank you!

Lastly, I would like to thank my committee for going above and beyond to assist me cross the finish line. Thank you, Dr. Kanyongo, for your leadership and motivation. Without your encouragement and positive motivation, I would not have completed this study on time. Thank you, Dr. Abbott, for exploring the data with me and assisting me in understanding it. Thank you, Dr. Olson, for taking time out of your personal schedule to listen to my research and offer suggestions for improvement. Dr. Mikolaj, I appreciate your extreme positivity, support, and willingness to listen throughout this process. I am forever grateful for all of your support!

TABLE OF CONTENTS

	Page
Abstract.....	iv
Dedication.....	vi
Acknowledgement	vii
Chapter 1 Introduction	1
Background of Study.....	3
Problem Statement.....	5
Purpose Statement	6
Theoretical Framework.....	7
Definition of Terms	12
Anticipated Limitations	15
Summary and Organization of the Remainder of the Study	16
Chapter 2 Literature Review.....	18
Context to the Problem	18
The Benefits of Higher Education.....	20
Meritocracy in Higher Education	27
Factors Causing Rising Tuition Costs	31
Chapter 3 Methods.....	54

Introduction	54
Statement of the Problem	54
Research Methods.....	55
Research Questions.....	57
Research Site	57
Data Sources	58
Population.....	58
Data Analysis.....	59
Ethical Consideration	59
Summary.....	59
Chapter 4 Findings	61
Introduction	61
Enrollment	62
Research Questions.....	68
Research Question One	69
Research Question Two.....	77
Research Question Three.....	83
Summary.....	87
Chapter 5 Conclusion.....	88
Discussion of the Findings	88

Recommendations and Implications for Educational Leadership for Social Justice	96
Limitations.....	106
Implications For Your Leadership Agenda and Growth	109
References.....	114

Chapter 1 Introduction

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. Throughout this Chapter One enrollment trends will be examined in regard to access to higher education, which will be outlined along with the local context and my own professional experiences that support this study.

There has been a steady trend in the United States of rising tuition costs for colleges and universities over the past several years. Since 1995, the average sticker price of a college education has increased dramatically but unevenly by 10 to 25 percent (depending on sector and time period) every five years (Goldrick-Rab & Kendall, 2017). Higher education has become less affordable making access to higher education less attainable to middle- and low-income students due to rising tuition costs. Years ago, access and affordability of higher education was a common focus of many universities in the United States. In today's higher education landscape, universities have been focused on increasing tuition for net-revenue profits and not focused on providing education for everyone. According to Jaquette et. al (2016), "rather than recruiting heavily in low- income high schools with large populations of URM (underrepresented racial minority) students, institutions often focus recruiting efforts on affluent high schools, both within and outside of their own state, with large populations of students who are high-achieving and/or willing to pay high tuition prices" (p. 642). This has caused a chain of events that has provided barriers for some student populations to access and afford higher education. Higher education institutions have annually increased tuition to compensate for less government granted funds. Declines in non-tuition revenue have put administrators in a position to adopt unusually large

tuition increases (Hemelt and Marcotte, 2011, p. 436). As a result of less federal and state aid, universities have implemented rising tuition costs to help offset these means of revenue streams. According to Cahalan et al. (2020), “The disinvestment of state funds for public colleges and universities since the 1980s and the declining value of federal student grant aid have aided in the creation of a higher education system that is stained with inequality” (p. 8-9). The social injustice of access and affordability of higher education has been amplified by the lack of funding that higher education institutions have been receiving.

Rising tuition costs have also contributed to the student loan debt crisis in this country. The net price of tuition, fees, room, and board at a public four-year college has climbed by 68 percent since 1999-2000. The annual amount borrowed to attend college has increased over the same time period. Today, federal student loan debt exceeds \$1.54 trillion, which is more than double the amount in 2010 (Whistle, 2020). This lack of funding has helped cause the social injustice of access and affordability of higher education and increased student debt nationwide. As student debt has increased, communities have been weakened and destabilized, entrepreneurship and innovation have been discouraged, inequality has grown, and a growing chorus has questioned if in fact hard effort and skill in our nation lead to economic opportunity (Goldrick-Rab & Steinbaum, 2020). If student debt continues to grow it will not only hurt the individual students but will also cripple our economy and our society. Since the federal government guarantees the majority of these loans, all American taxpayers have an interest in whether this growing debt will eventually place them under a direct financial burden (Goldrick-Rab & Steinbaum, 2020). Rising tuition costs have ripple effects on student populations it affects and the economy in which our society functions.

Background of Study

At the turn of the last century, colleges and universities missions were focused on educating the Americans of this country. According to Jaquette et. al (2016), “In the late 1800’s, University of Michigan President James Angell committed to providing “an uncommon education for the common man” (as cited in Rudolph, 1962, p. 279). Yet in 2014, the mean family income of enrolled students at Michigan was \$200,000 which was more like the 1 percent elite than the common man (Jaquette, et.al 2016). Across the country many research universities forego students of diversity and from low socioeconomic backgrounds by focusing on elite income and academically gifted students. Black and Hispanic students made up just 5.4 percent and 6.6 percent of enrollment, respectively, in prestigious public colleges nationwide. Regrettably, these colleges have abandoned their "glorious legacy of functioning as a motor of social mobility" by focusing on rich students to fulfill institutional revenue goals (Jaquette et. al, 2016). The core focus of access to higher education and educating all Americans has fallen to the wayside for higher education institutions. Jaquette, et. al (2016) contends, “Instead, they have become “engines of inequality,” growing “disproportionately whiter and richer” even while “the number of low income and minority high school graduates in their states grow” (p. 636).

A four-year private institution in western Pennsylvania has a similar history to the University of Michigan and other research universities. The early beginnings of this four-year private institution in western Pennsylvania provided education for hundreds of poor immigrants (Rishel & Demilio, 1997) who might not otherwise have had such an opportunity. Despite the four-year private institution in western Pennsylvania’s founders’ beliefs of welcoming all and excluding none, the current modern-day campus has the same focus but with different results.

The four-year private institution in western Pennsylvania uses the “high-price/high-aid” tuition model as their main revenue source. In 2021, base price of tuition at the four-year private institution in western Pennsylvania was \$43,526 per year and the average amount of federal, state/local, and institutional grant or scholarship aid awarded was \$24,698 per year (2023). Further research is needed to determine if the current tuition model prohibits students from attending the four-year private institution in western Pennsylvania. A question that needs to be answered is whether or not the rising costs and shifts in the distribution of the burden of these increases has made higher education less affordable (Hemelt and Marcotte, 2016, p.44). If a positive correlation is determined then, the recent period of fast-rising tuition may have the effect of limiting educational attainment in the aggregate (Hemelt and Marcotte, 2016, p.44). Over the years, the four-year private institution in western Pennsylvania University has grown from its meek beginnings into an educational and economic powerhouse (Rishel & Demilio, 1997). The economic growth that the four-year private institution in western Pennsylvania has achieved, consequently, may also have alienated low socioeconomic students who were once the main focal point of the institution. This type of tuition model is not designed for the “common person,” or for all student populations, as most students will not consider attending due to the high cost.

Equity in higher education access and affordability aims for everyone to have the opportunity to build a foundation for life-long learning and subsequently, a career. The data in the 2020 Integrated Postsecondary Education Data System (IPEDS) Indicators show persisting inequality in higher education opportunity based on family income, race/ethnicity, and dependency status (Cahalan et al., 2020). In addition, the US Department of Education (2016)

reported that white students had a greater college attainment rate than black and Hispanic students, regardless of socioeconomic status. The predicted shift of a student body would suggest a change in the institution's demographics, which would result in socioeconomic disparities in access to higher education. Hence, this transition may exacerbate racial, ethnic, and socioeconomic inequality (Yu, 2019). The United States has gone from a country that emphasized accessible higher education, to a nation where educational revenue and profit margin have taken priority (Deresiewicz, 2014).

Problem Statement

Enrollment has been declining in the 21st century for most colleges and universities. In 2011, there were over 20 million college students enrolled in higher education, but has gradually been declining since, with only about 18 million in 2018 (Loper, 2021). Simultaneously, tuition costs have been increasing substantially and at an accelerated rate (Hemelt and Marcotte, 2011). If higher education administrators are attentive to this phenomenon, enrollment and affordability of education and increase tuition costs imply they are inversely proportionate. Preceding this recent consternation, analysts and policymakers were concerned that rising costs would cause prospective students to forgo college and current students to drop out (Hemelt & Marcotte, 2016). Research has shown that increased tuition costs have a ripple impact on racial minority and low socioeconomic level students.

According to Allen and Wolniak (2018), “Our findings suggest that tuition increases at public four-year institutions have negatively and significantly affect the racial/ethnic diversity of college student bodies” (p. 30). The benefits of having access to higher education and receiving a

postsecondary degree are why this particular social injustice must change. The domino effect of having a postsecondary degree has vast benefits for not only the individual who obtains the degree but also for our society to which the individual contributes to in a variety of ways. Individuals that obtain higher education also tend to have better health and live healthier lifestyles and enables people to adapt more easily to change (Ma et al., 2016). Ma et al. (2016) contends, “It also makes them more likely to take responsibility for their health and for the society in which they live, and to parent in ways that improve the prospects for their own children” (p. 9). Not having the access and ability to obtain higher education puts students at a major disadvantage and directly affects our society.

Finding an equitable approach to higher education access for all students is important. The common denominator, regardless of the cultural, socioeconomic, or historical background of the prospective students I have worked with, has been the value of an education. Students who are unable to access higher education due to exorbitant tuition costs are unable to experience the value of an education. Every student should have the ability to experience higher education if they so desire.

Purpose Statement

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. The study will be guided by the following research questions:

What are the enrollment trends for racial minority students at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

What are the enrollment trends for students from various SES at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

Theoretical Framework

This study will be supported by three theoretical frameworks: Human Capital Theory, Net Price Theory and Meritocracy Theory. These three theoretical perspectives intersect and guide this researcher's approach and understanding of the problem of practice.

Human Capital Theory asserts that education is a necessity for a professional career and a means to support oneself financially and subsequently, a higher quality of life. The notion of human capital refers to the means of production, through which increased investment generates additional output. Human capital is replaceable, but cannot be transferred like land, labor, or permanent capital (George-Jackson et al., 2012). Obtaining a higher education is an investment in one's future. George-Jackson et al. maintains (2012), "Within education, this theory suggests that a college degree increases the earning potential of an individual over their life course.

Human capital theory has been used to explore how differences in opportunities within higher education are contingent on access to financial resources, including financial aid” (p. 5).

Net Price Theory in higher education refers to the student “shopping” for the best net price in tuition amongst higher education institutions. Many institutions use the “high-price/high-aid” as their tuition model. In this model, institutions will increase their overall tuition prices while also offering more institutional aid. Private universities increase their "sticker price" and then balance the tuition increase with substantial institutional subsidies in the form of merit-, need-, or trait-based scholarships (Rine, 2016). Students who are affected by high prices experience price sensitivity and are less likely to enroll. Historically, racial minority students and low socioeconomic students are the students who are price sensitive (Allen & Wolniak, 2018).

Higher education can be viewed through the lens of Human Capital Theory if it is understood that higher education is a proven commodity that offers the key to a successful profession or desired outcome. With the knowledge that a higher education degree is in high-demand due to the desired career outcomes, university administrators believe they can charge a higher price for a product in high-demand. That is, their belief is to set a higher price since the demand for a higher education degree is high. In response to the student populations price sensitivity, the administrators will offer a tuition discount by offering a type of merit-based scholarship that will result in a lower net price of tuition. The administrators use Net Price Theory as they believe that a more attractive net price will enroll students from all different populations. People prefer to feel that they are receiving a discount and did not pay "full price" for a prominent private institution, therefore administrators believe substantial tuition cuts will attract more students. The “high-price/high-aid” tuition price setting model does exactly the

opposite as students from middle-and low-socioeconomic statuses are the most price sensitive and will forego college because they cannot afford it even with the tuition discount applied.

The stakeholders that this study focuses on are undergraduate students enrolled at a four-year private institution in western Pennsylvania over the past five years (2017-2021) and undergraduate students accepted to a four-year private institution in western Pennsylvania but did not enroll from the past five years (2017-2021). Through the admissions process, these two groups of stakeholders both start out in the same group as accepted students but eventually make decisions that are opposite from one another which separates them into these two groups. Net-Price Theory and Human Capital Theory intersects and applies to both groups of student stakeholders. Enrolled students were content with the net price because they either were not sensitive to the price, or could afford it, or they were pleased to be receiving a discount from the total cost of tuition and were “getting a deal” to attend a prestigious four-year private institution in western Pennsylvania that will help them provide a future career. While the accepted students who did not attend were more price sensitive to the net price and could not afford it and decided to enroll at another university that was more affordable which still allowed them to pursue the proven commodity of higher education, or they did not enroll at any institution due to tuition costs. Human Capital Theory and Net Price Theory work together in preventing students of racial minority and middle- and low-socioeconomic backgrounds from experiencing a proven commodity.

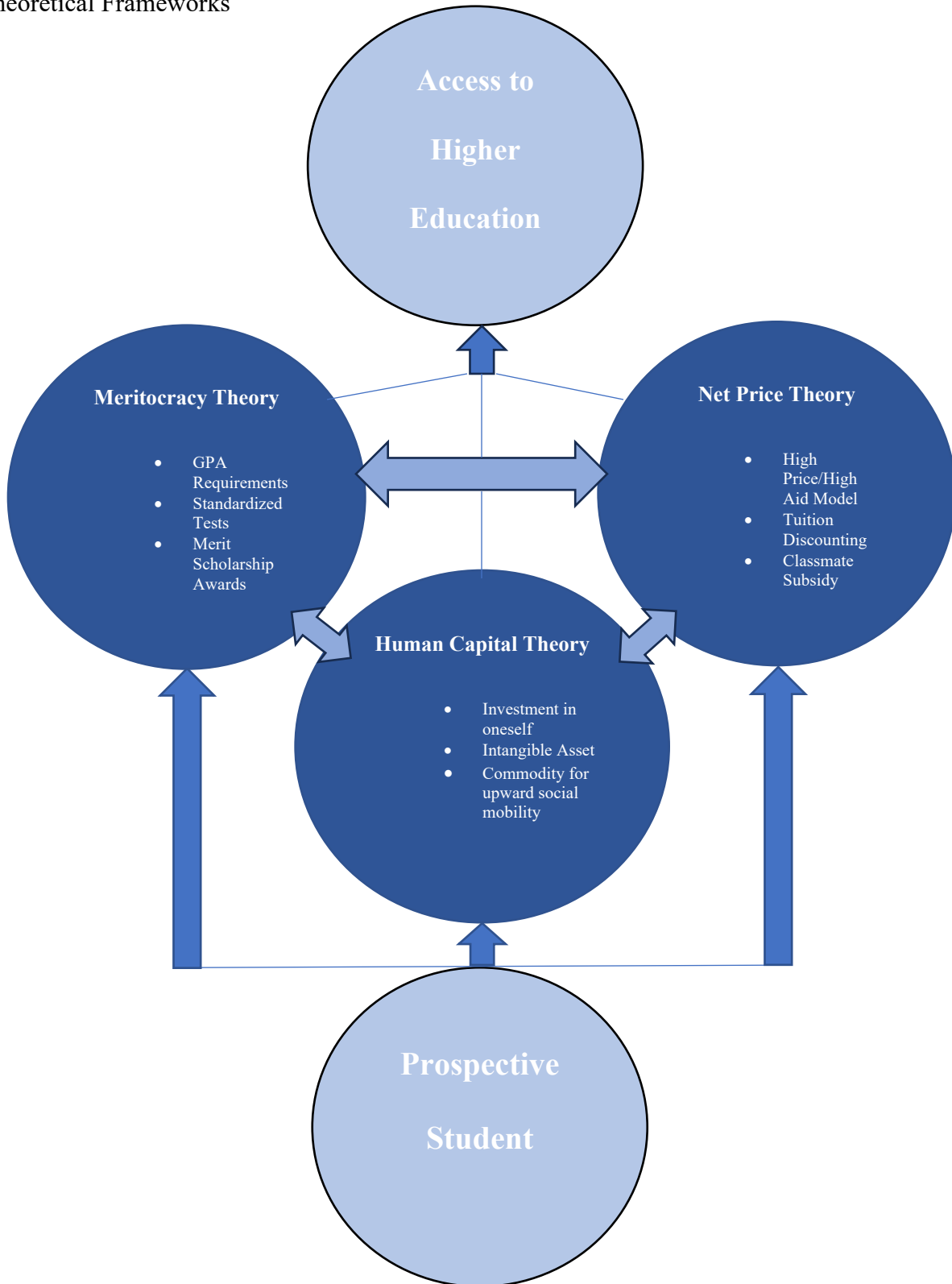
Meritocracy Theory in higher education refers to institutions as gatekeepers for admittance into their respective colleges and universities. According to Liu (2011), “In a meritocracy, social status becomes increasingly dependent upon an individual's level of

education (Moore 2004). As Bell (1973) noted, colleges and universities that once reflected the status system of society are now the "gatekeepers" of class position and access to them determines the future stratification of society" (p.384). Meritocracy in higher education rewards those for higher academic standards. Institutions will admit students with higher GPAs and standardized test scores and will entice the strongest academic students with larger merit scholarship awards with the intent to recruit a stronger academic profile student population. On the surface, a meritocracy seems like the fairest way to admit students – award those on accomplishments or merit. Once one takes a deeper dive into the higher education system of merit, a different picture of inequity will be painted rather than the fair equitable system expected. Rich parents spend enormous sums of money on educating their children, on getting their children into prestigious kindergartens and high schools, on coaches and tutors and music teachers, and this means the children of rich people simply do better on the merits (Illing, 2019). Conversely, students of low income and poor neighborhoods do not have the same advantages and resources because of the lack of funding provided to the school districts that they attend. Less resources provided by the schools effects the educational opportunities of these students and does not prepare them as well as others for attending a higher education institution (Liu, 2011). Higher education institutions show no disparity among students from different backgrounds while recruiting to fill their incoming classes. These institutions are recruiting students and using the same admissions criteria among all student populations to fill “seats” (Liu, 2011). These underprepared students are competing with the richer and more prepared academically students. This is a major disadvantage for students that come from low-income

families and school districts. And so, the big problem is that meritocracy favors the rich and elite.

Human Capital Theory and Meritocracy Theory work together in higher education and explain why education is so important and how the American Dream narrative is achieved through higher education. The human capital element of higher education is a needed commodity for upward social mobility and success. Higher education is not an on-demand product or service, rather it takes hard work, time, and diligence to receive a postsecondary degree but those individuals who obtain a higher education are rewarded with a career that provides them upward social mobility. The human capital component of a needed commodity and the meritocratic component of “hard work equals reward” factor are how these two theories work together to explain the importance of higher education and postsecondary degrees.

Theoretical Frameworks



Definition of Terms

Accepted Not Enrolled (ANE) -Students that have been accepted to the institution but have decided to enroll at another institution.

Access to Higher Education – For the purpose of this study, access to higher education is defined as the ability for a student to enroll into a higher education institution. A student may be accepted to an institution but cannot enroll and have access to higher education until they have obtained means to finance their education. Access to higher education is granted once a student has acquired admittance and financial means to pay for postsecondary education.

Classmate Subsidy – The phenomenon that results when lower-rated applicants are required to pay a higher tuition rate so that higher-rated applicants can receive a tuition discount in the form of an unfunded institutional grant.

Enrolled Students – Students that have been accepted and enrolled in the institution.

High-price/High-aid Tuition Model - The practice of setting a high tuition sticker price and then offering a large discount in the form of institutional aid.

Low-Income Student – The U.S. Department of Education defines "low-income individual" as an individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount (2023). Low-income students are those who come from homes with yearly incomes in the bottom 20 percent nationwide or less than 150 percent of the federal poverty level. The poverty limit for a household of four was established at \$30,000 as of January 2023 (2023). The poverty line varies based on the size of the family, with smaller families

having a significantly lower poverty line and bigger families requiring more money to sustain all its members, resulting in a higher poverty line (2018). For the purpose of this study, a low-income student will be defined as a student from a household income of \$30,000 or less.

Racial Minority Enrollment- Common Data Set (CDS) reports the following racial minority student populations: Hispanic/Latino, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, Two or more races, Race and ethnicity unknown and Nonresident alien. CDS uses the U.S. Census Bureau format for racial and ethnicity reporting (Bureau, 2020). For the purpose of this study, racial minority enrollment will be defined as Hispanic/Latino, Black or African American, Asian, Two or more races and Nonresident alien.

Socioeconomic Status – The American Psychological Association (APA) Dictionary of Psychology defines socioeconomic status as the position of an individual or group on the socioeconomic scale, which is determined by a combination of social and economic factors such as income, amount and kind of education, type and prestige of occupation, place of residence, and—in some societies or parts of society—ethnic origin or religious background (APA.org, 2022).

Sticker Price – The publicly advertised retail or asking price for a good or service, often used as a starting point for negotiations. A college or university’s published tuition rate is its sticker price.

Tuition Discounting - The practice of offering a discount in the form of institutional aid such as a merit-based scholarship.

Tuition Reset – The practice of a modification of pricing, typically a reduction, in the published tuition price of an institution.

Anticipated Limitations

The anticipated limitations in this study are the many variables that are part of the decision-making process when deciding on what college to attend that may not be reflected in accepted vs enrolled data results. These variables include and are not limited to are the location and proximity from home, religion, academic reputation, relatives or alumni, athletic recruitment and seeking change from high school experience (Loper, 2021). The student populations of accepted not enrolled and the enrolled will be compared over a five-year period to tuition costs and racial and household income data. The data may illustrate a trend of tuition costs and racial and household incomes influencing the student populations in inverse directions. These results may not provide the most accurate reasons for the decision made by these student populations. Many other decision-making variables may be present and may not be reflected in the quantitative data results.

The data being collected for this study was collected during the period of 2017 through 2021. The COVID-19 pandemic occurred during the years of 2020 through 2021 and may have affected the enrollment data from that time period. The COVID-19 pandemic has prompted a rise in unemployment rates. During prior economic downturns, rises in unemployment rates led to increases in enrollment at postsecondary institutions. Contrary to past economic patterns, the

unusual nature of the pandemic has resulted in a significant decrease in enrollment in the fall of 2020 for many higher education institutions (Kwakye et al., 2021). Issues about health and safety, online learning, and conflicting family responsibilities have been added to the personal and financial expenses of college attendance, which limit access for many prospective students. Community colleges have incurred the heaviest burden nationally and some student groups have been disproportionately affected (Kwakye et al., 2021). Nationwide data provide more detail on enrollment patterns by race. Black and Hispanic students saw the worst reductions in undergraduate enrollment in Fall 2020 (Kwakye et al., 2021). The historical underrepresentation of these populations in postsecondary enrollment and the disproportionate impact of the COVID-19 pandemic on communities of color may have a detrimental effect on their educational attainment and the data collected may reflect that. The data collected for enrollment of all student populations may be impacted by the COVID-19 pandemic during the years of 2020 through 2021.

Summary and Organization of the Remainder of the Study

In this Chapter One, rising tuition costs at higher education institutions was introduced as the problem. The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. The study will be guided by the following research questions: What are the enrollment trends for racial minority students at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

What are the enrollment trends for students from various SES at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021? After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021? Chapter two will provide a literature review that will support this study and provide an improvement study focus. The methodology used in this research will be presented in chapter three. Chapter four will present the findings that this research produces. Chapter five addresses and analyzed the overall findings and presents recommendations to higher education administrators involved with setting tuition prices for their respective institutions.

Chapter 2 Literature Review

This chapter provides a review of the literature that aligns with this research study and its research questions. First, context to the problem will be addressed speaking to the tuition costs and the enrollment of diverse student populations. The next section explains why attending and achieving a higher education is so important for students and society in general. Higher Education institutions become the “gatekeepers” for access to their respective institutions and ultimately to careers. Obtaining a postsecondary education has become very expensive over the 21st century which has caused affordability issues for various student populations. An explanation of the rising tuition costs will be addressed outlining the reasons why tuition has become so expensive in the current higher education climate. Finally, an explanation of how the results of these tuition policies have affected different student populations.

Context to the Problem

This section will provide context to the tuition costs and coinciding enrollment trends at higher education institutions. Tuition costs have been increasing substantially since the turn of the century. Subsequently, enrollment in higher education institutions has decreased in the same period (Allen & Wolniak, 2018). Recently, there has been a trend of increasing tuition prices at higher education institutions across the nation, but it has not always been that way. Large increases in tuition at universities have become common (Hemelt & Marcotte, 2016). According to Hemelt and Marcotte (2011), “tuition has continued to rise, and by a lot” (p.438). This researcher looks to see if there is a direct correlation between tuition cost and enrollment, specifically racial minority and low socioeconomic enrollment.

An obvious concern for researchers is whether rising tuition costs and the shift of burden have made higher education less affordable (Hemelt and Marcotte, 2016). Tuition costs have been rising substantially and the rate of increase has accelerated (Hemelt and Marcotte, 2011). According to Allen and Wolniak (2018), “Our findings suggest that tuition increases at public four-year institutions have negatively and significantly affect the racial/ethnic diversity of college student bodies” (p. 30). Every student regardless of their race, gender, or socioeconomic background, should have the ability to experience higher education if they so desire. Access to higher education remains unequal in the United States, particularly for low-income, Black, and Hispanic students (Engberg & Wolniak, 2014). African American and Latino students disproportionately attend institutions associated with the worst education outcomes and poorer low-income students continue to be underrepresented in the leading colleges and universities (Glater, 2016). It is truly an uneven playing field when these students are denied higher education because of affordability.

Increased tuition costs may not only prohibit many student populations from obtaining higher education but also may negatively affect larger amounts of federal student loans creating more student debt. The escalating expenses of higher education have prompted widespread concerns about student debt and the possibility of a "bubble" in the sector (Hemelt & Marcotte, 2016). A contributing factor to the increases in tuition is less funding that schools have been receiving from state and federal aid. Poor economic conditions and dwindling general income support from state legislatures have exerted significant pressure on public college and university administrations and their governing boards to increase tuition (Hemelt & Marcotte, 2016). Many colleges and universities have adopted the “high-price/high-aid” model as a result of these

contributing factors. As stated by Rine (2016), “private colleges mark up their “sticker price” and then offset the tuition hike with sizable institutional grants that take the form of merit-based, need-based, or characteristic-based scholarships” (p.5). The practice of offering students an institutional grant is known as tuition discounting. There has been substantial research conducted on the “high-price/high-aid” tuition model from the literature that reveals a negative effect on racial minority and low socioeconomic students’ propensity to enroll in higher education institutions (Rine, 2016).

The Benefits of Higher Education

This section will explain why higher education is important for students of all cultural backgrounds to experience and achieve a degree. A postsecondary degree can prepare one for a career and provide future social mobility. Higher education institutions are the gatekeepers and act as the conduit for one to achieve a postsecondary degree. These institutions dictate what student populations they are attracting by tuition setting policies, admissions policies and recruitment strategies. The importance of higher education must first be understood before diving into the policies of postsecondary institutions.

Throughout most of recorded history, income levels were low, life expectancy was short, and there was little or no economic progress in the world. Now, we live longer, healthier, wealthier, and in some cases, happier lives. The regime change involved an increase in knowledge and its dissemination, higher levels of training and education, enhanced health, increased migration, a shift in fertility, and the demographic transition (Goldin, 2016). In short, human capital advancements were the change in our progressing society.

Education is an economic benefit because it is not easily accessible and must therefore be allocated. Economists view education as both a consumer and capital good since it provides utility (pleasure) to a consumer and acts as an input for the development of the human resources required for economic and social transformation (Almendarez, 2013). The emphasis on education as a capital good is related to the notion of human capital, which highlights the importance of skill development in productive operations. It is widely acknowledged that education produces better citizens and contributes to the general improvement of a society's level of living. Many emerging nations have made substantial investments in education because of their greater belief in its transformative power (Almendarez, 2013). The public's perception of the financial benefits of getting a higher education has unquestionably contributed to the demand for higher education in many emerging nations. It is believed that improving educational access and opportunity boosts economic growth (Almendarez, 2013). A nation's economic prosperity and ability to function are contingent on its physical and human capital stock. Physical capital has generally been the focus of economic study, whereas elements influencing the enhancement of human skills and ability figure increasingly in social and behavioral sciences research. Human capital is, in general, the investment that people make in themselves to increase their economic production (Almendarez, 2013).

If it is established that having a higher education is important, or a needed commodity, than it can be viewed through the lens of human capital theory. According to George-Jackson et al. (2012), "Human capital theory relates to the means of production, by which additional investment produces extra output. Human capital is interchangeable, but not transferable like land, labor, or fixed capital" (p. 5). In a modern society that is always looking for instant

gratification with on-demand options in virtually all aspects of life, higher education is the inverse on-demand option. Obtaining a higher education is an investment in one's future.

Education is an intangible asset that over time becomes a tangible asset.

Blundell et al. (1999) reports:

“Human capital investments involve an initial cost (tuition and training course fees, forgone earnings while at school and reduced wages and productivity during the training period) which the individual or firm hopes to gain a return on in the future (for example, through increased earnings or higher firm productivity)” (p. 2).

Human Capital in higher education is the investment that one pays in oneself for a better future. Within the field of education, this hypothesis posits that a college degree boosts an individual's lifetime earning potential (George-Jackson et al., 2012). Human capital theory is based on the notion that formal education is highly instrumental and important for enhancing a population's productive potential. Theorists contend, in brief, that an educated population is a productive population. Human capital theory highlights how education promotes worker productivity and efficiency by expanding the cognitive stock of economically valuable human potential, which is the result of intrinsic abilities and investment in people (Almendarez, 2013). The provision of formal education is viewed as an investment in human capital, which proponents of the notion have deemed to be at least as valuable as physical capital (Almendarez, 2013). Human capital theory is the foundational theoretical framework for why it is so important to obtain a higher education and the possibility of future social mobility for middle-and low-socioeconomic students by gaining access to higher education.

A higher education degree can be the key to upward social mobility and a fruitful career. Conversely, not having a higher education degree puts one at a severe disadvantage.

Ma's et al. (2016) report found the following:

A college education opens the door to many opportunities that would not otherwise be available to most individuals. Adults with postsecondary credentials are more likely to be employed and to earn more than others. Many occupations are open only to those with specific degrees or certificates. Higher levels of education correspond to more access to health care and to retirement plans; more educated people are more likely to engage in healthy behaviors, to be active and engaged citizens, and to be in positions to provide better opportunities for their children (p. 7).

Along with the monetary benefits a higher education provides, there are also many external social benefits such as new and adapted ideas vital to technical change, democratization, lower crime rate, better health, and local community support for better environment (McMahon, 2021). Most people only consider the individual long-term financial aspects of having access to higher education and not the external societal benefits that highly educated citizens provide.

As far as technical change goes, advanced university graduates are a major driver generating new ideas. Graduates with Doctoral or Masters' degrees have contributed technical change by working with complex technologies. There are others without advanced degrees who have also contributed to technical innovations such as Bill Gates, Mark Zuckerberg, and the wright brothers, though most have some level of higher education (McMahon, 2021). Jobs that require less education, such as jobs of labor, are no longer in high demand. Millions of people

with inadequate skills, such as high school graduates or those with less education, continue to be displaced by automation. According to McMahon (2021), “There has been shrinkage of manufacturing employment, no more elevator or telephone operators, and fewer workers in agriculture, mining, typing pools, retailing, and elsewhere. These are fields where the number of jobs will never return” (p 426). 64 percent of the US population, with high school skills and knowledge, real earning power has been kept at the same level of earning power since 1980. On the contrary, in the same timeframe the earnings of college graduates have risen 49 percent (McMahon, 2021). The unemployment rate for college grads remains low, and earnings remain higher, in relation to those with high school or less according to the Bureau of Labor Statistics (2021). McMahon (2021) contends, “This failure of human capital skills and knowledge to keep up with technology due to insufficient education and continuing automation contributes to inequality and dissatisfaction” (p. 421) This strongly suggests that expanding access to higher education degrees through lower tuition and more lifelong learning would reduce inequality and poverty while also increasing economic growth (McMahon, 2021).

Another social benefit that a higher education degree provides is democratization. A higher education is more likely to provide a graduate with a democratic outlook and lifestyle. According to McMahon (2021), “college graduates are more likely to support a free press and a viable opposition, to vote, to be more tolerant, to contribute to democratic institutions such as Congress, state Legislatures, local boards and commissions, and to hold leading roles in the civil service” (p. 400). Other social benefits related to democratization are civil liberties and political stability. Higher Education institutions train lawyers and judges which helps improve the justice system. College graduates serve on juries that help enforce the judicial system and the law of the

land (McMahon, 2021). Higher education helps promote democratization and pushes democratic advances with highly educated citizens.

Individuals that obtain higher education also tend to have better health and live healthier lifestyles and enables people to adapt more easily to change. Ma et al. (2016) reports, “The proportion of individuals with at least a bachelor’s degree who reported exercising vigorously was twice the rate for individuals with a high school diploma (58 percent vs. 29 percent)” (p. 37). These individuals are more likely to be healthier and take an active approach for their own health and for the society they live in. College graduates also help to contribute to lower public health and welfare costs at all levels of government (McMahon, 2021). They also parent in ways that improve future prospects for their children as well (Ma et al., 2016). Fertility rates are also affected by highly educated individuals. Increased education contributes to lower fertility, but also to lower infant mortality and longer life expectancy (McMahon, 2021). Overall, individuals with higher education degrees are much healthier than the non-educated citizens.

A higher education degree increases the human capital level in many cities and suburban areas as well. Those with a high level of education are more inclined to fund museums, parks, orchestras, and theatre. Similarly, educated citizens may utilize consumer services such as restaurants, coffee shops, and bars that customers value (Winters, 2011). Those with greater education are more inclined to perceive society through the prism of social justice than those with less education. They are also more likely to be politically engaged, which may lead to the election of better government leaders and the development of cities with low pollution and crime rates. Moreover, educated individuals are less prone to commit crimes and more tolerant of

others who are different from themselves. (Winters, 2011). Reductions in murder rates, other crime rates, and prison costs have been shown to follow higher enrollment rates in 2-year community college programs (McMahon, 2021). Higher education provides a more civilized, safe and advanced society for one another.

The benefits of having access to higher education and receiving a postsecondary degree outweighs the inverse option of not obtaining a postsecondary education. During economic downturns, it is extremely vital for individuals to pursue a higher education, as it leads to greater wages and decreased unemployment risks. Non-college-bound high school graduates from disadvantaged socioeconomic origins earn around three times less than those who pursue professional or advanced degrees (Engberg & Wolniak, 2014). The domino effect of having a postsecondary degree has vast benefits for not only the individual who obtains the degree but also for the society to which the individual contributes to in a variety of ways. People with higher education earn more, pay more in taxes, and are more likely to be employed than those with less education. College education raises the likelihood that people will climb the socioeconomic ladder and decreases their likelihood of relying on public assistance (Ma et al., 2016). Taxpayers benefit by having citizens off unemployment and contributing to society by working. The community that contains tax paying citizens also benefits as highly educated citizens pay larger amounts of taxes to contribute to the society, they reside in. The typical college graduate is estimated to pay \$3,824 more in Federal and state income, and sales taxes annually than the typical high school graduate (McMahon, 2021). Higher education promotes a healthier economy for society as highly individuals pay more into the system rather than receive more.

Not having the access and ability to obtain higher education puts students at a major disadvantage. If postsecondary education is necessary to obtain work that pays a living wage, then all individuals, regardless of family income, parents' education, socioeconomic status, or other demographic characteristics, should have equal opportunity to participate, complete, and benefit (Cahalan, 2020). Students from all cultural backgrounds should be granted access to the necessity of higher education so that they may provide a better life for themselves.

Meritocracy in Higher Education

To obtain a prosperous career and subsequently a better lifestyle of living, many career paths require a postsecondary degree from a higher education institution. Consequently, these institutions hold the preverbal “key” to the future for these students and serve as “gatekeepers” to their careers. Meritocracy Theory can be applied to higher education institutions and their capacity to decide who is admitted into their prestigious academic establishments. According to Liu (2013), “Meritocracy exists as a powerful ideology because it represents a type of social selection that, at least nominally, transcends ascriptive boundaries, such as class, gender, ethnicity and nationality, and where there is a positive association between merit and commonly desired opportunities and rewards” (p. 869). To analyze Meritocracy Theory in higher education, the definition of meritocracy must first be established and applied. At the root of Meritocracy Theory is merit. What is merit? According to Alvarado (2010), “Merit is generally defined as a combination of factors including “innate abilities, working hard, having the right attitude, and having high moral character and integrity” (p.12). These qualities are the basis of a what a meritocracy is made of. Alvarado (2010) maintains, “If a person possesses these qualities and

works hard, they will be successful. Americans not only tend to think [meritocracy] is how the system should work, but most Americans also think that is how the system does work” (p.12). Meritocracy is woven into the fabric of our American culture. For decades the term “American Dream” has been in the forefront of American culture and is an ideology that is held high amongst our western culture. Americans uphold this ideology that all should abide by and strive to obtain. Meritocracy provides a solution to the question of who and how individuals accomplish the American Dream. America, according to the American Dream ideology, is a land of limitless opportunities where individuals may achieve success to the extent that their merit enables (Alvarado, 2010). On the surface, a system that rewards people on their merits seems like a fair and just system to abide by. Meritocracy is a master narrative in our American culture and is generally seen as a positive. Generett and Olson acknowledge (2020), “As a master narrative, meritocracy advances the belief that those who are successful in society (and on a smaller scale, in schools) have “earned” their success through hard work and judicious application of their talents (i.e., through their own merit)” (p. 399). Most people believe in a meritocratic system because they have been taught their entire life to work hard and you will get rewarded. In the views of Americans, hard work and effort is an essential component of the formula for success. According to national surveys, hard work and effort constantly rates as one of the top three criteria essential for success, typically rotating with education and knowing the right people as its closest competitors (Alvarado, 2010). Viewing higher education through a meritocratic lens, one will see the “hard work equals reward” narrative very clearly. It is at the root of the American psyche, if you work hard to achieve a postsecondary degree, you will be rewarded.

Higher education institutions are the gatekeepers to living a comfortable life and experiencing upward social mobility. A college education may not ensure access into the middle class and beyond, but those without a degree are increasingly precluded from doing so. As a result, education remains a route to economic prosperity, but not without major impediments along the way (Hardy & Marcotte, 2020). To encounter a successful career, you must work hard and continue to get educated which will lead to success and will result in experiencing the American Dream. Americans wish for the educational system to facilitate the transformation of the American Dream into reality (Alvarado, 2010). It is understood by most Americans that the key to a successful career and life is through obtaining a postsecondary education. As the “gatekeepers” to the American Dream, higher education institutions hold the key to student’s future careers and lifestyles. According to Alvarado (2010), “Just a decade ago, a high school education was enough to succeed in the job market and going to college would make a person competitive. Today, a college education is required in order to be considered a competitive candidate. Higher education is now understood as a way to realize the American Dream” (p. 14).

Institutions of higher education provide preference to meritorious students while acting as "gatekeepers" to a prosperous future. The postsecondary admissions process lacks equity of access to higher education when seen from a meritocratic lens. The system is favorable to those with more qualities, and as a result, it is not dispersed equitably throughout all student populations. Those who can define "merit" will nearly always have more of it, and those with better cultural, economic, and social advantages will typically be able to assure that the educational system considers their children to be more worthy (Mijs, 2018). Even though Ivy League colleges have gotten more inclusive over time, particularly in terms of ethnic diversity,

the socioeconomically wealthy continue to be grossly overrepresented. 15 percent of today's Harvard University freshman report an annual household income between \$250,000 and \$500,000, while 14 percent come from families earning above \$500,000 annually (Mijs, 2018). This positions these students in the top five and top one percent of the U.S. income distribution, respectively, indicating that offspring of the (ultra) rich attend Harvard at rates three and fourteen times higher than would be expected if family income and Harvard admission were linked (Mijs, 2018). People have unequal starting positions like these upper-class rich Harvard students and students of low-income households. It matters which family you are born into, as well as your attractiveness, intelligence, and physical strength. However, none of these awards are meritocratically deserved (Mijs, 2018). The higher education meritocratic system favors the already advantaged and privileged upper class and is not a proponent of social justice.

The flip side of the meritocratic award, received by those who work hard and accomplish well, reflects the belief that the person is responsible for his or her failures, not society (Mijs, 2018). The opposite of reward, or winner, is failure in this meritocratic system. Those who are not awarded access to higher education are branded a failure and it is their own personal fault for failing. These people are thought to have “not worked hard enough” and that is why they were not rewarded. Mijs (2018) posits, “Recognizing success necessarily implies too that we recognize failure” (p.23). Humans tend to accept inequalities as warranted, which enables them to preserve their perception that they live in a just society without addressing the inequalities (Mijs, 2018). This disposition is justified by meritocracy and extended to a national societal view. Meritocracy Theory promotes the illusion of manageable success and legitimizes failure on a moral level, adding insult to injury. In addition, societal institutions significantly distort the

meritocratic process by increasing inequalities rather than establishing the level playing field desired by policymakers (Mija, 2018). Meritocracy emphasizes our individual responsibility to work diligently to create our own future. Promoting the illusion of Meritocracy therefore entails not only that people are given false optimism, but also that it legitimizes societal inequalities as justly deserved, and misfortune is transformed into personal failure (Mija, 2018). Social issues can immediately manifest as psychological dispositions, such as guilt, anxiety, conflict, and neuroses as a result of these rejections (Mija, 2018). The ramifications on those that are deemed “failures” in a meritocratic higher education system can cause psychological distress. According to Mija (2018), “Some research suggests a ‘palliative effect’ of meritocratic beliefs on those who lose out to the extent that those beliefs foster a sense of control over future outcomes” (p. 29). Higher education institutions promote the reward while simultaneously ignoring the failure of Meritocracy Theory.

Factors Causing Rising Tuition Costs

This section will explain the reasons why tuition costs at higher education institutions have risen rapidly over the years. A combination of decreased funding from federal and state entities and higher education institutions’ pursuit of prestigious rankings have been the main reasons for the increase of tuition costs. At the root of this issue is the neoliberalism paradigm that society has transitioned to over the years. As a result of neoliberalism, colleges and universities have had to increase tuition prices to make up for lost revenue sources from federal and state funding. Increasing tuition costs have also helped with the prestigious rankings that help with recruiting future student populations. Institutions are specific and intentional in

targeting the student populations they are recruiting by awarding larger merit scholarship award amounts to high academic profile students, which in turn supports a higher institutional ranking for the institution. These rising tuition costs make it more difficult for middle-and low-socioeconomic student populations to gain access to higher education institutions putting them at a disadvantage.

Higher education viewed through a neoliberalism lens reveals problems with higher education discourses that construct students as consumers, create faculty as service providers, and prioritize revenue generation (Cannella & Koro-Ljungberg, 2017). The neoliberalism paradigm was established over a seven-year period of the Reagan administration in the 1980's. Today's students are consumers because of the increasing perception of education as a private rather than public benefit, the methods by which colleges and universities are supported, and the "marketization" of higher education (Mintz, 2021). This circumstance has contributed to tuition hikes. Neoliberal beliefs about privatization, deregulation, and budget cuts in social services have been firmly ingrained in conventional knowledge and have influenced the public policy that has contributed to the growth of the student-as-customer model in higher education (Mintz, 2021). Neoliberalism attributes a state's success to its capacity to foster and maintain the economy. In contrast to liberalism, however, it disregards the contradiction between the right to pursue profits in a capitalist economic system and the goal of equal opportunity in a democratic society (Mintz, 2021).

Neoliberal assumptions consider a college education as a financial investment for the student and a vehicle for serving the needs and demands of the business community. Advocates

of neoliberalism also presume that colleges and universities should compete for students as customers in a marketplace and should produce highly trained workers who will enable the nation to compete successfully in a global arena (Mintz, 2021). The concept of education as a private good is something that is pursued by the individual as an investment that would bring future rewards. These investments are referred to as "human capital" by economists, with the returns accruing to the person rather than the community (Mintz, 2021). According to Mintz (2021), "Although the potential for personal gain is far from new, in the last few decades, the view of education as a private good and the neoliberal corollary that emphasizes individual responsibility and individual consequences have increasingly framed the discourse of education policy" (p.83-84).

The neoliberal ideas that the recipients of an investment should pay for it and that education is a private benefit, help to explain the preference for loans over grants and the systematic defunding of public colleges and universities (Mintz, 2021). Access to higher education is influenced by each of these views. Neoliberal ideology "produces, legitimizes, and exacerbates" poverty and inequality by redefining the public good as private. Specifically, the emphasis on individual accountability and the application of market concepts to the nonprofit sector have led to the defunding of higher education by the government (Mintz, 2021). This translates into the structural need of privileging the wealthy, since institutions increasingly rely on people who can pay the bills for their survival. Since tuition revenues are a growing proportion of institutional earnings, schools and universities attempt to entice students with greater disposable income and take as much revenue as possible from them. Mintz (2021) posits,

“American colleges and universities have become like airlines and hotels, practicing “yield management” to try to maximize the revenue generated by every seat or bed” (p. 85).

Many feel that marketing is mostly responsible for price increases. As higher education is highly regulated and heavily subsidized, it is not technically a market; yet, the United States has the most market-oriented system in the world (Mintz, 2021). Traditional colleges and universities compete for students, faculty, administrators, research funds, donations, and endowments, whereas private for-profit institutions target students who are eligible for Pell grants and/or government-subsidized loans. Several reasons have led to this level of competitiveness, and the emergence of the student as a consumer helps to understand why (Mintz, 2021). Education, which was once centered on a paradigm of knowledge acquisition, is now frequently viewed as a commodity to be exploited for competitive advantage in the job market. This has contributed to the ongoing differentiation between elite and non-elite schools, fueling the fierce competition for admission to the most prestigious colleges and universities and reflecting the high-stakes game of maximizing individual educational advantage in an era of "credential inflation" (Mintz, 2021).

In its early years, government financial assistance consisted of a range of programs aimed to accomplish national educational objectives, only a few of which were income-based. Funding was delivered in the form of grants and subsidized loans to specific schools and institutions for distribution to their students (Mintz, 2021). The 1970s brought about a change in this practice, ending a long-standing controversy over whether these funds should go to schools or directly to the beneficiary, who can then enroll anywhere he or she chooses (Mintz, 2021). In the 1990s, loans replaced grants in government financial assistance policy, reflecting the neoliberal ethos of personal responsibility and confidence in education as a private benefit (Mintz, 2021). This has

resulted in the accumulation of student loans and significant amounts of debt and represents a much greater level of privatization in the financing of public higher education than has existed for a very long time. Additionally, the reduction in per-student public funding has resulted in larger classes, more classes taught by adjuncts as opposed to regular faculty, and department budget allocations based on the number of majors (McMahon, 2021). As a result of this reduction of funding, a major shift of focus in campus culture known as "the amenity wars" began to emerge. In an effort to recruit students, schools and universities have adopted these practices to remain competitive in the enrollments market. This is no longer limited to the most affluent private colleges; it is now an essential component of all institutions (Mintz, 2021). These amenities attract students to campus. In addition, they "are essential components of institutional marketing, and recruiting techniques and facility investments influence students' enrollment decisions (Mintz, 2021)." The affluent private universities continue to invest funding for cutting-edge facilities, innovative programs, and aggressive recruitment of academic stars (Mintz, 2021). Archibald and Feldman (2010) argue convincingly that the cost of highly educated labor, not amenities, drives college costs; this is not contradictory, as the expansion of student services—however defined—is accompanied by an increase in personnel to administer these programs (Mintz, 2021). Although many people, including faculty, turn to high-level executive compensation to explain the escalating cost of a college education. The goal of both public and private sectors is to maximize the number of students who pay full tuition in order to pay the bills. In order to achieve this, schools strive to maintain (or improve) their position in the cutthroat world of academia; the drive for prestige remains intense in both sectors (Mintz, 2021). This has resulted in immense quantities being spent on merit scholarship award aid.

In recent decades, government support for state colleges and universities has decreased, and tuition has risen, to the point that the public nature of these institutions is in question (Brighouse, 2022). The average published and actual cost of tuition at these institutions for in-state students has doubled over time for public colleges and universities (Mintz, 2021). This is a result of the decline in state funding, which, consistent with the neoliberal assumption that education is a private benefit, shifted the cost of education from the collective to the individual. Hemelt and Marcotte (2016) contend, “Weak economic conditions and declining general revenue support from state legislatures have put substantial pressure on public college and university administrators and their governing boards to increase tuition” (p. 645). In 1987, state and municipal governments provided three times more funding per student than tuition did for public colleges. But as government financing decreased, tuition increased (Brighouse, 2022). In 2013, tuition accounted for the same proportion of public higher education's earnings as state and local financing. Public institutions are now only publicly accessible in name (Brighouse, 2022). The lack of funding has left a revenue gap that higher education institutions have had to find other revenue streams to offset the disparity of government aid. This has caused institutions to change their strategies and recruitment focus, in many cases. Prior research suggests that public universities have responded to long-term state and federal budget cuts by focusing on private goals of revenue generation and academic prestige rather than the public goal of access (Jaquette et. al, (2016). This strategic shift has caused many institutions to change their recruitment practices and the goal of access has taken a backseat to net revenue tuition goals and academic prestige. The focus on net tuition revenue and increased enrollment goals has prevented access to higher education institutions for all student populations but have affected specific student

populations more than others as increased tuition costs are designed to attract the affluent student populations that can financially afford them.

The institution that this study uses as its research site, a four-year private institution in western Pennsylvania, has a similar history of once providing education for the common person but in recent years has changed their strategic focus. The price of tuition at the four-year private institution in western Pennsylvania have risen rapidly over the past years. According to George-Jackson et al. (2012), “In the last two decades, the maximum amount of the Pell Grant has not kept pace with increasing tuition costs or with inflation. This is mostly attributable to the recent financial burden experienced by many public institutions due to reduced state and federal support which is often transferred to the student via tuition and fee increases” (p. 6). Many private institutions are not receiving state and federal funding and must rely on tuition costs to offset the decrease of federal funding. The combination of rising tuition costs with the minimal increases of the Pell Grant, that have plateaued, have provided a wider gap of net price that students must pay out of pocket. Subsequently, it is more difficult for low- and middle-income students to attend public colleges, which were once regarded as more affordable (George-Jackson et al., 2012). This study's research site, a four-year private institution in western Pennsylvania, has experienced tuition increases over the period of 2017-2021. This researcher is interested in examining the enrollment trends of racial minority and low socioeconomic enrollment during this period.

In addition to the lack of funds provided by government entities, higher education institutions are also looking for the elite academic profile student to support the elite tuition cost

of their school. Historically, the primary focus of institutional financial aid was to help the lower income students and provide access to higher education for these students. Jaquette et. al (2016) contends, “However, as institutions have become more concerned about rankings, enrollment managers have shifted the focus of institutional financial aid policy from helping low-income students afford the cost of attendance to attracting high achieving students” (p. 639). To achieve the academic prestige, institutions look to increase their national rankings and focus on the *U.S. News & World Report* “best colleges” annual report. Prospective students and families view this report on an annual basis and use it as a guide to help them through the college decision process. There is an enormous amount of value that prospective students put into this report and higher education institutions are explicably aware of this value and look to leverage it by acquiring favorable annual rankings (Ortagus, 2016). Colleges and universities, as well as students and their parents, take the rankings extremely seriously. Indeed, the stakes for both parties are extremely high. College aspiration among upper-middle-class families has become predicated on prestige. Some argue that because evaluating a school's educational offering is so difficult, prestige serves as a substitute for concrete measures of quality and value for students (Mintz, 2021). For schools and universities, a better ranking is indicative of the perception of students of higher caliber and greater institutional reputation (Ortagus, 2016). The overall focus of tuition revenue generation has helped increase the prestige of institutions which helps create public awareness and contributes to enrolling future prospective students with an elite prestigious brand. Ortagus (2016) maintains, “As a seemingly impartial evaluator, U.S. News & World Report appears to have high legitimacy with the public and appears to influence the admissions decisions of prospective students as well as higher education institutions” (p. 12). With so much

focus on institutional rankings and academic prestige, equity of access to higher education has been “put on the back burner” for most institutions. Regarding race and gender, a rise in ranking had a negative and statistically significant impact on the enrollment numbers of African American male and female freshman (Ortagus, 2016). This organizational shift in focus has been detrimental to students of diverse cultural backgrounds and the middle-and low-socioeconomic groups as prestigious rankings have been more important to these institutions.

Browning (2013) reported;

Smaller, less selective institutions may use financial aid packaging to meet enrollment goals. The public perceives the cost associated with this practice not only as an incentive for students to enroll but also as an investment in the future. The packages attract students, in general, and higher quality students, in particular, which, in turn, may increase the ranking, prestige, and perceived quality of the institution (p. 4).

The public’s popular belief of financial aid packages, in the form of need-based scholarships, are awarded to students of all backgrounds is no longer an accurate depiction. According to Browning (2013), “Many perceive these methods for awarding discounts as institutional altruism and as driven by the perception that institutions have a responsibility to promote access, but many institutions use tuition discounting to attract the most qualified candidates” (p. 4).

Many colleges and universities have adopted the “high-price/high-aid” tuition model because of these contributing factors. The tuition rates listed in college guides and on the websites of higher education institutions are sticker prices, but as in the automobile industry, few students pay the entire amount. When discounts are factored in, average tuition increases have

been much more modest than the official record indicates: a recent analysis indicates that the actual price paid for college tuition in the 2018–2019 academic year at private nonprofits was on average 55 percent of the published figure, with nearly 82 percent of undergraduates receiving financial aid (Mintz, 2021). The practice of offering students an institutional grant, or discount, is known as tuition discounting. Applicants with lower academic ratings pay a substantially higher tuition rate and receive less financial help (i.e., a lower discount on the sticker price) than those with higher ratings (Rine, 2016). Tuition discounting is not only used to entice students to enroll but is also used strategically to entice specific highly sought-after students to enroll. Discounting tuition allows institutions to improve the academic profile of their incoming student classes (Rine, 2016). Students are price sensitive to these tuition costs and particularly to tuition discounting and the overall net price. Net price is defined as the final selling price and is calculated by subtracting a discount from the list price. Net price theory in higher education refers to the student “shopping” for the best net price in tuition amongst higher education institutions. Price sensitivity is the tendency of individuals or groups to react unfavorably to increases in the net price of a product or service. Due to net price increases, low-income students are less likely to enroll in higher education, although the same increases have less impact on the enrollment decisions of other students (George-Jackson et al., 2012). The institution that this study uses as its research site, a four-year private institution in western Pennsylvania, uses the “high-price/high-aid” tuition model as their main revenue source. The question remains; Does this tuition model prohibit students from attending a four-year private institution in western Pennsylvania? George-Jackson et al. contends (2012), “While a high-tuition, high-aid strategy may offset the higher cost of majoring in Engineering for low-income students, Hu and Hossler

(2000) encourage us to rethink this strategy at both public and private institutions of higher education, by considering both students' willingness and ability to pay for their college degree" (p. 19). However, high-tuition, high-aid strategies are seldom implemented with adequate funding, limiting the affordability of higher education for low-income students, who are particularly susceptible to rises in postsecondary education prices (George-Jackson et al., 2012). Human capital theory and net price theory work together to help inform university administrators on how to adapt their tuition pricing strategies. Administrators know that higher education is a necessity to gain a successful career and use net price theory to markup tuition cost to present their respective institutions in a prestigious "light." According to George-Jackson et al. (2012), "Specifically, human capital theory suggests that a reduction in the net price (i.e., the sticker price minus grant aid) of college would improve access to higher education for some student populations. At the same time, low-income students are characterized as having a greater level of price sensitivity as compared to their high-income peers" (p. 5). The middle- and low-income students that are "shopping" around for institutions are price sensitive to the "sticker price" or higher prices of private institutions and forego the admissions process before they receive the institutional scholarship which lowers the overall cost, or net price. In today's world of high tuition costs, merit competes with financial need for institutional aid. According to available data, approximately forty percent of institutional grant funds at four-year public universities go to high-achieving students (Mintz, 2021). Wealthy and upper-middle-class recipients are the primary beneficiaries. The magnitude of grants tends to increase as income levels rise. In 2017, 44.5 percent of private school scholarships went to pupils in the highest income quartile (Mintz, 2021). In the early 1990s, the financial aid provided directly by colleges and universities was

responsive to both need and merit; however, in recent years, the emphasis on academic achievement has increased dramatically. Originally intended as a way to attract students in an increasingly competitive market and as a recompense for diligent work in the context of declining scholastic attainment, merit scholarship has evolved into a strategy for enhancing prestige (Mintz, 2021). This provides an unfair competitive advantage for those in the upper socioeconomic class as the higher priced tuition, aided by larger merit scholarship awards, is not an issue for these students. The price sensitivity of low-income students to changes in the total prices of higher education has a stronger negative impact on their postsecondary enrollment than that of students from other socioeconomic backgrounds (George-Jackson et al., 2012).

Critics have claimed merit-based aid, although pervasive, would favor wealthy students at the expense of those in need. Utilizing merit aid to increase enrollments has significantly contributed to the rise in tuition costs. As critics predicted, merit scholarships favor the affluent; the academic scholarships that have increased at the expense of need-based aid are primarily awarded to students with higher household incomes (Mintz, 2021). Typically, award amounts increase as income levels rise. Families in the lowest 20 percent of the income distribution receive, on average, only about \$400 more than those in the highest quintile (Mintz, 2021). This means that students from traditionally underrepresented populations in higher education are the least likely to receive merit aid. This is correlated with a decline in the proportion of low-income and African-American undergraduates at selective colleges and universities (Mintz, 2021). The “high-price/high-aid” tuition model deters middle-and low-socioeconomic students from attending colleges as the tuition “sticker shock” prevents them from applying and moving through the admissions process. In these cases, the “high-price/high-aid” tuition model is not

operating as it was intended, which is to lower the overall cost of the tuition. Early concerns about the expansion of merit-based financial aid appear to be coming true, supporting David Harvey's (2005) assertion that neoliberalism and rising inequality go hand in hand.

The failure of many public research universities (Jaquette, et.al 2016) is their concern with institutional rankings which creates pressure for universities to recruit students with academic profiles valued by ranking methodologies. Jaquette, et. al (2016) acknowledges, “Scholarship on academic capitalism shows that public universities increasingly engage in entrepreneurial revenue generating behaviors to compensate for declining state appropriations” (p. 636).

Jaquette et. al (2016) reports;

The influence of entrance exam scores on admissions decisions has increased over time (Bastedo & Jaquette, 2011), a pattern due in part to the methodologies of college ranking systems placing heavy weight on standardized test scores. The increasing institutional focus on rankings, and thus on entrance exam scores, makes it difficult for public research universities to increase enrollment from low-income and underrepresented racial minority (URM) students, particularly in state policy environments hostile to affirmative action (p. 639).

From a critical perspective, ranking methodologies themselves must be put under scrutiny as such systems are socially constructed by a set of determining factors, valued by the interests of higher education decision makers, which can be biased or discriminatory toward vulnerable

populations, along socioeconomic and racial lines. This does not suggest universities should not have criteria. However, if such criteria are consistently excluding certain groups, one must question the fairness and political implications of such a methodology within the system. In addition, these arguments move beyond the false argument that to be more inclusive would suggest “lowering standards” in ranking methodologies, which is also an unfounded assumption.

Popular rankings of college quality, such as those issued by U.S. News, Forbes, and Money, focus on a tiny portion of the nation's four-year schools, and tend to favor extremely selective institutions above those that contribute the most to student achievement (Kulkarni & Rothwell, 2022). Brookings Institute has developed a value-added approach to assessing colleges as an alternative to the traditional college ranking methodologies. This method assesses the value added by a college in relation to the economic success of its graduates, as assessed by their earnings, their employment, and their debt repayment rates (Kulkarni & Rothwell, 2022). In numerous aspects, the value-added measurements presented by Brookings Institute are an improvement over conventional ranking. They are accessible for a far greater number of postsecondary schools; they focus on the elements that best predict objectively measured student economic results; and their purpose is to isolate the influence of colleges on these outcomes, above and beyond what students' backgrounds would predict (Kulkarni & Rothwell, 2022).

The need for standardized tests (SAT/ACT) in college applications is perhaps the aspect of the admissions process that has garnered the most recent public attention and discussion. A lengthy trend line preceding the COVID-19 pandemic indicates that institutions were already

migrating away from existing standardized tests (Cai, 2020). Clearly, the pandemic has exacerbated the process.

During the COVID-19 pandemic, enrollment declined at many higher education institutions. In fall 2019 and fall 2020, undergraduate enrollment dropped by around 3.6 percent. The highest decreases (-10.1 percent) occurred at public two-year colleges (IPEDS, 2023). Compared to the previous year, enrollment decreases at public four-year colleges (-0.7 percent) and private nonprofit four-year institutions (-1.4 percent) were significantly less (IPEDS, 2023). The enrollment in undergraduate programs at proprietary universities grew by 6.4 percent (Collins et al., 2021). In response to these declines in enrollment, many higher education institutions established test-optional standardized tests as prerequisite admissions requirements during the COVID-19 pandemic. This allowed for higher education institutions to admit a broader student population than pre-pandemic admissions standards would permit. Most of these institutions have extended their test-optional admissions criteria through the Fall 2022 application cycle, and several have committed to maintaining this policy into 2023 (Shultz & Backstrom, 2021). The number of institutions committing to test-optional admissions on a permanent basis is also increasing. If this trend continues, then admissions policies will support the equity of access to higher education going forward.

Not only does the “high-price/high-aid” model help institutions offset less government funding, but it also assists with stronger institutional rankings by recruiting a stronger academic profile student population. This type of tuition model is not designed for the “common person,” or for all student populations, as most students will not consider attending due to the high cost.

First and foremost, students are likely to respond to the "sticker price" of attendance (Hemelt & Marcotte, 2011). So that students may make college decisions based on the net price they will pay, as opposed to the sticker price, marketing campaigns are undertaken to improve access to and awareness of grants (Goldrick-Rab & Kendall, 2017). These efforts are an attempt to prevent students from deciding where to attend college based on financial concerns. Even once grants are accounted for, the net price for most students remains expensive (Goldrick-Rab & Kendall, 2017). This system creates a social injustice for racial minorities and middle- and low-socioeconomic student populations by providing an unjust advantage to the prominent and wealthy student populations.

Rising Tuition Costs Policies Impact on Student Groups

The admissions process for all students, including the student stakeholder groups of accepted not enrolled and enrolled students, can be viewed through the lens of Meritocracy Theory. Once students have been accepted into higher education institutions, they receive an acceptance packet including any institutional awards, such as merit scholarships. The "high-price/high-aid" tuition model, used at many higher education institutions, sets tuition prices high and then offsets the price with scholarship amounts that discount the tuition. The net prices for these institutions, including a four-year private institution in western Pennsylvania, in most cases are extremely high and as a result make higher education unaffordable for racial minorities and middle-and low-socioeconomic students. The upper class are not price sensitive to this tuition model and are able to enroll at these institutions with no issue. This tuition setting model can also be viewed through the lens of Meritocracy Theory as the amount of merit scholarship is given as

a reward for the students with higher academic accomplishments, such as GPA and standardized test scores. The four-year private institution in western Pennsylvania has a tiering system that is applied to levels of academic achievement and awards different amounts of scholarship awards to the corresponding tier of academic achievement. This causes the meritocracy of students rewarded with a scholarship amount on their academic merits thus leading to the students believing they earned and deserved the amount of merit scholarship received. The tuition discounting or “high-price/high-aid” tuition model gives the advantage of more lucrative merit scholarship award amounts to the more “academically talented” students but does not consider the limitations that some students have in high school. Jaquette et. al (2016), “found that growth in the number of high-achieving students receiving large institutional financial aid awards was associated with a decline in the share of low-income students who enrolled” (pp. 639-640). Although it is not their fault, urban students attending urban school districts do not have access to the same resources that some rural or private school districts provide their rural or private students. College preparation and standardized test preparation, also known as college and test prep, are two services that many urban students do not experience while in high school. Compared to private high schools that hire professional college admissions counselors who can give students individualized counseling, these institutional restrictions hinder the possibility of an equal opportunity for college preparation (Liu, 2011). Conversely, students from rural or private schools have experienced the college and test preps because their school districts have the resources to provide to their student bodies or the student’s family has the financial resources to pay for these services.

Liu (2011) writes:

Students seeking to leverage their own opportunities in order to gain an edge over their peers often procure two of the sector's main activities: standardized test preparation (test prep) and private college counseling. These students tend to be from higher socioeconomic backgrounds and have the financial means and knowledge for securing these additional tactics (p. 390).

Students receiving these college and test prep services are better prepared for postsecondary education and as a result, have higher academic profiles. These students have an advantage over the middle- and low socioeconomic students who cannot afford to pay for these extra services which in turn makes them not as academically prepared and less likely to have a strong academic profile. In these tuition discounting institutions, the rich and upper socioeconomic class have an advantage over the other classes. They receive the larger amounts of merit scholarships based on their "merit" or higher academic profile. Admissions policies that disproportionately "advantage the already advantaged" also serve to undermine the ideals of meritocracy (Liu, 2011). The irony of these policies is that middle- and low-income students can benefit the most from these larger merit scholarship award amounts, which make their educations more affordable. The tuition discounting model is not meritocratic at all. The higher education institutions are more intent on enrolling the higher academic profile students to increase their national rankings for prestige. Rine (2016) explains, "The high-price/high-aid model encourages smaller private colleges to mark up their sticker prices far beyond what is necessary to cover their actual operational expenses—the higher the sticker price, the stronger the public perception of educational quality,

and the larger the average tuition discount for students” (p.13). There are at least three pessimistic and self-serving incentives influencing how schools give tuition discounts. First, schools have shifted to merit-based awards because the middle class is unwilling to pay for rising tuition and student loan debt (Browning, 2013). Second, schools are under growing pressure to provide greater financial aid to students with higher incomes in order to balance the rising cost of attendance (Browning, 2013). Thirdly, in an increasingly competitive market, universities frequently provide financial assistance packages based on merit, as opposed to need, to academically talented undergraduate students. Institutions must have sufficient resources to grant tuition discounts regardless of their rules for providing discounts (Browning, 2013). This model creates a phenomenon that is called “classmate subsidy.” Institutions give larger discounts to their desired “higher academic profile” students while the less desired students get less tuition discounts which results in the less desired paying more and subsequently paying for their desired classmates discounts. The college has basically granted a significant discount to its most attractive candidates and has compensated for the lost revenue by charging practically everyone else a higher tuition cost (Rine, 2016). Meritocracy is not only unfair in this instance, but it is also working against the middle-and low-socioeconomic students. Not only do candidates with lower ratings pay more for the same educational experience, but most are unaware that they are supporting their classmates with higher ratings, and many must use federal student loans to cover the greater tuition costs (Rine, 2016). Meritocracy is intended to be fair for everyone. Racial minority and middle-and low-socioeconomic status students that were not as fortunate to have the resources to be academically prepared for college not only receive less scholarship money but also end up paying for their higher academically prepared students

discounts and most finance these payments in student loans and go into student loan debt as a result. Meritocracy, when framed from this perspective, is not only unfair, its unjust and downright immoral.

The student loan debt crisis is a major issue in the United States today. Rising tuition costs are the main culprit for unwarranted nationwide student loan debt. The student debt crisis also prohibits the access of higher education. Middle-and lower-income students typically would not enroll in higher education institutions due to the exorbitant tuition costs and the fear of racking up huge amounts of future student debt (Hartocollis, 2020). Studies indicate that college debt has discouraged some low- and middle-income students from even attempting to attend the best college for which they are qualified, thereby lowering their future wages (Hartocollis, 2020). If they do enroll, anxiety over and measures to decrease cumulative indebtedness may negatively impact the capacity to perform well academically and take advantage of the intangible benefits of higher education (Glater, 2016). Even if students are not scared off by fear of excessive student debt, they are still put into a tough decision on whether or not to take out student loans to pay for rising tuition costs. Contrary to their better judgment, many students take out college loans not because they are assured of the financial return, but because they are certain that their and their families' life chances would suffer if they do not (Goldrick-Rab & Steinbaum, 2020). In the absence of viable alternatives to debt, families and students are compelled to just accept the conditions, even when they know better. The outcome is a deliberate normalizing of debt that portrays borrowers as "responsible" and encourages them to be "independent," penalizing them for nonpayment even when it was entirely foreseeable (Goldrick-Rab & Steinbaum, 2020). Excessive student loan debt can have a detrimental impact on a student's job choice, quality of

life, capacity to give back to their school or college and society at large, and progress toward other financial goals, such as retirement savings (Ulbrich & Kirk, 2017).

When students leave college with debt and, in many cases, without a degree, they begin at a disadvantage, suffering less financial security and greater stress than previous generations. This causes people to question the value of education for both them and others. Perhaps the most severe consequence of college unaffordability and the consequent debt is the intergenerational effects of this shift in the pricing of a crucial public asset, education (Goldrick-Rab & Steinbaum, 2020). In addition, the net price commonly rises as a student progresses through college since financial assistance is often most generous during the first year and because the sticker price typically climbs from year to year (Goldrick-Rab & Kendall, 2017). Consequently, a student who is able to afford the cost of college for the first year may have trouble moving toward graduation, as the net price of education increases with each passing year. In calculating what students must pay, however, governments choose to consider only the first sticker price and initial net price (Goldrick-Rab & Kendall, 2017). Financial aid policies are intended to help those with scarce resources to earn their degrees. However, these regulations frequently fall short, and when students have trouble paying for college, they are more likely to spend their efforts on working and earning cash rather than studying and attending classes, and they are less likely to get their degrees (Goldrick-Rab & Kendall, 2017). Except for the wealthiest Americans, paying for college is difficult for everybody. The new economics of college are defined by high college costs and insufficient grants and scholarships, and the wealth and income of today's students are insufficient to cover these costs. The job market for college students seeking employment, while

still enrolled in school, is characterized by low pay and inconvenient hours (Goldrick-Rab & Steinbaum, 2020).

Certain student populations are affected more severely by the burden of student loan debt than are other student populations. African American and Latino students disproportionately attend schools associated with the lowest education results, and rates of student loan default are much higher among African American and Latino students than among other student groups (Glater, 2016). The numbers reveal the severity of the student loan issue. The average Black student borrower owes more on their federal student loans than they initially borrowed, whether or not they graduated, twelve years after enrolling (Jimenz & Glater, 2020). The average Black borrower owes 13 percent more than what they borrowed more than a decade ago, while the average Latino borrower owes 83 percent of what they first borrowed. In comparison, the average White student owes only 60 percent of their initial debt (Jimenz & Glater, 2020). Some student populations are just unable to repay their school loans: studies have regularly shown that students of color default at a greater rate than white students, and that black undergraduates who borrow the most, frequently default (Jimenz & Glater, 2020). Sociologists Louise Seamster and Raphael Charron-Chenier coined the term "predatory inclusion" to describe this type of "process by which members of a marginalized group are provided access to a good, service, or opportunity from which they have historically been excluded, but under conditions that compromise the benefits of access (Jimenz & Glater, 2020). Student debt is presented as a prototypical example of predatory inclusion by Seamster and Charron-Chenier. Access to higher education is made possible by federal student loans, but the resulting debt undermines the benefits that such an education is intended to give (Jimenz & Glater, 2020). Due to the extent of

the racial wealth and salary inequality in the United States, a larger proportion of Black students and families must borrow, and borrow more, to finance their higher education. This issue has deteriorated over the past few decades, as tuition and fees have soared without grant help or family incomes keeping pace (Jimenz & Glater, 2020).

Chapter 3 Methods

Introduction

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. A quantitative approach for this study was selected to help examine diverse enrollment trends. The quantitative data that was used in this research was extracted from a five-year period, 2017 through 2021, from a four-year private institution in western Pennsylvania and was focused on two student populations: Enrolled students and Accepted Not Enrolled (ANE) students.

This section outlines the methods used for this study, beginning with a restatement of the problem at the focus of this research. The research site, a four-year private institution in western Pennsylvania, is described why it was ideal for this study demonstrating its student demographics and geographic location. The presentation of the research question will follow with the data collected, intended to answer the research questions.

Statement of the Problem

In this section, the problem of tuition costs increasing while enrollment has been declining and effecting students of diverse populations access to higher education is presented providing emphasis and validity to this research.

Research has shown there has been an increase in tuition costs over the past years in higher education. In the United States, concerns about the escalating cost of higher education are

pervasive. Numerous studies have documented the extent and causes of this cost increase (Hardy & Marcotte, 2020). Tuition increases have made it difficult for some student populations to attend higher education institutions due to affordability. The tuition rate in higher education influences students' decisions on enrollment, and a change in tuition will likely affect student demand for higher education (Dynarski & Scott-Clayton, 2013). According to Allen and Wolniak (2018), "Perna and others (2005) suggested that, in the face of increasing demand for higher education, colleges and universities will respond by raising the sticker price of a college education, which could potentially disproportionately reduce enrollment among students from underrepresented groups" (p. 4).

Through this study, I was able to examine enrollment trends of diverse enrollment at a four-year private institution in western Pennsylvania. The study will focus on racial minority and low socioeconomic student populations. Moreover, looking through an improvement study lens, I can give recommendations on how administrators can allow for a more diverse student population.

Research Methods

The quantitative data from this study was provided by one internal department, The Enrollment Management Group (EMG), and two external sources, The Integrated Postsecondary Education Data System (IPEDS) and The Common Data Set (CDS). The EMG is accountable for the strategy and management of all aspects of the University's enrollment. The EMG's constant objective is to meet or exceed enrollment and net revenue goals and to enroll, service, retain, and graduate the correct number, academic quality, and diversity of students who will

provide the University with the human and financial resources necessary to be competitive in the higher education marketplace and to fulfill its mission. Integrated Postsecondary Education Data System (IPEDS) is a yearly set of interconnected surveys undertaken by the United States (2020) and is part of the National Center for Education Statistics (NCES) of the U.S. Department of Education. IPEDS collects data from all colleges, universities, and technical and vocational schools that participate in federal student aid programs (2020). The Higher Education Act of 1965, as modified, mandates schools that participate in federal student assistance programs to submit information on enrollments, program completions, graduation rates, faculty and staff, finances, institutional pricing, and student financial help (2020). The College Navigator college search website and the IPEDS Data Center make these data accessible to students and parents (2020). The Common Data Set (CDS) program is a collaboration of higher education data providers and publications, including the College Board, Peterson's, and U.S. News & World Report (2022). This cooperation seeks to enhance the quality and accuracy of data given to all parties engaged in a student's transition to higher education, as well as to lessen the reporting load on data providers (2022).

The data was collected from a series of existing de-identified enrollment and financial aid and household income reports and was assessed to examine enrollment trends. This chapter presents the methodology utilized for this study. The following sections reiterate the enrollment problem which exist in higher education institutions and specifically at a four-year private institution in western Pennsylvania.

Research Questions

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. The study will be guided by the following research questions:

What are the enrollment trends for racial minority students at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

What are the enrollment trends for students from various SES at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

Research Site

The four-year private institution in western Pennsylvania is a predominantly White institution with a great reputation in the community as a reputable higher education institution. The institution's history is founded on educating the underserved and the immigrants that came to this country looking for a new start. The modern-day campus places an emphasis on historically marginalized and diverse student populations, but with varying results, educating approximately 10,000 students, of whom less than 5 percent identify as African American/Black, and more than 80 percent are White. (Loper, 2021). The lack of diverse and historically marginalized student

populations at the institution provides justification as to why this research site is ideal for this study.

Data Sources

A breakdown of the instruments and tools that were used to collect the data of this quantitative study are presented in this section, detailing specifically how the collection was completed. The essential tools used for the quantitative data collection were reports provided by Integrated Postsecondary Education Data System (IPEDS) and Common Data Set (CDS) and Enrollment Management Group (EMG). These reports included annual data from Accepted Not Enrolled (ANE) and Enrolled students' populations from a five-year period, 2017 through 2021, that indicated the institution's tuition cost, undergraduate enrollment demographics, including ethnicity, median household incomes and institutional award packages, including financial aid and merit scholarship award packages. Descriptive statistical analysis was used to analyze and reveal if there were any patterns, trends, or areas of concern with the data collected.

Population

The study utilized pre-existing data from three sources, namely IPEDS, CDS, and EMG, to examine the enrollment patterns of students from racial minority and various socioeconomic backgrounds, including those who were accepted but did not enroll (ANE).

Data Analysis

This section will explain how the collected quantitative data were analyzed in effort to understand and examine enrollment trends in racial minority student enrollment and low socioeconomic student enrollment leading to the conclusion supporting the research questions focused on this research. This study used descriptive statistical analysis to analyze the data collected. Descriptive statistics is a means of describing features of a data set by generating summaries about data samples.

Ethical Consideration

Research was conducted with the goal of getting valuable and accurate results while simultaneously not harming the participants of this study. The Belmont Report's three ethical principles served as a guide for research involving human subjects. The three ethical principles include respect for persons, beneficence, and justice. All data was presented in the aggregate without manipulation and exaggeration to prevent researcher bias and to ensure all data collected is true and accurate. No individual student data points or personal identifiable information were presented or discussed.

Summary

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. The statement of the problem: tuition costs have

been rising while enrollment has been declining and affecting student populations of diverse backgrounds access to higher education, was restated. The methodology that was used to collect data in this study and the research site that was used to answer the research questions was explained. A breakdown of the instruments and tools that were used to collect the data of this quantitative study were presented. The data collected in this study are from preexisting reports of two student populations being studied. The methods to analyze the quantitative data collected to help answer the research questions was explained. Finally, the researcher insured that all data will be presented without manipulation and exaggeration to prevent researcher bias and to ensure all data collected is true and accurate.

Chapter 4 Findings

This chapter discusses the findings and data obtained from the Integrated Postsecondary Education Data System (IPEDS), the Common Data Set (CDS), and the Enrollment Management Group (EMG). The data compiled for this research come from previously published reports on two student populations. The chapter will include an introduction to the methodology used to collect the data and the lens through which they were viewed, as well as a restatement of the research questions and the data collected to answer them. Following an explanation of the emerging themes, additional observations made during the data collection exercise will be presented.

Introduction

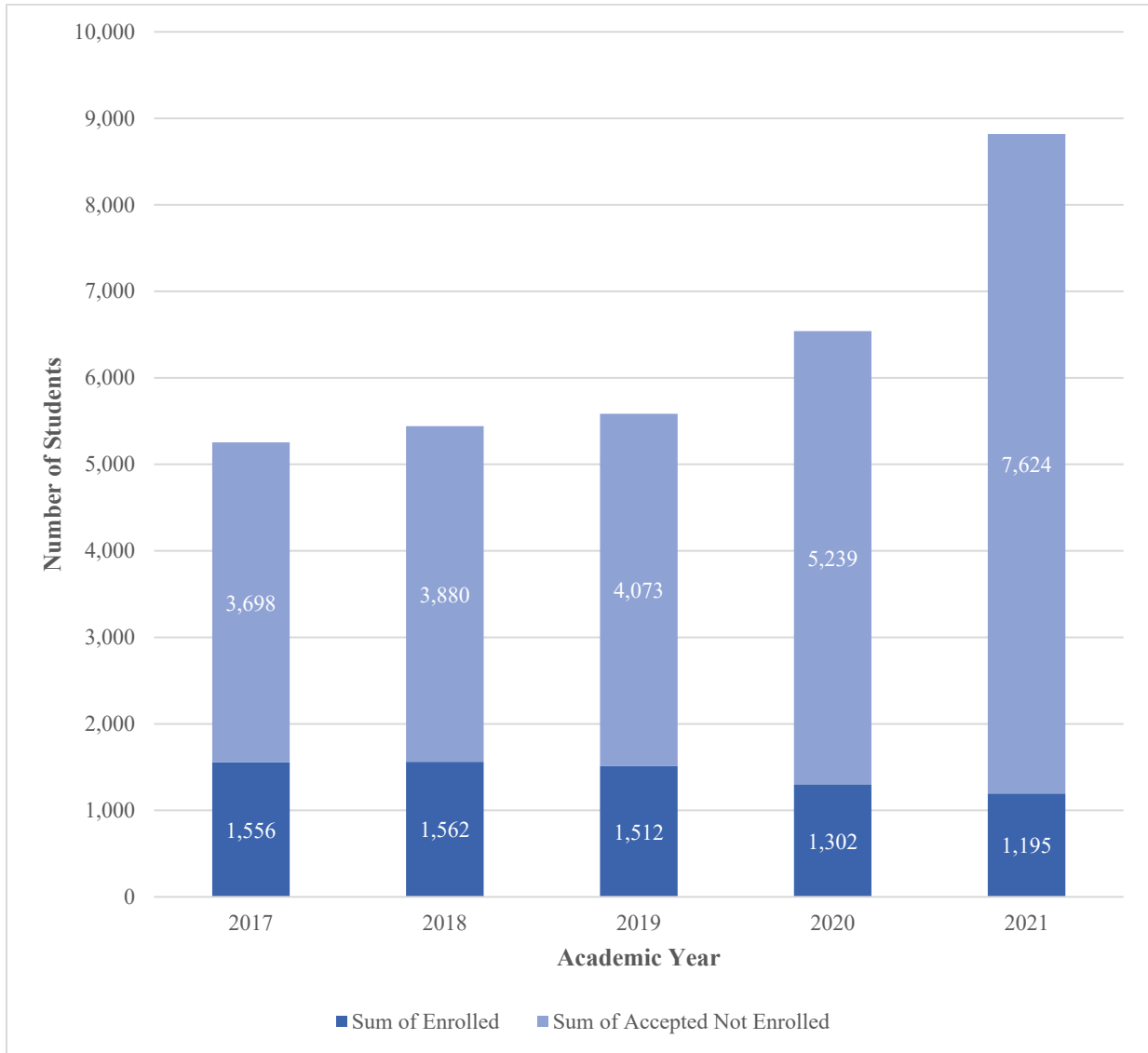
In order to answer the research questions at the core of this study, this chapter provides a description of the findings and an analysis of the data. In relation to two student populations, quantitative data was collected from two public domains and one internal department at a four-year private higher education institution in western Pennsylvania. Two public domains, the Integrated Postsecondary Education Data System (IPEDS) and the Common Data Set (CDS), provided the data for the Enrolled student population. The Accepted Not Enrolled (ANE) student population data was provided by the Enrollment Management Group (EMG) within the institution. This chapter will provide a better comprehension of the equity of access to higher education and the relationship between tuition cost and minority and low socioeconomic diversity enrollment through descriptive statistical analysis.

Enrollment

To gain a clearer understanding of enrollment trends at a four-year private higher education institution in western Pennsylvania, it is necessary to first discuss the total number of first-time freshmen enrolled. Figure 1 is a stacked bar chart depicting the two student populations of Enrolled and Accepted Not Enrolled (ANE) of first-time freshmen at a four-year private higher education institution in western Pennsylvania from 2017 to 2021.

Figure 1

Total Enrollment and Accepted Not Enrolled of First-Time Freshmen



Note. Data collected from Common Data Set (2023) and Enrollment Management Group (2023).

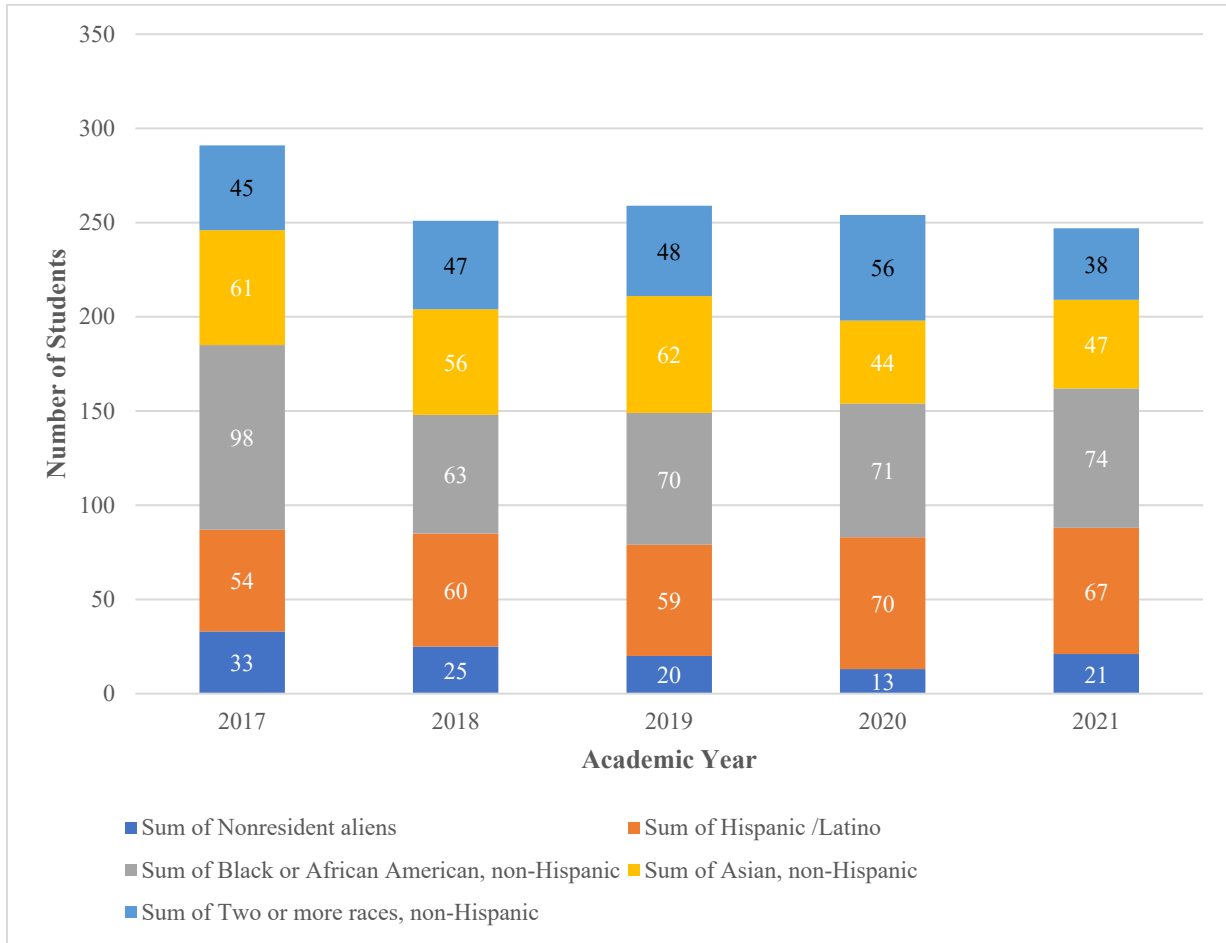
Enrollment of first-time freshmen remained stable from 1,556 in 2017 to 1,512 in 2019, before declining marginally to 1,306 in 2020 and significantly to 1,195 in 2021. During the same

period, the number of ANE students increased slightly from 3,698 in 2017 to 4,073 in 2019, followed by a significant increase in 2020 and 2021, with 5,238 and 7,021 students, respectively.

It is important to understand how racial minority groups are distributed among enrolled student populations at a four-year private higher education institution in western Pennsylvania by dissecting the aggregate enrollment number over the past five years into Racial Minority Enrollment student populations. For the purposes of this study, total Racial Minority student populations include Nonresident Aliens, Hispanic/Latino, Black or African American, non-Hispanic, Asian, non-Hispanic, and Two or more ethnicities, non-Hispanic. Due to low aggregate enrollment and ANE numbers, this study excludes two racial minority student populations: Native Hawaiian or other Pacific Islander students and American Indian or Alaska Native students, not Hispanic. Figure 2 is a stacked bar chart depicting racial minority enrollment by academic year for first-time freshmen at a four-year private higher education institution in western Pennsylvania from 2017 to 2021.

Figure 2

Racial Minority Enrollment by Academic Year



Note. Data collected from the CDS or Common Data Set (2023).

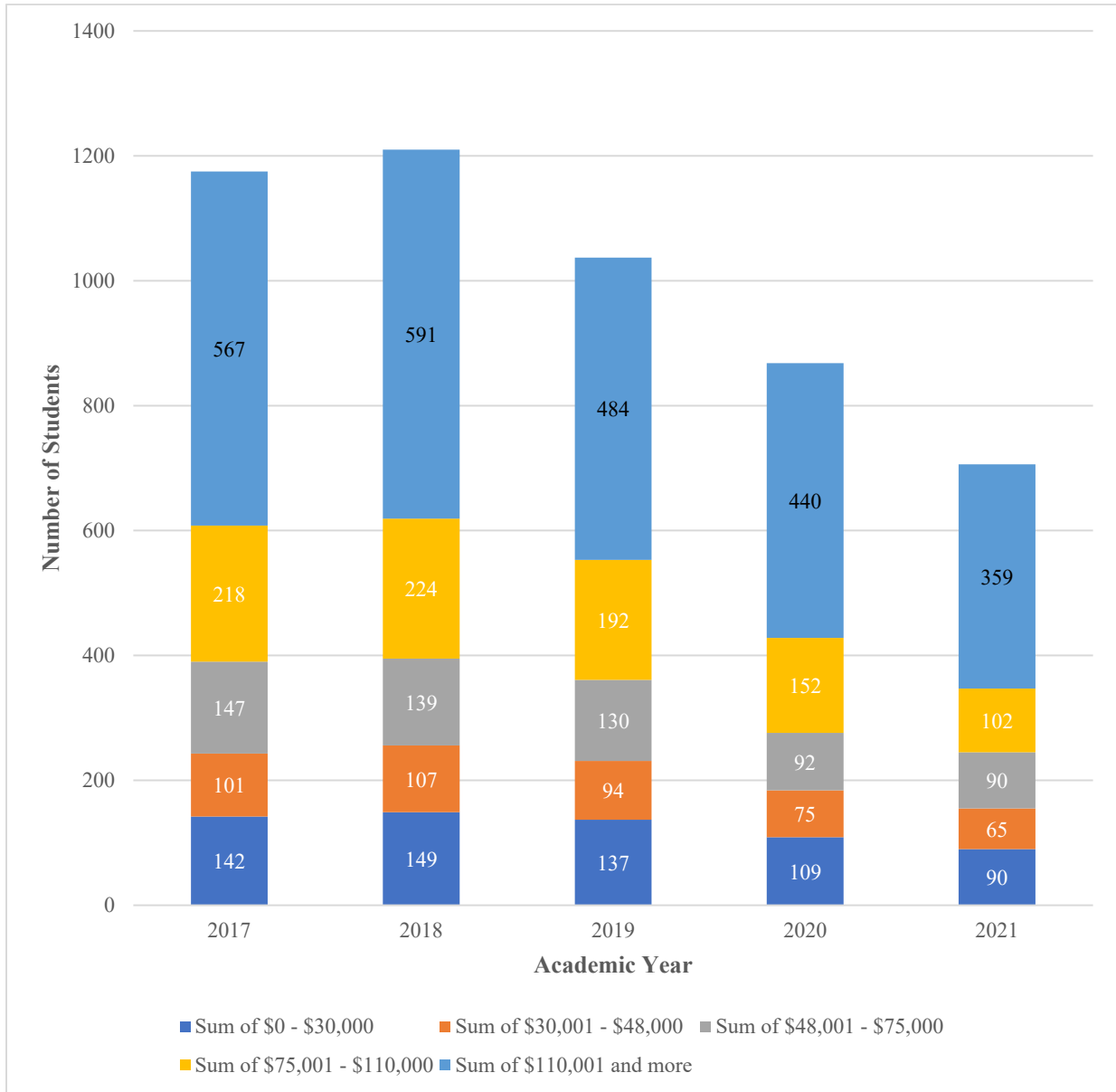
In Figure 2, Black or African American, non-Hispanic demonstrates a surge in 2017 with 98 students, followed by a decline to 63 students in 2018, a minor increase in 2019 to 70 students, and a period of stability from 2019 to 2021 with 74 students. The number of Hispanic/Latino students remained steady from 2017 with 54 students through 2019 with 59 students and then an increase of 70 students in 2020 and finally a slight decrease to 67 students. From 2017 to 2019,

the number of Asian, non-Hispanic students remained constant at 61, 56, and 62, respectively. A diversion occurred with Asian, non-Hispanic over the last two years of 2020 and 2021 with 44 and 47 students respectively. From 2017 to 2019, the number of enrolled nonresident alien students decreased from 33 to 20, followed by a precipitous decline to 13 students and a modest increase to 21 students in 2021. Two or more races, non-Hispanic students remained constant from 2017 with 45 through 2019 with 48 while experiencing a minor increase in 2020 with 56 students and then a decrease with 38 students in 2021.

Figure 3 is a stacked bar chart depicting household income level enrollment by academic year for first-time freshmen at a four-year private higher education institution in western Pennsylvania from 2017 to 2021.

Figure 3

Household Income Level Enrollment by Academic Year



Note. Data collected from IPEDS or Integrated Postsecondary Education Data System (2023).

In Figure 3, student enrollment in households with an annual income of \$0 to \$30,000 remained stable from 2017 to 2018 with 142 students increasing to 149 students, followed by drastic year-over-year decreases in 2019 with 137 students decreasing to 109 students in 2020 and 90 students in 2021. Students with an annual household income between \$30,001 and \$48,000 exhibit a similar pattern, with a modest increase from 2017 to 2018 (101 and 107 students, respectively) followed by a steady divergence from 2019 to 2021 (94 and 65 students, respectively). The enrollment of students with an annual household income between \$48,001 and \$75,000 fell dramatically over the five-year period, from a high of 147 students in 2017 to a low of 90 students in 2021. Student enrollment in the population with an annual household income between \$75,001 and \$110,000 was comparable to those in the \$0 to \$30,000 and \$30,001 to \$48,000 income brackets, with a slight increase from 2017 to 2018 (218 to 224 students, respectively) followed by a significant decline from 2019 to 2021 (192, 152, and 102 students, respectively). Students in the population with an annual household income of \$110,000 or more experienced the same enrollment trends, with a slight increase from 2017 to 2018 (567 and 591 students, respectively) followed by a significant deviation from 2019 to 2021 (484, 440, and 359 students, respectively).

Research Questions

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. A restatement of the research questions will be given.

The study will be guided by the following research questions:

What are the enrollment trends for racial minority students at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

What are the enrollment trends for students from various SES at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

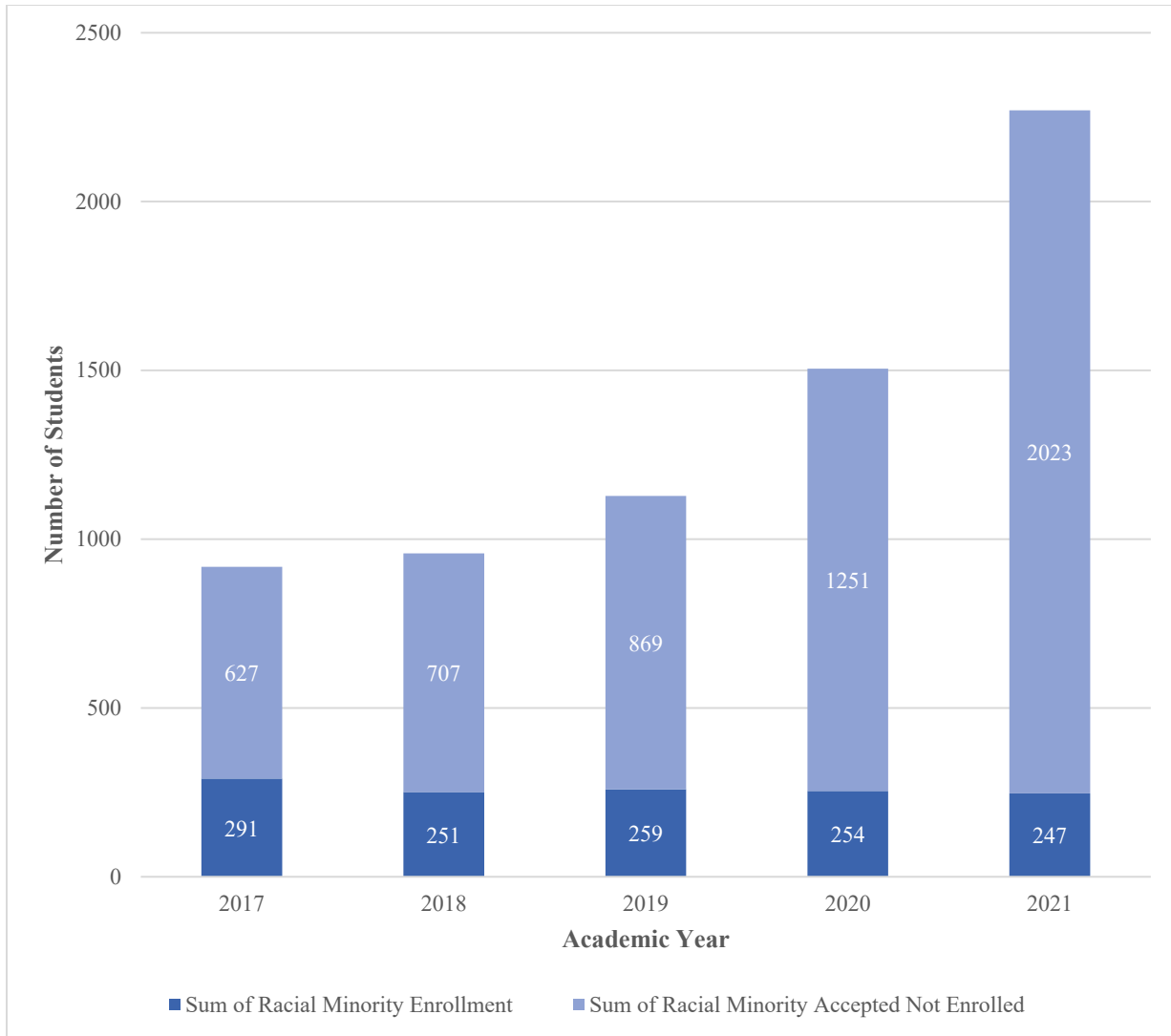
After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

Research Question One

To gain a better comprehension of the equity of access at a four-year private higher education institution in western Pennsylvania, it is essential to dissect the overall enrollment data by analyzing the total racial minority student populations. Figure 4 is a stacked bar chart illustrating total racial minority enrollment and racial minority accepted but not enrolled by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 4

Total Racial Minority Enrollment and Racial Minority Accepted Not Enrolled First-Time Freshmen



Note. Data collected from the CDS or Common Data Set and EMG or Enrollment Management Group (2023).

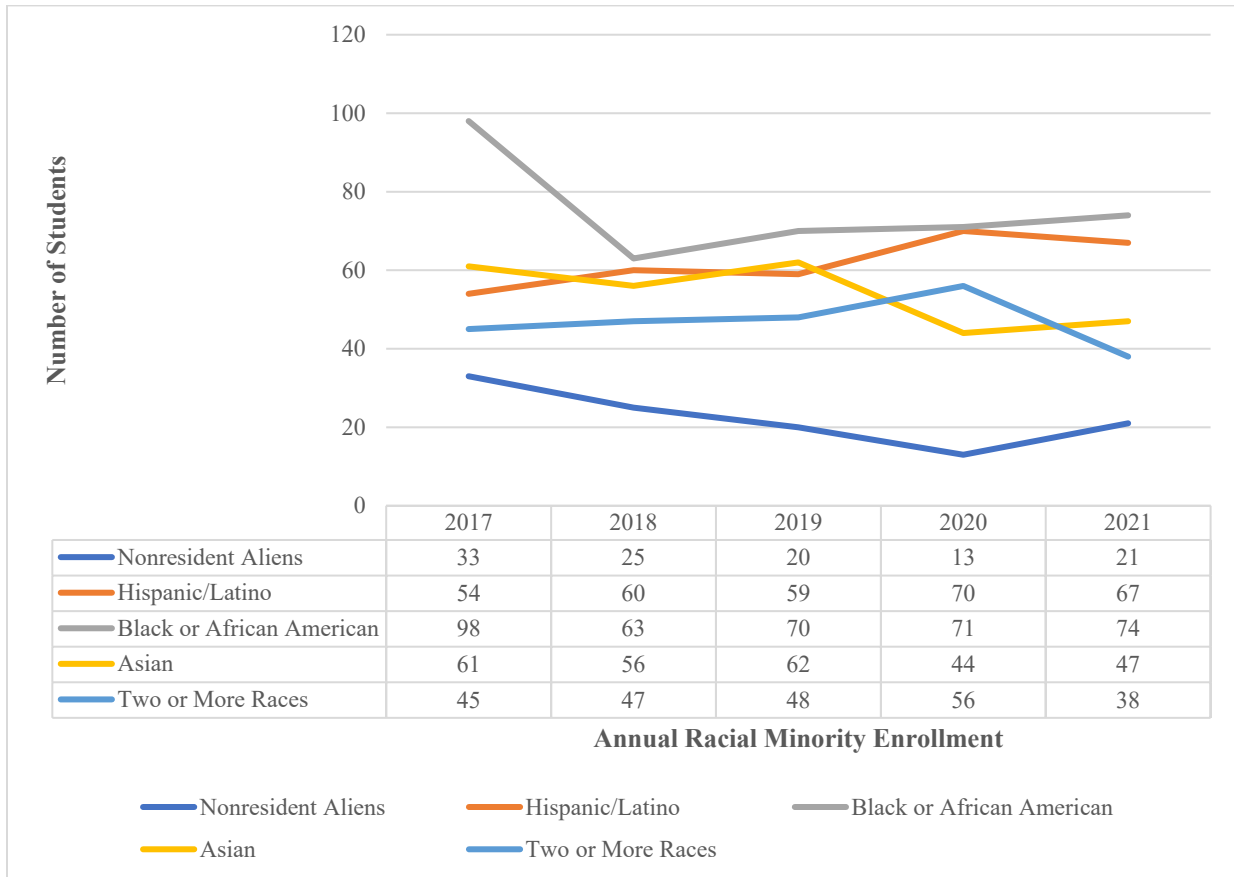
In Figure 4, the enrollment of racial minority first-year students decreased from 291 to 251 from 2017 to 2018 and then remained constant between 2019 through 2021, from 259 to 247 in 2021.

The number of racial minority first-year students in the ANE student population increased steadily from 2017 to 2020, from 627 to 869, followed by significant jumps in 2020 and 2021, with 1,251 and 2,023 students, respectively.

Figure 5 is a line graph illustrating total racial minority enrollment by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 5

Racial Minority Enrollment 2017-2021



Note. Data collected from the CDS or Common Data Set (2023).

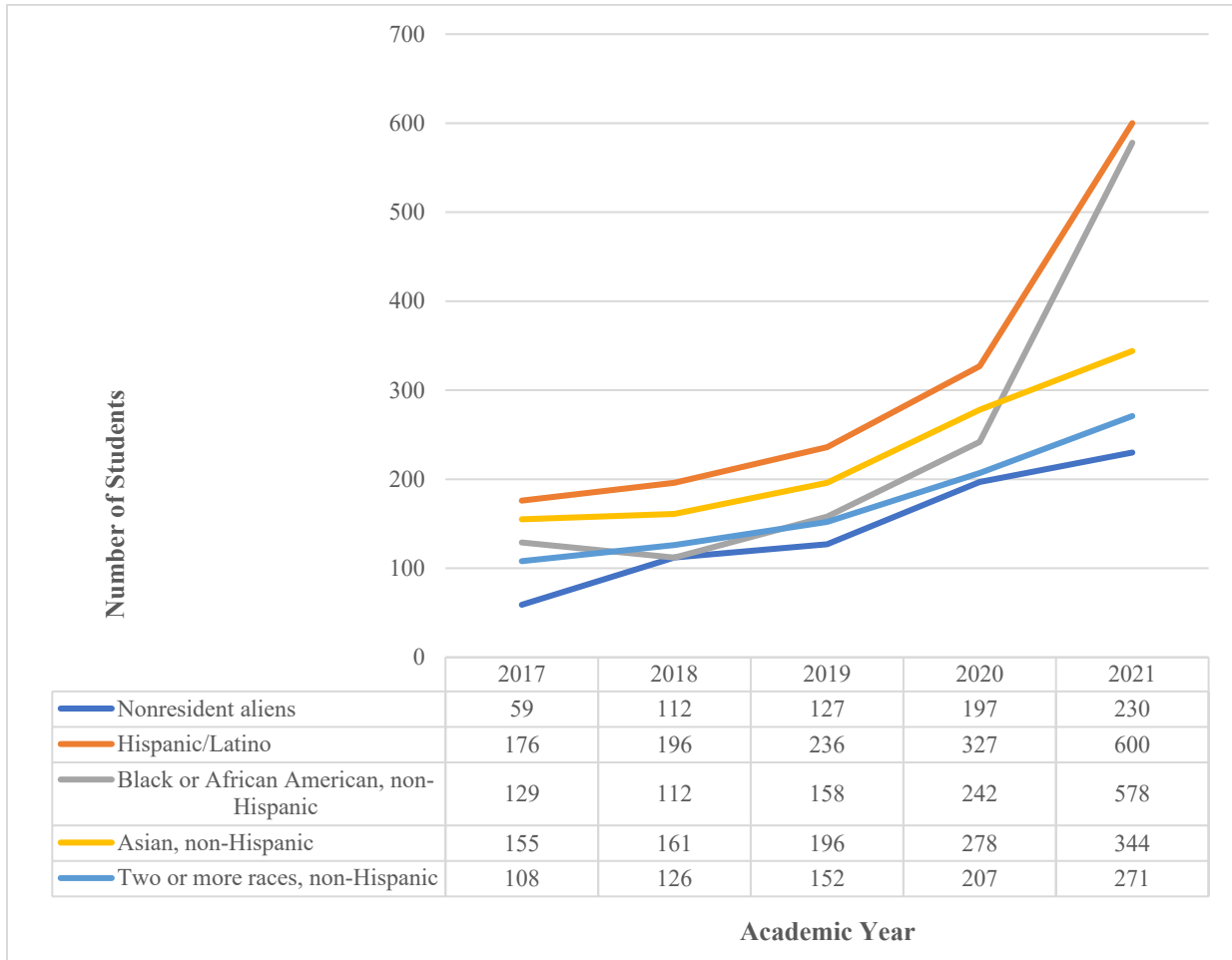
In Figure 5, Nonresident Aliens students trended in a decline from 2017 through 2020 with 33 and 13 respectively, while seeing an increase to 21 students in 2021. Hispanic/Latino enrollment remained unchanged from 54 students in 2017 to 59 students in 2019, then increased to 70 students in 2020, and remained consistent at 67 students in 2021. With 93 students in 2017 and 63 students in 2018, the Black or African American population experienced the largest decrease of any racial minority student population. The Black or African American racial minority student

population experienced a marginal increase in 2019 with 70 students, and then remain unchanged through 2021 with 74 students. The number of Asian students remained stable from 2017 to 2019 with 61 and 62 students, respectively, before declining to 44 students in 2020 and stabilizing at 47 students in 2021. The number of students of Two or more races increased steadily from 2017 to 2020, with 45, 47, 48, and 56 students, before plummeting to 38 students in 2021.

Figure 6 is a line graph illustrating racial minority accepted but not enrolled by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 6

Racial Minority Accepted Not Enrolled Populations 2017-2021



Note. Data collected from EMG or Enrollment Management Group (2023).

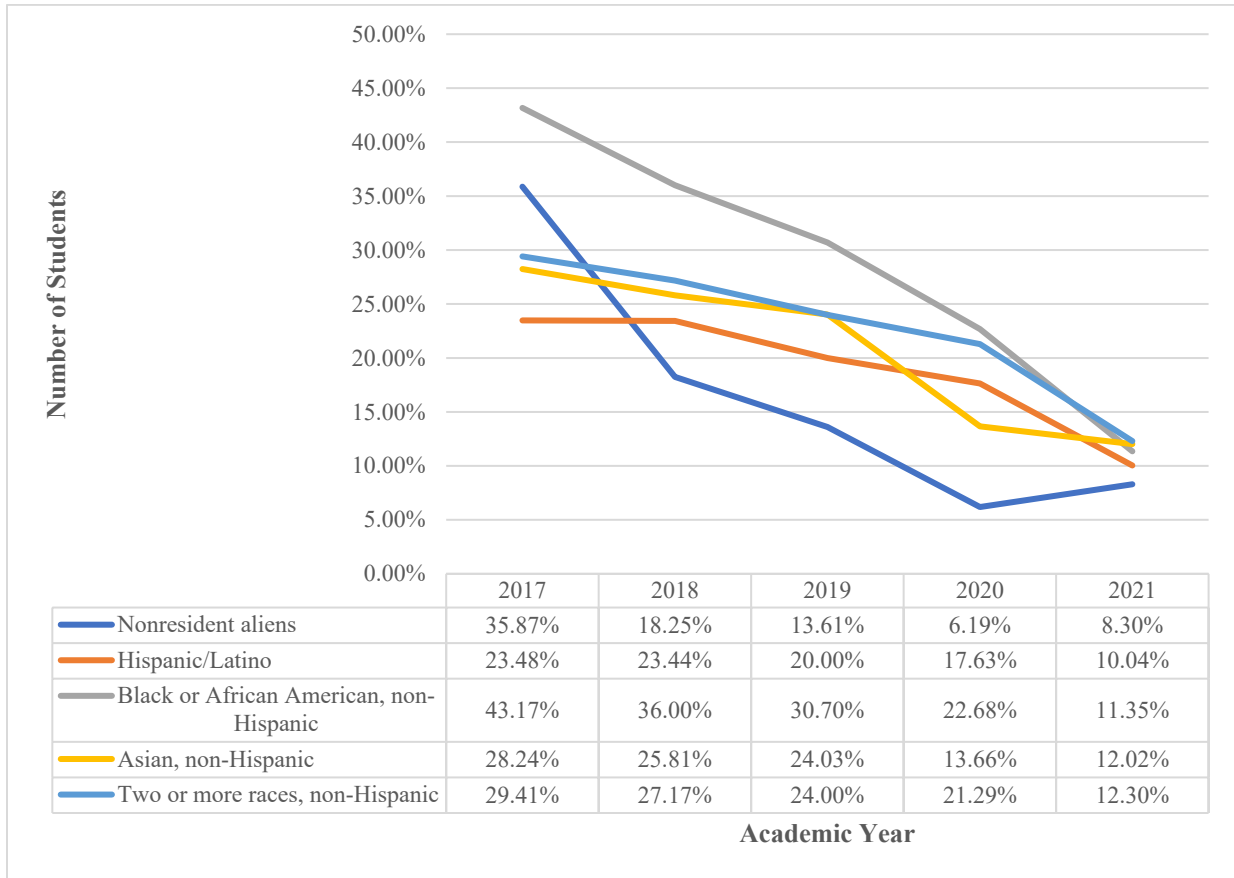
In Figure 6, Hispanic/Latino ANE increased steadily from 176 in 2017 to 196 in 2018 and 236 in 2019, with significant increases in 2020 and 2021 to 327 and 600 ANE students, respectively. Black or African American students experienced the same trend as Hispanic/Latino students, apart from a decrease from 129 in 2017 to 112 in 2018, followed by significant increases in 2019 (158), 2020 (242) and a large rise in 2021 (578). The remaining three racial minority student

populations, Asian, Nonresident Aliens, and Two or more races, have experienced comparable increases in the number of ANE students over the past five years. Asian students experienced a consistent increase of ANE students with 155 in 2017, 161 in 2018, 196 in 2019, 278 in 2020 and 344 in 2021. Nonresident Aliens students also experienced a consistent increase, with 59 students in 2017, 112 students in 2018, 127 students in 2019, 197 students in 2020, and 230 students in 2021. Nonresident Aliens students experienced a consistent increase, with 108 students in 2017, 126 students in 2018, 152 students in 2019, 207 students in 2020, and 271 students in 2021.

Figure 7 is a line graph illustrating enrollment percentage of overall racial minority accepted student populations by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 7

Enrollment Percentage of Total Racial Minority Accepted Student Populations 2017-2021



Note. Data collected from CDS or Common Data Set and EMG or Enrollment Management Group (2023).

In Figure 7, Black or African American students experienced the steepest decline in enrollment percentage, with 43.17 percent in 2017, 36.00 percent in 2018, 30.70 percent in 2019, 22.68 percent in 2020, and 11.35 percent in 2021. Nonresident Aliens also experienced a steep decline in enrollment, with 35.87 percent enrolled in 2017, followed by a precipitous drop to 18.25 percent in 2018, 13.61 percent in 2019, 6.19 percent in 2020, and 8.30 percent in 2021. Two or more races experienced a progressive decline in enrollment from 2017 to 2020, falling from

29.41 percent in 2017 to 21.2 percent in 2020 to 12.30 percent in 2021. The enrollment percentage of Asian students remained unchanged at 28.24 percent in 2017, 25.81 percent in 2018, 24.03 percent in 2019, and then plummeted to 13.66 percent and 12.01 percent, respectively, in 2020 and 2021. Similar to Asian students, the percentage of Hispanic/Latino students remained constant at 23.48 percent, 23.44 percent, and 20.00 percent in 2017, 2018, and 2019, before decreasing to 17.63 percent in 2020 and 10.01 percent in 2021.

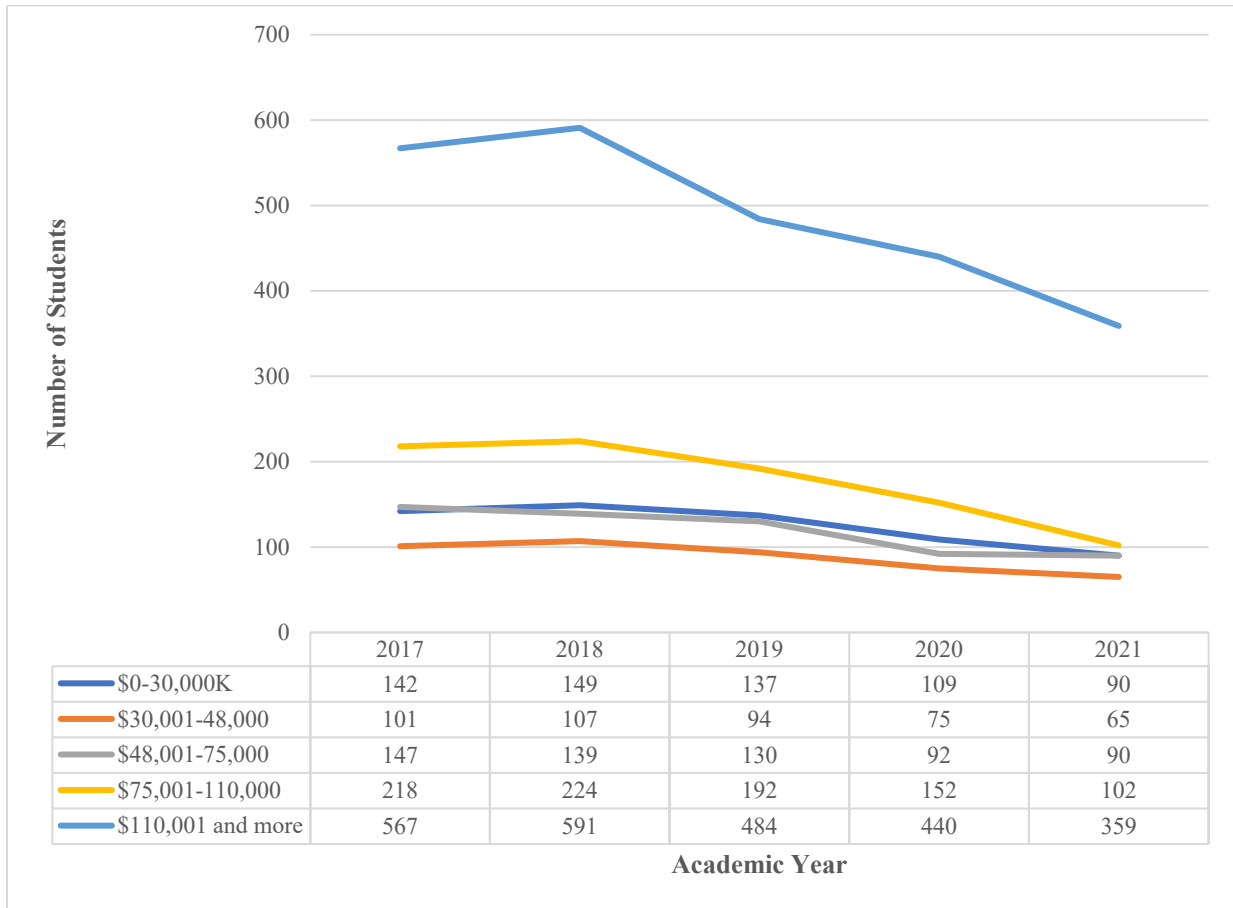
Research Question Two

What are the enrollment trends for students from various SES at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

Figure 8 is a line graph illustrating enrollment by household income level by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 8

Enrollment by Income Level 2017-2021



Note. Data collected from IPEDS or Integrated Postsecondary Education Data System (2023).

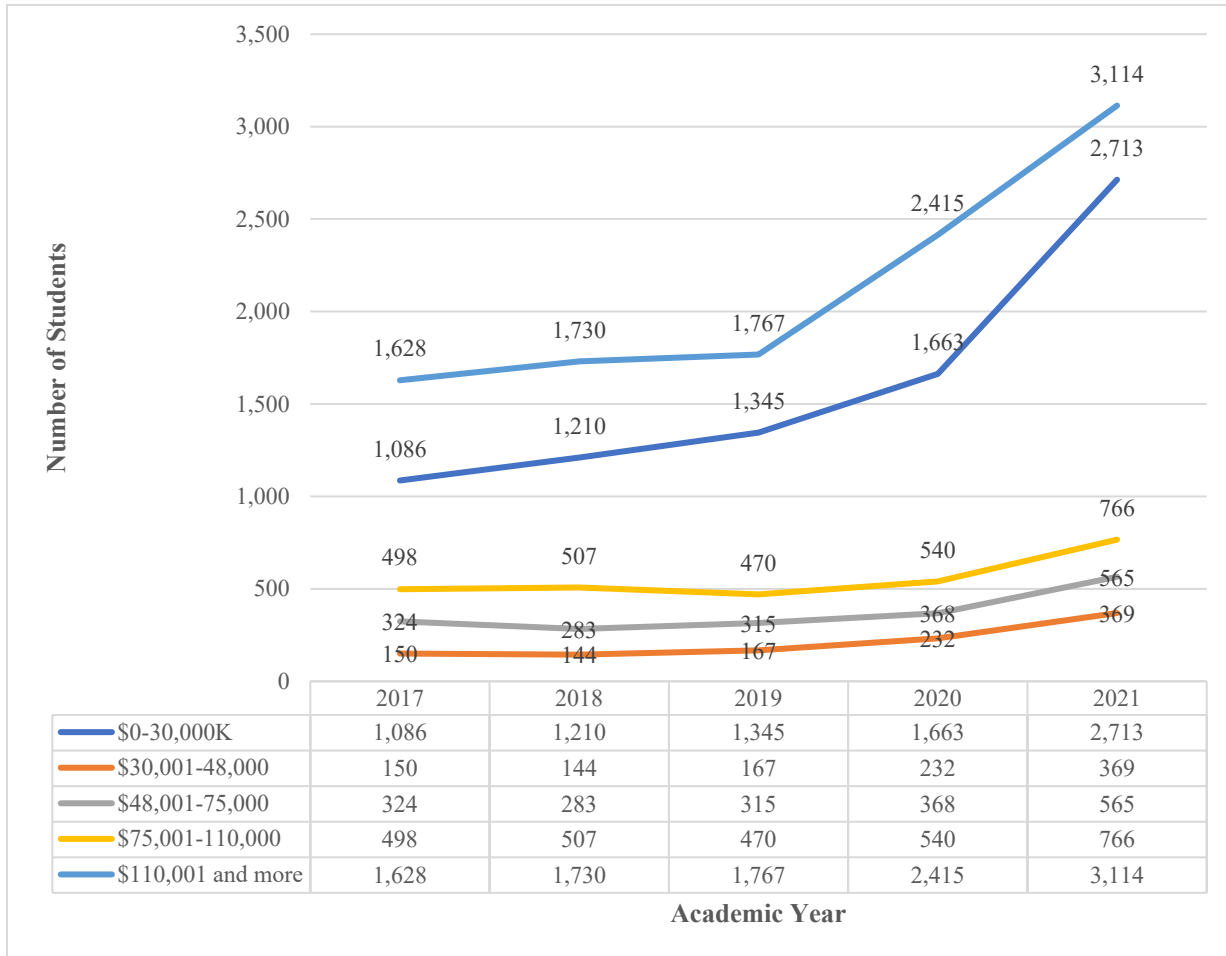
In Figure 8, the income level with the highest enrollment rate over the past five years is the one with a household income of \$110,000 or more. From 2017 to 2018, enrollment increased from 567 to 591, followed by a downward trend with 484 students in 2019, 440 students in 2020, and 359 students in 2021. The \$75,001 to \$100,000 income bracket had a very similar enrollment pattern to the \$110,001 and more income bracket, but at a much lower rate. In 2017, there were 218 students enrolled, followed by a minor increase to 224 in 2018, followed by a downward

trend to 192,152, and 102 in 2019, 2020, and 2021, respectively. The remaining three Income brackets, \$0 to \$30,000, \$30,001 to \$48,000, and \$48,001 to \$75,000, exhibited similar enrollment trends, with significantly lower numbers and a minor increase from 2017 to 2018 followed by a gradual decline from 2019 to 2021.

Figure 9 is a line graph illustrating household income level accepted but not enrolled students by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 9

Accepted Not Enrolled by Income Level 2017-2021



Note. Data collected from EMG or Enrollment Management Group (2023).

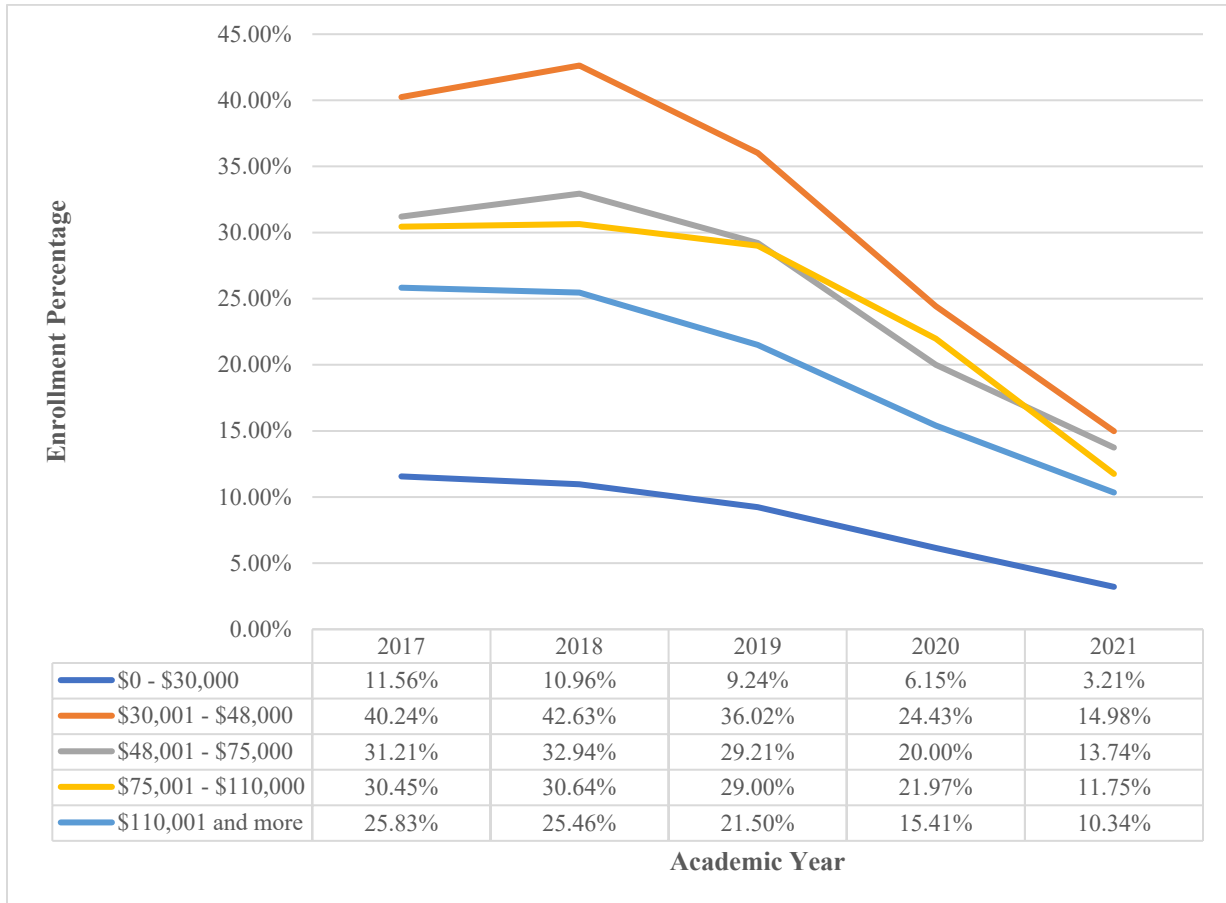
In Figure 9, the income level with the highest ANE over the past five years is the one with a household income of \$110,000 or more. From 2017 to 2018 and 2019 respectively, the ANE increased from 1,628 to 1,730 to 1,767, followed by an upward trend with 2,415 students in 2020 and 3,114 students in 2021. The trend between the \$0 to \$30,000 income bracket and the \$110,000 and more income bracket was very similar. From 2017 to 2018 and 2019 respectively,

the ANE increased from 1,086 to 1,210 to 1,345, followed by an upward trend with 1,663 students in 2020 and 2,713 students in 2021. The \$75,001 to \$110,000 income bracket experienced a modest increase with 498 in 2017 and 507 in 2018, followed by a decline with 470 in 2019 and an upward trend with 540 and 766 ANE students, respectively, in 2020 and 2021. The remaining two income brackets, \$30,001 to \$48,000 and \$48,001 to \$75,000, exhibited similar enrollment trends, with significantly lower ANE numbers and a minor decrease from 2017 to 2018 followed by gradual increases from 2019 to 2021.

Figure 10 is a line graph illustrating percentages of enrolled students from the entire accepted student population from various household income level by academic year for first-time freshmen at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 10

Enrollment Percentage of Total Accepted Student Population by Income Level 2017-2021



Note. Data collected from IPEDS and EMG (2023).

In Figure 10, the income bracket of \$30,001 to \$48,000 had the highest enrollment rate compared to other income brackets over the five-year period. From 40.24 percent in 2017 to 42.63 percent in 2018, there was an increase, followed by a decline to 36.02 percent in 2019, 24.43 percent in 2020, and 14.98 percent in 2021. During the five-year period, the income bracket of \$0 to \$30,000 had the lowest enrollment rate compared to other income brackets. The enrollment rate

for \$0 to \$30,000 decreased steadily from 2017 to 2021, falling by 11.56 percent to 3.2 percent, respectively. The income bracket of \$48,001 to \$75,000 experienced a minor increase from 31.21 percent to 32.94 percent in 2017 and 2018 and a gradual decline from 29.21 percent to 13.74 percent during the period of 2019 to 2021. A constant enrollment rate of 30.45 percent in 2017 and 30.64 percent in 2018, followed by a slight decline to 29.00 percent in 2019 and a progressive decline to 21.97 percent in 2020 and 11.75 percent in 2021 for the income bracket of \$75,001 to \$110,000. A constant enrollment rate for those with incomes of \$110,000 or more in 2017 and 2018, with 25.83 percent and 25.46 percent, respectively, followed by a slight decline to 21.50 percent in 2019 and a progressive decline to 15.41 percent in 2020 and 10.21 percent in 2021.

Research Question Three

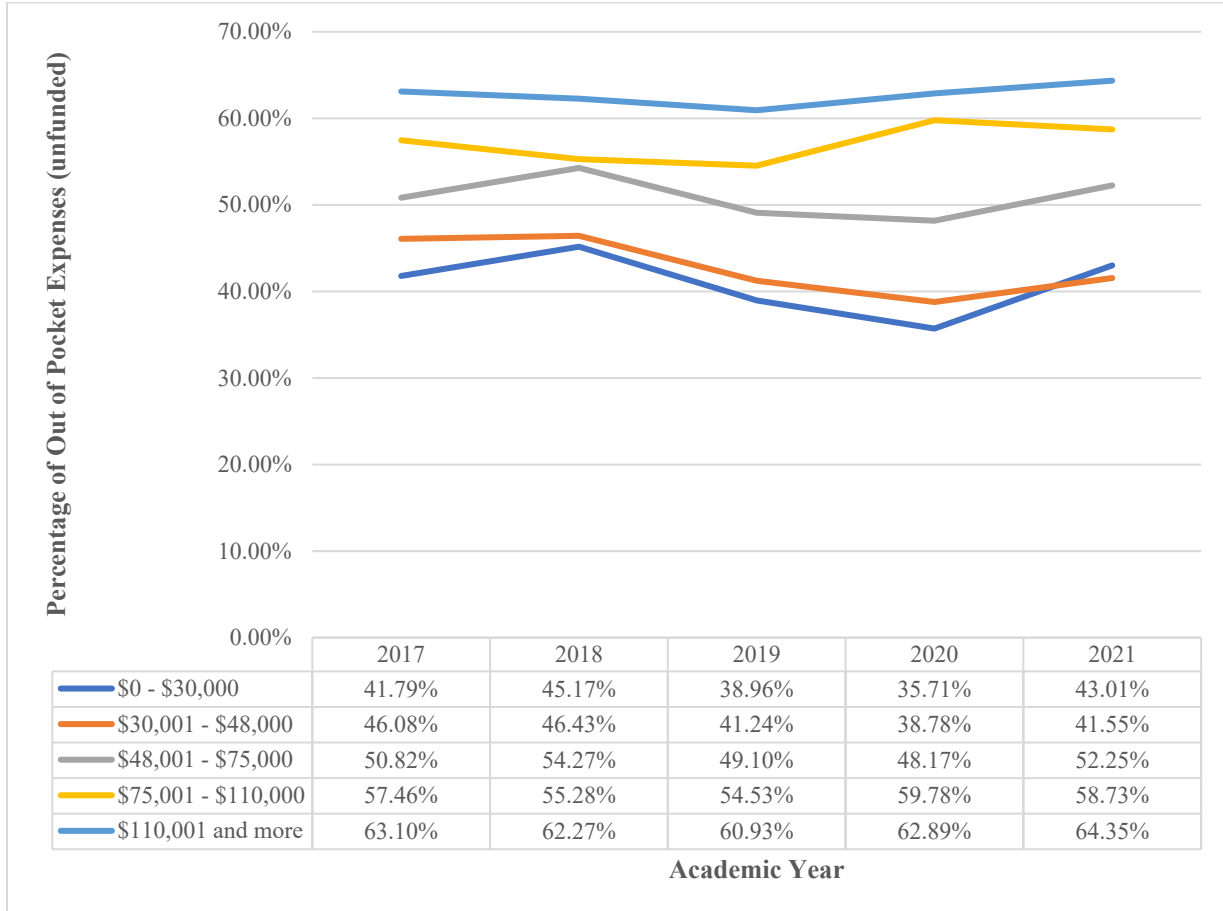
After all financial aid sources have been applied to the total cost of tuition, what are the remaining out-of-pocket expenses across all socioeconomic levels at a four-year private higher education institution in western Pennsylvania during the period of 2017-2021?

To answer the third research question, it is necessary to examine the unfunded amount, or out-of-pocket expenses, from the total cost of tuition and room and board after all financial aid sources are applied at a four-year private higher education institution in western Pennsylvania by household income levels. Figure 11 is a line graph depicting the percentage of out-of-pocket expenses for enrolled students from various household income levels by academic year at a private four-year higher education institution in western Pennsylvania from 2017 to 2021.

Figure 11

Percentage of out-of-pocket expenses after all financial aid sources by Household Income Level

Enrollment 2017-2021



Note. Data collected from IPEDS (2023).

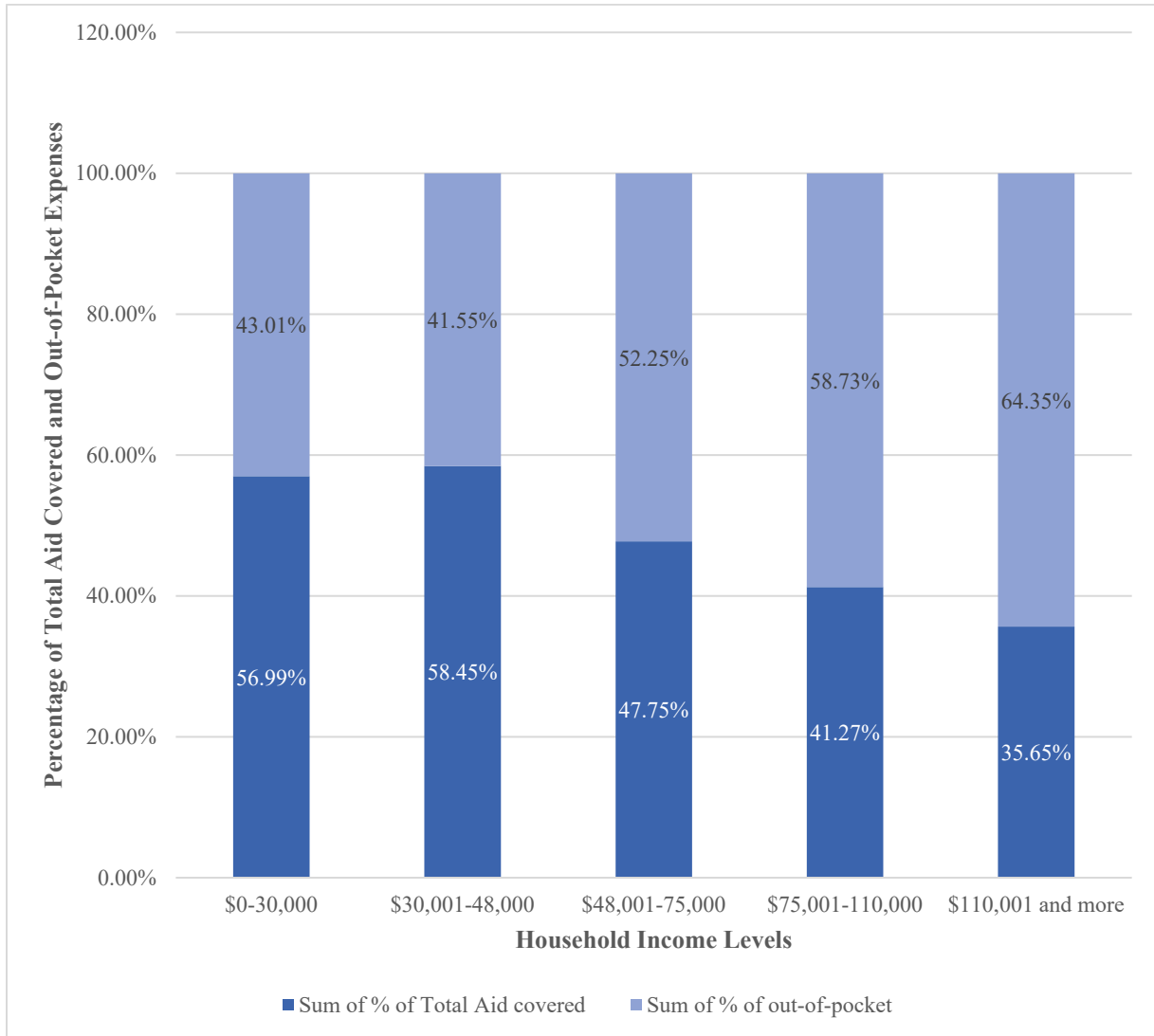
In Figure 11, the greatest percentages of out-of-pocket expenses over the five-year period correspond to the income level of \$110,001 and more, with 63.10 percent in 2017 and 64.35 percent in 2021. Similarly, the income bracket between \$75,001 and \$110,000 had 57.4 percent in 2017 and remained stable over the subsequent five years, culminating in 58.73 percent in

2021. The \$48,001 to \$75,000 household income bracket experienced a slight increase in 2018 to 54.27 percent, up from 50.82 percent in 2017, followed by a slight decrease to 49.10 percent in 2019 and a leveling out to 48.15 percent in 2020 before surpassing the 50 percent threshold with an increase to 52.25 percent in 2021. The \$30,001 to \$48,000 household income level bracket remained above the 40 percent threshold with 46.08 percent, 46.43 percent, and 41.24 percent in 2017, 2018, and 2019, respectively, before experiencing a slight decrease to 38.78 percent in 2020, followed by an increase to over 40 percent with 41.55 percent in 2021. Finally, the \$0 to \$30,000 income bracket had the lowest percentage of out-of-pocket expenses during the first four years compared to the other income brackets. In 2021, the percentage of out-of-pocket expenses for those with incomes between \$0 and \$30,000 was marginally higher than those with incomes between \$30,001 and \$48,000. In 2017, the income levels of \$0 to \$30,000 had out-of-pocket expenses of 41.79 percent, which increased to 45.17 percent in 2018, followed by a decline to 38.96 percent and 35.71 percent in 2019 and 2020, respectively, before increasing to 43.01 percent in 2021.

The most recent year, 2021, permits a thorough examination of the total amount of aid covered and the residual out-of-pocket costs for enrolled students. Figure 12 is a stacked bar chart depicting the total percentage of all financial aid sources which cover the total cost of tuition and room and board and the remaining percentage of out-of-pocket expenses for enrolled students by household income levels at a private four-year higher education institution in western Pennsylvania in 2021.

Figure 12

2021 Percentage of Total Aid Covered and Out-of-Pocket Expenses by Income Level



Note. Data collected from IPEDS (2023).

Overall, the upper income brackets had the highest percentage of out-of-pocket expenses, with \$110,000 and more having 64.35 percent, \$75,001 to \$110,000 having 58.73 percent, and \$48,001 to \$75,000 having 52.25 percent. The \$30,001 to \$48,000 income bracket had the lowest

percentage of out-of-pocket expenses at 41.55 percent, while the \$0 to \$30,000 income bracket had a slightly greater percentage of out-of-pocket expenses at 43.01 percent.

Summary

In this Chapter four, the findings were presented and discussed. An introduction to the methodology used to collect the data and the lens through which they were viewed was presented, as well as a restatement of the research questions and the data collected to answer them. Finally, explanations of emerging themes were presented along with additional observations made during the data collection.

Chapter 5 Conclusion

The purpose of this research study was to examine the enrollment trends of racial minority and low socioeconomic enrollment, and the equity of higher education access at a four-year private institution in western Pennsylvania. Using quantitative methods, analyzed through an improvement science lens, existing aggregated enrollment and financial aid and household income reports were assessed to examine enrollment trends.

It must be noted before the discussion of the findings, the tuition cost with room and board at a four-year private institution in western Pennsylvania increased during 2017 through 2021, year over year. In 2017 the tuition cost with room and board was \$48,508, in 2018 it was \$50,764, in 2019 it was \$53,080, in 2020 it was \$55,504 and \$57,670 in 2021.

Discussion of the Findings

After observing the overall accepted student populations, and the Accepted Not Enrolled (ANE) and enrolled student populations with the overall accepted student data, over a five-year period from 2017 to 2021 at a four-year private institution in western Pennsylvania, it can be stated that the accepted student population and the ANE student population increased annually while the enrolled student population decreased gradually from 2018 to 2021. Within the overall accepted student data, the overall accepted racial minority student population and the ANE racial minority population increased over a five-year period from 2017 to 2021, while the enrolled racial minority student population decreased slightly and then remained stable over the same period. It can be concluded that the ANE student populations and the enrolled student populations were inversely proportionate during the five-year period. The household income

level of enrolled students at a private four-year institution in western Pennsylvania was evaluated from 2017 to 2021. Every household income level student population exhibited a declining enrollment trend from 2018 to 2021. By a significant margin, households with incomes of at least \$110,000 had the most students compared to all other income levels over the five-year period. The five-year enrollment trends for three household income levels, \$0 to \$30,000, \$30,001 to \$48,000, and \$48,001 to \$75,000, were very comparable with the lowest enrollment totals of all household income levels. Increased tuition costs have a cascading effect on students from racial minorities and low socioeconomic backgrounds, according to research (Hemelt & Marcotte, 2016). It is plausible the increased tuition cost with room and board over the five-year period effected the college decision making process and prevented accepted students to not enroll at a four-year private institution in western Pennsylvania. The price sensitivity of low-income students to changes in the total cost of higher education has a greater negative effect on their enrollment in postsecondary education than that of students from other socioeconomic backgrounds (George-Jackson et al., 2012). Numerous studies have investigated price elasticity of demand, or the specific response of students' quantity demanded of higher education to a change in price. It is well-documented that tuition affects students' enrollment decisions (Allen and Wolniak 2018).

During the five-year period from 2017 to 2021, the Accepted Not Enrolled (ANE) student population increased because, as stated previously, the overall accepted population of racial minorities increased while the enrolled population remained stable. Individual racial minority groups exhibited a similar trend to the overall student population and racial minority student population. Black or African American, non-Hispanic saw an increase in ANE students from

2018 to 2021, whereas their enrolled student population decreased significantly from 2017 to 2018 and remained stagnant through 2021. The aggregate enrollment rates for Black or African American, non-Hispanic students decreased from one year to the next. Hispanic Latino also saw an increase of ANE students while their enrolled student population remained stable while seeing a slight increase in 2020 and then remaining stable again. The overall enrollment percentage of Hispanic/Latino student population remained stable until 2019 as it gradually decreased and then significantly decreasing in 2021. Similar results were experienced by the remaining three racial minority student populations. As tuition costs rise, students of color are less likely to enroll in college (Mitchel et al., 2018). In a recently published study, researchers discovered that tuition increases decreased campus diversity, especially at non-selective institutions. A \$1,000 increase in tuition was associated with a 4.5 percent decline in class diversity among full-time incoming undergraduates at non-selective institutions (Mitchel et al., 2018).

Despite attracting and accepting more students, why has the enrolled population not increased proportionally with the accepted student population? National databases on higher education can be used to investigate trends and assist with answering this question. According to the Integrated Postsecondary Education Data System (IPEDS), 26.7 percent of admitted, first-time degree/certificate-seeking undergraduates enrolled in postsecondary institutions in the fall of 2017, 25.9 percent in 2018, 24.7 percent in 2019, 22.2 percent in 2020, and 22.00 percent in 2021. Comparatively, the percentage of enrolled first-time freshmen at a four-year private institution in western Pennsylvania was 29.61% in 2017, 28.70% in 2018, 27.07% in 2019, 19.90% in 2020, and 13.55% in 2021. The racial minority student population percentage of enrolled first-time freshmen at a four-year private institution in western Pennsylvania was 31.69

percent in 2017, 26.20 percent in 2018, 22.96 percent in 2019, 16.87 percent in 2020, and 10.88 percent in 2021. In 2017 and 2018, a four-year private institution in western Pennsylvania had higher overall accepted and accepted racial minority student enrollment rates than the national average for postsecondary institutions. In 2019, the overall accepted student population remained above the national average for postsecondary institutions, whereas the accepted racial minority student population fell below. In 2020 and 2021, both the overall accepted and accepted racial minority populations dropped below the national average for postsecondary institutions. Consistently, research has found that as college tuition costs rise, enrollment declines. While many universities and the federal government provide financial aid to students, research indicates that a high sticker price can discourage enrollment even if the net price, which includes financial aid, does not increase (Mitchel et al., 2018).

A four-year private institution in western Pennsylvania began using the Common Application in 2019. The Common Application is a college admissions application for undergraduates that applicants may use to apply to over 1,000 member colleges and universities in all 50 U.S. states, the District of Columbia, Canada, China, Japan, and many European countries (2023). The institution's use of the Common Application in 2019 may explain the substantial spike in accepted students from 2019 to 2020. This increased visibility may have allowed the institution to attract more applicants, resulting in a larger applicant pool and pool of accepted students. Another factor may be the elimination of application fees, which permits students to apply to more institutions to determine which ones admit them. Students are then able to choose between the institutions to which they were accepted. This theory is supported by Net-Price Theory because students can apply to multiple institutions without paying an

application fee. Once a student has been accepted to multiple schools, they can begin "shopping" for the best net price among the institutions that admitted them. In addition, Neoliberalism maintains that higher education is a private, not a public, product and that students are market-driven price shoppers. This would explain why there were substantial spikes of accepted students and ultimately ANE students from 2019 to 2021.

During the same five-year period, the household income level ranging from \$0 to \$30,000 had the lowest enrollment rate of any income bracket. \$0 to \$30,000 had the second highest number of ANE students compared to all other household income levels. As the overall accepted student population increased substantially, year over year, it would be expected that the enrolled student population would also increase at a comparable rate. The enrollment trends of racial minority and low socioeconomic student populations indicate otherwise. This data suggests a possible issue to higher education access at a private four-year institution in western Pennsylvania. Tuition increases not only have a negative impact on enrollments, as numerous studies have shown, but they also reduce campus diversity (Allen and Wolniak, 2018).

The income bracket of \$110,000 or more had the greatest number of ANE and Enrolled students. The enrolled student population with household incomes of \$110,000 or more is significantly larger in number than the other household income level student populations, which are significantly smaller in number. The enrollment percentages of \$110,000 or more were not the highest among household income level student populations but that may be due to the competitive nature of higher education institutions "high-price/high-aid" models. As more institutions compete in this manner, however, schools must continue to discount tuition in order

to remain competitive, despite the practice's diminishing ability to differentiate schools (Mintz, 2021). These students can afford higher-priced institutions, have numerous options within these institutions, and can accept the best "high-aid" offer they receive. Using Net price theory and college choice, these students can determine their school of choice. The net price theory in higher education refers to the student "shopping" for the institution with the lowest net tuition price. In addition to encouraging prospective students to view higher education as a commodity, the high-price, high-aid model incentivizes admitted students to negotiate for the largest tuition discount (Rine, 2019). This mentality transfers the objective of students and their families from finding the best possible institution given the student's unique background, requirements, and interests to securing the lowest possible cost or the highest educational value (Rine, 2019). The data indicate that college choice is an access issue for a private four-year institution in western Pennsylvania, as the number of accepted students has increased from year to year, but enrollment has remained stagnant.

The overall out-of-pocket expenses for each enrolled household income level student was observed and analyzed. During the five-year period, the percentage of out-of-pocket costs was highest for households with incomes of \$110,000 or more. This trend continued across all income levels, with higher household income levels having the highest out-of-pocket expenses and lower household income levels having the lowest out-of-pocket expenses. In 2021, the percentage of unfunded tuition, or out-of-pocket expenses, for households with incomes between \$0 and \$30,000 was 43.01 percent, compared to 64.35 percent for households with incomes of \$110,001 or more. On the surface, it appears that this would be an appropriate and comparable amount of out-of-pocket expenses for each household income level. 43.01 percent equates to

\$24,801 out-of-pocket expenses from a total cost of tuition with room and board, or cost of attendance, for a student in the \$0 to \$30,000 income level. There is still a substantial amount of out-of-pocket expense to be covered. Furthermore, low-income students who attend these institutions may be disproportionately affected by increasing tuition levels and thus encumbered with having to seek additional sources of aid, primarily loans, to fund their education. For most low-income students, the amount of aid does not fully offset the economic burden of foregone income or eliminate the need to work during college (George-Jackson et al., 2012).

Even with a lower out-of-pocket expense for low household income students based solely on socioeconomic status, the debt-to-income ratio after completion of a four-year degree poses a greater challenge if their household income does not increase after graduation. A student in the lowest income bracket, \$0 to \$30,000, owes 43 percent compared to those in the highest bracket, \$110,000 or more, who owe 64 percent. Comparatively, the cost of a four-year degree at a private four-year institution in western Pennsylvania including room and board, is approximately \$230,000, excluding the annual tuition increase and based on 2021 prices. If the percentage of aid is compared to the total tuition cost to determine the amount owed at a four-year private institution in western Pennsylvania after graduation, and then this amount is compared to the student's income, the results indicate that a student from a low socioeconomic background will graduate with a substantial amount of debt, even with larger financial aid amounts. A student with a low socioeconomic status has a debt-to-income ratio that is more than double that of a student with a higher socioeconomic status. Notably, researchers have hypothesized that students from underrepresented minorities and lower socioeconomic backgrounds may be more sensitive to tuition increases, possibly due to a higher concern for reliance on loans to pay for college

(Allen and Wolniak 2018). In 2021, a low socioeconomic status student attending a four-year private institution in western Pennsylvania for a four-year degree would receive 67 percent financial aid, leaving them with \$98,040 in debt, which is greater than 300 percent of their annual income. Comparatively, a student with a higher household income attending a four-year private institution in western Pennsylvania for a four-year degree in 2021 would receive 46 percent aid, leaving them with \$147,200 in debt, or 133 percent of their annual income. If solely based on socioeconomic status, a student with a low socioeconomic status pays double the amount of debt. Abrupt tuition hikes have accelerated the longer-term trends of college becoming less affordable and costs transferring to students. The cost of attending a four-year public college or university has increased significantly faster than the median income over the past two decades (Mitchel et al., 2018). Although federal student aid has increased, it has fallen short of tuition and other college expense increases on average.

What does this mean for access to a four-year private institution in western Pennsylvania? A four-year private institution in western Pennsylvania has adopted the "high-price/high-aid" tuition model. The "high-price/high-aid" tuition model discourages middle- and low-socioeconomic students from enrolling in college because "sticker shock" prevents them from applying and advancing through the admissions process. In these instances, the "high-price/high-aid" tuition model is not functioning as intended, namely, to reduce the overall cost of tuition. Due to net price increases, low-income students are less likely to enroll in higher education, whereas the same price increases have a smaller effect on the enrollment decisions of other students (George-Jackson et al., 2012). Net price theory not only supports the higher income level student populations as they “shop” for the best price, but it deters the middle- and low-

socioeconomic status students from enrolling as they are the most price sensitive and will forego college because they cannot afford it, even with a tuition discount. Rising tuition threatens affordability and access, leaving students and their families, including those whose annual incomes have remained stagnant or declined over the past several decades, overburdened with debt or unable to afford college (Mitchel et al., 2018). Mitchel et al. (2018) posits, “This is notably true for racial minority students (who have historically confronted significant barriers to attending college), low-income students, and non-traditional students” (p. 1). After observing and analyzing the data, it is apparent that a four-year private institution in western Pennsylvania has an access issue.

Recommendations and Implications for Educational Leadership for Social Justice

Within American higher education, a growing consensus is forming that the “high-price/high-aid” model is broken (Rine, 2019). What can be done in the future to enhance access to higher education for students from all racial and socioeconomic populations? Long-term cuts to per-student funding for higher education jeopardize the affordability, accessibility, and quality at higher education institutions in all fifty states (Mitchel et al., 2018). In addition to allocating additional funds to support public and private colleges and universities and reversing the long-term trend of disinvestment, states can implement more sophisticated state financial aid policies and ensure that funds are allocated to institutions with the greatest need (Mitchel et al., 2018). The positive news is that this is currently occurring. According to the latest State Higher Education Finance report from the State Higher Education Executive Officers Association, state and local funding for higher education increased by nearly 5 percent in fiscal year 2022

(Huiskes, 2023). States allocated more funds for higher education, with financial aid increasing by 2 percent and general public operations increasing by 7 percent (Huiskes, 2023). The SHEF report, which has been published annually since 2003, is a collection of data describing state and local funding for two- and four-year institutions of higher education, as well as tuition revenue and enrollment (Huiskes, 2023). In 32 states and the District of Columbia, the "student share" — which the association defines as the percentage of total revenue that comes from tuition for each full-time student — decreased during the 2022 fiscal year. In Connecticut, Kansas, Louisiana, and New Jersey, the proportion of student revenue to total revenue has fallen below 50 percent in each of the past five years (Huiskes, 2023). This trend was attributed to three factors in the report: the national enrollment decline, increasing state commitments to financing higher education, and some federal stimulus funds given to states for higher education during the pandemic (Huiskes, 2023). Although this recent increase of state appropriations is helping, tuition and fees continue to account for nearly 42 percent of the revenue of public colleges, compared to just 21 percent in 1980. From 2021 to 2022, enrollment in public colleges declined 2.5%, the second-largest decline since 1980. The previous year, public higher education experienced a 3 percent decline (Huiskes, 2023). Increasing state appropriations is one way to help with the national declining enrollment trend. Nationally, revenue per full-time student from state appropriations and net tuition revenue amounted to \$17,393, a record high. However, the trend does not remain true in the majority of states; only eleven states have reached record highs (Huiskes, 2023). This trend must expand to more states in the future if it is to assist students with their tuition costs. The recent increase in state appropriations may be attributable to the COVID-19 pandemic and the federal and state governments' stimulus packages for higher education

institutions. If these increases are a result of the pandemic, they are temporary and not permanent, and the data must be monitored moving forward. All models of rising tuition rates originated from a decline in state and federal funding. To facilitate access to higher education, it is recommended to return to increasing state allocations.

The discussion surrounding rising student loan debt is inevitably dominated by the cost of tuition and, more frequently, proposed solutions involve tuition reductions (Ulbrich & Kirk, 2017). Options to resolve the escalating tuition costs must be a significant component of the solution, but they cannot be the only solution pursued. In addition to tuition reduction, there are several other areas and potential opportunities that are frequently left out of the discussion. Today's Financial Aid is a pale imitation of what its originators intended. It is punitive rather than supporting the aspirations and desires of those who wish to study and advance through higher education. It serves as an incentive to enroll in college, but then subjects students to annual costs they cannot afford. It positions students against their parents, administrators of financial aid, and each other. It gives those who run out of money the impression that they did something wrong (Goldrick-Rab, 2016). In the 1970s, it made sense to limit financial aid to the poorest individuals; after all, most people didn't want to go to college, it wasn't required, and college costs were low enough that the Pell Grant covered most of the costs. Today, the same model fails: the vast majority of the population desires access to affordable, high-quality public or private higher education, and costs are so high that grants and scholarships provide only a small discount for a minority of students with financial need (Goldrick-Rab, 2016). Financial aid based on financial need and administered by a vast bureaucracy excludes the impoverished, who cannot navigate the system, and squeezes the middle class, which is only offered loans (Goldrick-Rab,

2016). There are measures that can be taken immediately to strengthen the Financial Aid system, as well as measures that can be taken to reduce college costs. But ultimately, a new system must be constructed, Financial Aid 2.0, based on affordable and accessible public higher education of high quality (Goldrick-Rab, 2016). This future system should begin by making the first few years of college or the first degree free for all as a public benefit, as opposed to offering more financial assistance to keep up with escalating costs (Goldrick-Rab, 2016). An incremental strategy that begins by providing free access to the associate degree program for all students who pursue it. This is the first step in the college admissions process, and all public institutions should grant it. Numerous students enroll in four-year institutions, complete four semesters, and graduate with nothing. It is crucial that these institutions recognize this effort with an associate degree and that this degree become the new "first degree." According to Goldrick-Rab (2016), "We must move beyond the view that education is something that takes place only in K-through-12 schools and four-year colleges as important as those are. Education and skills must be provided flexibly and to people of any age" (p. 254). A year or two of college credits without a degree is not only a waste of time but also a substantial financial burden. Those who are left behind today are those who choose not to take the risk. Price is the primary barrier to higher education access. By eliminating the price of admission, an important message can be communicated: there is no downside to attempting. And for those who do attempt, eliminating the need to work during college increases their likelihood of success. If they do not succeed, students will suffer minimal damage and will be able to reflect on what transpired, but they will not be required to pay a debt collection agency on a monthly basis after they have left without a degree (Goldrick-Rab, 2016). National leaders must provide hope to all people. Simply supplying financial assistance is

insufficient. Efforts to expand the maximum Pell Grant have never met with much success, and this laudable program continues to exclude (due to a lack of funds and administrative red tape) a large number of students who face substantial price barriers (Goldrick-Rab, 2016). Simplifying the FAFSA is a technocratic solution, not a transformative one; it will not generate new funds. It is time for a national discourse about what it means to provide everyone with a high-quality public education for the thirteenth and fourteenth years and how we will pay for it (Goldrick-Rab, 2016). New taxes are an option, but we can also simply cease spending on unprofitable investments. Estimates vary, but many indicate that the costs are between \$70 billion and \$100 billion; we could go a long way toward covering these costs by eliminating subsidies to for-profit universities and tax credits that are demonstrably ineffective (Goldrick-Rab, 2016).

Students must be educated on the origins of their grants and loans. Pell Grants and the subsidy affixed to federal loans are funded by taxpayers. In reality, the federal government assumes a substantial amount of risk when it originates student loans. All financial aid documents should include the aid's name and source (federal, state, institutional, philanthropic) in plain language (Goldrick-Rab, 2016). It is not sufficient to begin the name of a grant with "Federal Pell Grant," as in the current Financial Aid Shopping Sheet disseminated by the United States Department of Education (Goldrick-Rab, 2016). There should be a separate column describing the source of the funds, and government expenditures should be labelled "taxpayer-supported federal grant." In addition, the specific requirements for each form of assistance should be specified. If maintaining a 2.0 GPA is a requirement of the Pell Grant, the requirement must be displayed next to the dollar amount (Goldrick-Rab, 2016). Students must understand the requirements to keep their Pell grant. Students, their academic advisors, and financial aid

administrators must have a clearer understanding of the conflicts and complexities caused by tying various requirements to different forms of aid.

Financial aid information for students should be provided sooner and in greater detail than is the case currently. Students should discover about financial aid nearly a year prior to enrolling in college, as opposed to just a few months beforehand! This would be an improvement in the correct direction. There are advantages to informing students about Pell eligibility much earlier, even as early as in middle school. Goldrick-Rab (2016) maintains, "Early notification that aid is available may help some young people begin to think about college in concrete terms and take steps to prepare academically" (p. 243). Surprises derail students. Universities frequently include an asterisk or fine print in their extensive literature sent to prospective and incoming students to indicate that prices are subject to change (Goldrick-Rab, 2016). In general, however, students are led to assume that the cost of their first year of college will not change in subsequent years. Colleges, universities, and states benefit from understating the likelihood and magnitude of future price increases, but doing so decreases the likelihood of degree completion and harms all institutions involved, while also not being fair to students and their families (Goldrick-Rab, 2016). States should collaborate with public colleges and universities to develop budgets that provide an incoming student with a road map of what the real cost of attendance will be over the next four years. Projected tuition increases and non-tuition increases should be included, and the methodology underlying these estimates should be made clear (Goldrick-Rab, 2016). The Truth in Tuition Act was enacted years ago. It would have required all colleges and

universities to provide a multiyear estimate of their students' actual and net costs (Goldrick-Rab, 2016). This endeavor should be revisited.

Additionally, colleges and universities must assume greater accountability for whether their students can satisfy the academic requirements for financial aid (Goldrick-Rab, 2016). If a college has a satisfactory academic progress standard that a significant number of students fail to meet, thereby losing their financial aid, then incoming students must be made aware of this fact. This information should be included in the aid package provided to students, along with explicit explanations of the repercussions of falling short (Goldrick-Rab, 2016). In a similar vein, families with annual incomes between \$20,000 and \$30,000, many of whom live on the brink of poverty, deserve better than the current system provides. The automatic zero expected family contribution threshold should be set at or above \$30,000 and maintained (Goldrick-Rab, 2016). This could have helped low-income students whose families were deemed capable of contributing \$2,500 to their education in one year but contributed nothing the following year (Goldrick-Rab, 2016). These changes do not inspire confidence in the current financial aid system.

Several areas of current expenditure should be reconsidered if the objective of financial aid policy is to break the link between family income and college completion. The first is merit-based aid. According to the National Association of State Student Grant and Aid Programs, in 2012 - 2013, states distributed \$2.3 billion in merit-based grants - one-fourth of all grant aid distributed (Goldrick-Rab, 2016). Growth in spending has slowed in the last two years, and yet in many states, more than half of all state aid dollars are distributed without regard to need.

Moreover, a recent policy scan conducted by the Education Commission of the States revealed that many of the hundred largest state financial aid programs restrict eligibility to only students who enroll full time or conservatively cap the number of years they can receive support (Goldrick-Rab, 2016). Higher education institutions annually distribute \$9 billion in grants from their own treasuries, roughly the same amount as the states. However, colleges and universities continue to allocate more than half of what they claim to be "scarce" resources based not on the financial need of their students, but on their "talents" (Goldrick-Rab, 2016).

Merit aid expenditures perpetuate inequality. 28 percent of all state aid and 31 percent of all institutional aid distributed in this manner are awarded to students from the top 25 percent of families by income (Goldrick-Rab, 2016). Students from affluent families not only have no unmet needs, but their needs are met in excess, whereas students from middle-class and low-income families have unmet needs. This is supported by the meritocracy theory, as merit scholarships are awarded to students with higher academic profiles and not to those with unmet financial needs. Moreover, these expenditures frequently do not increase college enrollment or completion rates among affluent students; in fact, a number of studies indicate that they encourage negative academic behavior in college (Goldrick-Rab, 2016). It is recommended that states and institutions alter the structure of their scholarship programs from merit-based aid to need-based aid. Need-based aid programs facilitate access to higher education by assisting students from racial minorities and low socioeconomic backgrounds and will help increase enrollment among these groups.

The “high-price/high-aid” model encourages institutions to focus on the bottom line, or the amount of net tuition revenue that can be generated using specific sticker prices and discount rates. Often lost in this approach is a focus on the extremities, specifically the utmost amount that some students must pay (often through student loans) for the institution's aggregate figures to work (Rine, 2019). Tuition resets and other promising reforms provide a better balance because they reduce the utmost financial burden "full-pay" students must shoulder (Rine, 2019). A tuition reset is the inverse of the “high-price/high-aid” tuition model. Tuition resets essentially lower the cost of tuition and offer lower amounts of institutional aid, also known as “low-price/low-aid” tuition model. Instead of offering discount rates, which, according to the National Association of College and University Business Officers, have surpassed 52 percent nationally, institutions reduce initial prices to attract students (Brock, 2020). Historically, the majority of colleges and universities that declared resets had fewer than 5,000 students. Nonetheless, since the public sector is also experiencing enrollment declines, a number of larger universities have joined the tuition reduction bandwagon (Brock, 2020).

The price sensitivity of students and families continues to rise, and with good reason. According to College Board, the average published tuition and fees at private nonprofit four-year institutions was \$49,870 in 2019–20. According to the National Center for Education Statistics, in 1985–1986 the total expenditure was \$19,812 (Brock, 2020). Longmire and Company, an enrollment management firm, discovered in a study that 35% of parents and 45% of students eliminated potential institutions based on pricing before conducting any research. In addition, the study revealed that approximately sixty percent of families were unaware that private colleges

offer tuition discounts, a factor that many institutions consider when determining price reductions (Brock, 2020). This affirms Net Price Theory in that racial minority and low socioeconomic students are most sensitive to price and are deterred from applying to institutions with high “sticker prices.” Prospective students and their parents have stated for several years that a high tuition rate is simply unaffordable. Extensive research supports this conclusion. Despite significant discounts, it simply appears to be beyond their financial means. Resetting tuition results in a price that is much closer to the actual cost of educating a student and is much more transparent and accurate (Brock, 2020).

ADV Market Research and Consulting cautions that prior to announcing or instituting a reset, institutions should have developed a strong brand. In addition, an announcement of a reset is most effective when made in conjunction with other significant initiatives, rather than as the sole strategy (Brock, 2020). According to Brock (2020), “Colleges with strong brands who reset tuition are seen as offering better value, whereas those with weak brands are perceived as making a last-ditch effort to generate some enrollment” (p. 41).

Some institutions have experimented with tuition resets by offering benefits in addition to a total cost reduction. Through its "Learn more, earn more, and spend less" campaign, Hiram College added more to the equation than a tuition reset. Students at Hiram can enroll in up to two free summer courses annually, allowing for acceleration or deceleration during the academic year. Students can earn a degree in three years if they take more credits, or they can use the summer to make up courses they discontinued or postponed at no additional cost (Brock, 2020).

In addition to lowering the "sticker price," this model also provides students with financial and academic benefits.

Resetting tuition is an efficient recommendation for institutions with a strong brand that use the "high-price/high-aid" tuition model. A private four-year institution in western Pennsylvania satisfies all of these criteria. To ensure a smooth transition to a tuition reset model, administrators at the institution should conduct a comprehensive analysis of its position in relation to its competitors in the marketplace. Research indicates that higher education institutions with strong brands have been successful in instituting a tuition reset. Therefore, determining the institution's brand strength is essential. The institution should utilize a ranking system, such as the *U.S. News & World Report*, to evaluate the brand strength and rankings of its primary local and national competitors. These rankings and the total number of students enrolled at rival institutions can help the institution determine its relative standing. Competitors with fewer than 5,000 students would not contemplate emulating the institution's strategy to reset tuition. This information can assist the institution in determining the strength of its brand among its competitors and the likelihood that its competitors will also implement a "low-price/low-aid" tuition model. If the research is positive, the institution is advised to implement a tuition reset. Resetting tuition would increase enrollment among price-sensitive student populations, such as racial minorities and students with low socioeconomic status.

Limitations

Despite the fact that this study's collected data produced results that addressed the research questions, there were still limitations. It would be naive to presume that the students

from the Accepted Not Enrolled (ANE) population did not attend a four-year private institution in western Pennsylvania solely because of the cost of tuition. The college decision-making process influences the outcomes of these students and offers numerous variables that may not have been identified in this study. College choice theory is the process by which students determine whether or not to attend college and where to attend (Iloh, 2018). According to early college choice research, parental, student, and institutional factors are among the most influential influences on college selection. Examples of parental influences are parent income, parent education, and parent encouragement and support (Iloh, 2018). Characteristics of students include socioeconomic status, academic aptitude, educational aspirations, gender, and ethnicity. Institutional factors include reputation, location, tuition, academic and non-academic programs, religious affiliation, social atmosphere, and size (Iloh, 2018).

Students who did not enroll in a four-year private institution in western Pennsylvania were influenced by factors other than or in addition to tuition cost, according to the college choice theory. A qualitative research strategy would permit further exploration of the decision-making process of ANE students to not attend a four-year private institution in western Pennsylvania. ANE students could be administered semi-structured interviews to determine which variables influenced their college selection. Due to the researcher's position at the institution and the fact that this form of research would violate the Family Educational Rights and Privacy Act (FERPA), the Institutional Research Board denied the researcher mixed methods research proposal.

As indicated in Chapter 1, "Anticipated Limitations," the COVID-19 pandemic may or may not have influenced students' college choice decisions. In the fall of 2020, a four-year

private institution in western Pennsylvania adopted a hybrid class structure in response to the COVID-19 pandemic. The hybrid model involved a rotation of fifty percent of a class in the classroom and fifty percent online during the same lecture. The students would alternate between attending live and online lectures. During the summer preceding, all accepted students for the Fall 2020 semester were informed of the hybrid model and all campus-wide social distancing measures. It is conceivable that the COVID-19 pandemic and the hybrid class model at a four-year private institution in western Pennsylvania influenced students' college attendance decisions. Observing the percentage of accepted students who enroll out of the total accepted student population can provide insight. The enrollment rate decreased from 27.07 percent in 2019 to 19.90 percent in 2020 to 13.55 percent in 2021. It is plausible that the COVID-19 pandemic influenced ANE students' college admissions decisions. However, without a semi-structured interview to confirm the theory, it is only one of several possibilities.

The data gathered for the ANE student population's household income levels were not as accurate or comprehensive as the data collected for the Enrolled student population's household income levels. The population of enrolled students was obtained from the public domain Integrated Postsecondary Education Data System (IPEDS) and the Common Data Set (CDS). This information must be reported annually to IPEDS and CDS by a four-year private institution in western Pennsylvania, making it accessible to the public. The ANE data obtained from the Enrollment Management Group (EMG) are not available to the public. EMG reported ANE students using the same format as IPEDS and CDS reported Enrolled students. EMG provided the total number of ANE students by income level as well as the “number of students who were awarded any grant or scholarship aid from the following sources: the federal government,

state/local government, or the institution.” In accordance with the IPEDS and CDS format, EMG also provided the "Average amount of federal, state/local, and institutional grant or scholarship aid awarded to these students." Since these ANE students did not "draw down" Title IV funding from the federal and/or state/local governments in order to attend a four-year private institution in western Pennsylvania, only the institutional merit scholarship was reflected in their student records. Due to this lack of information, it was impossible to ascertain the out-of-pocket expenses for ANE students after all financial aid sources were applied to the total cost of tuition because the averages were inaccurate. If given additional time to collect the data on all financial sources for ANE students, a more accurate picture of out-of-pocket expenses for ANE students would emerge. This lack of data prevented a comparison between the out-of-pocket expenses of Enrolled and ANE students.

Implications For Your Leadership Agenda and Growth

As a higher education administrator at a four-year private institution in western Pennsylvania with over twenty years of experience in higher education, tuition cost has always been a barrier to access. I have witnessed firsthand the pleasure that people feel when they realize that higher education is the missing element to attaining their career goals. I appreciate the process of forming relationships while observing the beginning of these students' journey. Over the course of my professional tenure, I have seen students from diverse backgrounds denied access to higher education due to cost. Affordability and access to higher education is still an issue for diverse student populations.

As a higher education administrator, I have learned to evaluate policies, methods, and procedures that may restrict access to higher education. In my current position, I have eliminated several long-standing barriers to access. There is still work to be done, as numerous other obstacles have been identified through this improvement research process. Certain decisions made by senior administrators and executive leaders exceed the scope of my current position. I plan to continue using data to inform my own decision-making and to present data to executive-level decision-makers to assist in informing their own decisions. In the past, I conducted my own research and was able to use data to inform my immediate supervisor, who then used my data to influence senior management's decision-making at the institution. In the future, I intend to continue using this strategy to present my research to executive-level decision makers.

My life has been governed by meritocracy because I was taught at an early age that "if you work hard, you will be rewarded." I have lived my entire life according to the meritocratic principles, but I was unaware of it because I did not know what meritocracy was. Meritocracy Theory provided me with a new perspective on higher education admissions processes in which I had participated throughout my entire career. On the surface, meritocracy seems fair and just as students are awarded on their "merits." A system that is intended to reward all students on their merits of hard work and academic abilities, conversely does not reward ALL students. Instead, one will see that the advantaged get rewarded on their merits while the already disadvantaged are put behind even further.

This study focused on the theoretical framework of Human Capital Theory. In this study Human Capital Theory is described as a means of production through which increased

investment generates additional output or an investment in oneself. Human Capital is not a barrier to accessing higher education, but rather precludes prospective students before they begin their educational journey, according to a second interpretation of the Human Capital Theory. In other words, all students have various starting positions or advantages and disadvantages before attempting to gain access to higher education. These students have varying levels of human capital, which impact their access to higher education. A student born into a wealthy elite family has the opportunity to attend an Ivy League institution such as Harvard, Yale, or Princeton, whereas a student born into a low socioeconomic family has almost no chance of attending one of these prestigious universities. Future research should contemplate examining the Human Capital Theory through this lens.

I have learned the disadvantages of the "high-price"/ "high-aid" tuition model and how it impedes access to higher education on an equitable basis. Traditionally marginalized student populations cannot afford the high tuition prices and in most cases are not given the necessary tuition discount because the "high-aid" is given to students with the best academic profiles and not given to students who need it the most. Meritocracy Theory and Net Price Theory work together to prevent access because merit scholarships are awarded to students with exceptional academic profiles, and the high "sticker price" discourages students from racial minorities and low socioeconomic backgrounds from enrolling.

It would be beneficial for administrators at a four-year private institution in western Pennsylvania to track specific data points in order to give them a better knowledge of access at the institution. The focus of this study was on accepted not enrolled and enrolled students rather than the prospects, inquires, and applicants at the top of the admissions funnel. By examining

each of these initial phases of the admissions cycle by race/ethnicity and household income levels, administrators would obtain better understanding about access to the institution. If the racial minority and low socioeconomic prospect and inquiry levels are low, this can be viewed through the lens of Net Price Theory, as these students are more price sensitive than students from other racial backgrounds and household income levels and do not apply because of the "sticker price." Applicants who were rejected acceptance can also be evaluated based on their racial/ethnic and socioeconomic status to determine if there is an issue with access to accepted status. If there is a high proportion of students from racial minorities and low socioeconomic backgrounds among applicants who were rejected acceptance, this can be viewed through the lens of Meritocracy Theory. These students were not accepted primarily due to their academic profiles. The academic standards were not fulfilled due to the lack of merits possessed by these students. According to Meritocracy Theory, the affluent perform better due to their capacity to pay for higher quality learning environments than those from low-income households. This is a substantial disadvantage for students from low socioeconomic backgrounds and ethnic minority groups. Administrators of the institution should scrutinize these data points at each level of the admissions funnel to determine whether or not there are access issues throughout the admissions cycle. This will allow administrators at a four-year private institution in western Pennsylvania to acquire a better comprehension of the current access issues and make adjustments to prevent further barriers to access.

A four-year private institution in western Pennsylvania should survey the ANE student pool in order to acquire a greater comprehension of the college decision-making process. After each admissions cycle concludes and the new academic year begins, electronic surveys should be

sent to ANE students and their parents to determine why they did not enroll. The institution should employ this strategy and continue to monitor this data. The institution can acquire a greater comprehension of the reasons why ANE students are not enrolling. Administrators will gain a greater understanding if there is an access issue at a four-year private institution in western Pennsylvania by acquiring this information. In addition, it would be advantageous to survey the enrolled student population. Administrators can discover the reasons why students chose their institution and develop strategies based on these strengths.

It would be naive of me to assume that every student who did not enroll at a four-year private institution in western Pennsylvania did so because of the cost of tuition. There are numerous factors that influence the college decision process. In the future, I would like to conduct a qualitative study to determine why a student selected a particular institution over others. This would help extend this study to provide administrators in higher education with more detailed information on student decision making and enrollment trends. As Diversity and Inclusion becomes a major focus for higher education institutions, it is crucial that administrators assess their own institution's policies to determine if any restrict access.

References

About common app: Common app. Common App | Common App. (2023).

<https://www.commonapp.org/about>

About IPEDS. The Integrated Postsecondary Education Data System. (2020). Retrieved March

23, 2023, from [https://nces.ed.gov/ipeds/about-ipeds#:~:text=IPEDS percent20is percent20the percent20Integrated percent20Postsecondary,for percent20Education percent20Statistics percent20\(NCES\).](https://nces.ed.gov/ipeds/about-ipeds#:~:text=IPEDS percent20is percent20the percent20Integrated percent20Postsecondary,for percent20Education percent20Statistics percent20(NCES).)

Allen, D., & Wolniak, G. C. (2018). Exploring the effects of tuition increases on racial/ethnic

diversity at public colleges and universities. *Research in Higher Education, 60*(1), 18–43.

<https://doi.org/10.1007/s11162-018-9502-6>

Almendarez, L. (2013). Human capital theory: Implications for educational development in

Belize and the Caribbean. *Caribbean Quarterly, 59*(3-4), 21–33.

<https://doi.org/10.1080/00086495.2013.11672495>

Alvarado, L. A. (2010). Dispelling the meritocracy myth: Lessons for higher education and

student affairs educators. *The Vermont Connection, 31*(1), 2.

American Psychological Association. (n.d.). *APA Dictionary of Psychology*. American

Psychological Association. Retrieved November 1, 2022, from

[https://dictionary.apa.org/socioeconomic-](https://dictionary.apa.org/socioeconomic-status?_ga=2.174436642.1256956930.1667346346-539139682.1667346346)

[status?_ga=2.174436642.1256956930.1667346346-539139682.1667346346](https://dictionary.apa.org/socioeconomic-status?_ga=2.174436642.1256956930.1667346346-539139682.1667346346)

Archibald, R. B., & Feldman, D. H. (2014). *Why does college cost so much?* Oxford University Press.

Blundell, R., Dearden, L., Meghir, C., & Sianesi, B. (1999). Human capital investment: the returns from education and training to the individual, the firm and the economy. *Fiscal studies*, 20(1), 1-23.

Brighouse, H. (2022). The tyranny of meritocracy and elite higher education. *Theory and Research in Education*, 20(2), 145-158.

Brock, M. (2020). *NACAC JCA246 Winter 2020 - Ed.* Tuition Resets Changing the Conversation. <https://files.eric.ed.gov/fulltext/EJ1258859.pdf>

Browning, J. (2013). Determining a relationship between higher education financial position and tuition discount rates. *Research in Higher Education Journal*, 20:1–34

Bureau, U. S. C. (2020). *United States Census Bureau: Race: Tables: Decennial Census.* Explore census data. Retrieved March 29, 2023, from <https://data.census.gov/table?q=Race&g=050XX00US24003 percent2C24001>

Cahalan, M. W., Perna, L. W., Addison, M., Murray, C., Patel, P. R., & Jiang, N. (2020). Indicators of higher education equity in the United States: 2020 historical trend report. *Pell Institute for the Study of Opportunity in Higher Education.*

Cai, L. (2020). Standardized testing in college admissions: Observations and reflections. *Educational Measurement: Issues and Practice*, 39(3), 34-36.

- Cannella, G. S., & Koro-Ljungberg, M. (2017). Neoliberalism in higher education: Can we understand? can we resist and survive? can we become without neoliberalism? *Cultural Studies ↔ Critical Methodologies*, 17(3), 155–162.
<https://doi.org/10.1177/1532708617706117>
- Collins, B., Fountain, J. H., & Dortch, C. (2021). The COVID-19 Pandemic and Institutions of Higher Education: Contemporary Issues. CRS Report R46666, Version 2. *Congressional Research Service*.
- Deresiewicz, W. (2014, July 22). *The Miseducation of America*.
<https://www.chronicle.com/article/The-Miseducation-of-America/147227>.
- Dynarski, S., & Scott-Clayton, J. (2013). Financial aid policy: Lessons from research.
<https://doi.org/10.3386/w18710>
- Engberg, M. E., & Wolniak, G. C. (2014). An Examination of the Moderating Effects of the High School Socioeconomic Context on College Enrollment. *The High School Journal*, 97(4), 240–263. <https://doi.org/10.1353/hsj.2014.0004>
- Generett, G. G., & Olson, A. M. (2020). The stories we tell: How merit narratives undermine success for urban youth. *Urban Education*, 55(3), 394-423.
- George-Jackson, C. E., Rincon, B., & Martinez, M. G. (2012). "Low-Income Engineering Students: Considering Financial Aid and Differential Tuition. *Journal of Student Financial Aid*, 42(2). [https://doi.org/ https://ir.library.louisville.edu/jsfa/vol42/iss2/](https://doi.org/https://ir.library.louisville.edu/jsfa/vol42/iss2/)

- Glater, J. D. (2016). Debt, merit, and equity in higher education access. *Law & Contemp. Probs.*, 79, 89.
- Goldin, C. (2016). Human Capital. In *Handbook of cliometrics* (pp. 55-86). Springer.
- Goldrick-Rab, S. (2016). *Paying the price: College costs, Financial Aid, and the betrayal of the American dream*. The University of Chicago Press.
- Goldrick-Rab, S., & Kendall, N. (2017, November 3). *The real price of college. college completion series: Part Two*. VTechWorks Home. Retrieved February 10, 2023, from <https://vtechworks.lib.vt.edu/handle/10919/83631>
- Goldrick-Rab, S., & Steinbaum, M. (2020). What Is The Problem With Student Debt? *Journal of Policy Analysis and Management*, 39(2), 534–540. <https://doi.org/10.1002/pam.22208>
- Hardy, B. L., & Marcotte, D. E. (2020). (rep.). *Education and the Dynamics of Middle-Class Status*. Brookings. Retrieved from <https://vtechworks.lib.vt.edu/bitstream/handle/10919/99756/EducationMiddleClass.pdf?sequence=1>.
- Hartocollis, A. (2020, February 20). *U.S.C. Offers Free Tuition to Students Whose Families Make \$80,000 or Less*. The New York Times. <https://www.nytimes.com/2020/02/20/us/usc-free-tuition.html>.

Hemelt, S. W., & Marcotte, D. E. (2011). The impact of tuition increases on enrollment at public colleges and universities. *Educational Evaluation and Policy Analysis*, 33(4), 435–457.

<https://doi.org/10.3102/0162373711415261>

Hemelt, S. W., & Marcotte, D. E. (2016). The changing landscape of tuition and enrollment in american public higher education. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 2(1), 42–68. <https://doi.org/10.1353/rus.2016.0002>

Home. Common Data Set. (2022, December 14). Retrieved March 23, 2023, from <https://commondataset.org/>

Huiskes, H. (2023, May 25). *State support for Higher Ed continues to rise. yet public colleges still face headwinds*. The Chronicle of Higher Education. https://www.chronicle.com/article/state-support-for-higher-ed-continues-to-rise-yet-public-colleges-still-face-headwinds?cid=gen_sign_in

Illing, S. (2019, October 21). *How meritocracy harms everyone - even the winners*. Vox. Retrieved October 19, 2022, from <https://www.vox.com/identities/2019/10/21/20897021/meritocracy-economic-mobility-daniel-markovits>

- Iloh, C. (2018). Toward a New Model of College "Choice" for a Twenty-First-Century Context. *Harvard Educational Review*, 88(2), 227-244,256.
<https://www.proquest.com/scholarly-journals/toward-new-model-college-choice-twenty-first/docview/2061866688/se-2>
- Jaquette, O., Curs, B. R., & Posselt, J. R. (2016). Tuition rich, mission poor: Nonresident enrollment growth and the socioeconomic and racial composition of public research universities. *The Journal of Higher Education*, 87(5), 635–673.
<https://doi.org/10.1353/jhe.2016.0025>
- Jimenez, D., & Glater, J. D. (2020). Student debt is civil rights issue: The case for debt relief and higher education reform. *Harvard Civil Rights-Civil Liberties Law Review*, 55(1), 131-198.
- Kulkarni, S., & Rothwell, J. (2022, March 9). *Beyond College Rankings: A value-added approach to assessing two- and four-year schools*. Brookings. Retrieved February 25, 2023, from <http://www.brookings.edu/research/reports2/2015/04/29-beyond-college-rankings-rothwell-kulkarni>
- Kwakye, I., Kibort-Crocker, E., Lundgren, M., & Pasion, S. (2021, January). *Fall enrollment report: Exploring the impact of covid-19 on Postsecondary Enrollment in Washington*. Higher Education and the Labor Market. Retrieved February 21, 2023, from <https://wsac.wa.gov/sites/default/files/2021-01-12-Fall-Enrollment-Report.pdf>

- Liu, A. (2011). Unraveling the myth of meritocracy within the context of US higher education. *Higher education*, 62(4), 383-397.
- Liu, Y. (2013). Meritocracy and the Gaokao: A survey study of higher education selection and socio-economic participation in East China. *British Journal of Sociology of Education*, 34(5-6), 868–887. <https://doi.org/10.1080/01425692.2013.816237>
- Loper, C. (2021). An Investigation of the Assumptions and Practices of Enrollment Management Professionals and Their Impact on Enrollment Decisions of African American/Black Students at a Private, Predominantly White Institution of Higher Education (Doctoral dissertation, Duquesne University). Retrieved from <https://dsc.duq.edu/etd/2019>
- Low-income students*. StudentCaffe. (2018, July). Retrieved March 23, 2023, from [http://studentcaffe.com/prepare/underrepresented-students/low-income-students#:~:text=Who percent20are percent20low percent20income percent20students,of percent20the percent20federal percent20poverty percent20line.](http://studentcaffe.com/prepare/underrepresented-students/low-income-students#:~:text=Who%20are%20low%20income%20students,of%20the%20federal%20poverty%20line.)
- Ma, J., Pender, M., & Welch, M. (2016). Education pays 2016: the benefits of higher education for individuals and society. trends in higher education series. *College Board*.
- McMahon, W. W. (2021). The external social benefits of higher education: Theory, evidence, and policy implications. *journal of education finance*, 46(4), 398-430.
- Mijs, J. J. (2018). The unfulfillable promise of meritocracy: Three lessons and their implications for justice in education. <https://doi.org/10.31235/osf.io/6w9rg>

Mintz, B. (2021). Neoliberalism and the crisis in higher education: The cost of ideology.

American Journal of Economics and Sociology, 80(1), 79–112.

<https://doi.org/10.1111/ajes.12370>

Mitchel, M., Leachman, M., Masterson, K., & Waxman, S. (2018, October 4). *Unkept promises:*

State cuts to higher education threaten access and equity. Center on Budget and Policy

Priorities. <https://www.cbpp.org/research/state-budget-and-tax/unkept-promises-state->

[cuts-to-higher-education-threaten-access-and](https://www.cbpp.org/research/state-budget-and-tax/unkept-promises-state-cuts-to-higher-education-threaten-access-and)

Ortagus, J. C. (2016). Pursuing prestige in higher education: Stratification, status, and the

influence of college rankings. *College and University*, 91(2), 10-19. [https://www-](https://www-proquest-com.authenticate.library.duq.edu/scholarly-journals/pursuing-prestige-higher-)

[proquest-com.authenticate.library.duq.edu/scholarly-journals/pursuing-prestige-higher-education-stratification/docview/1806232416/se-2](https://www-proquest-com.authenticate.library.duq.edu/scholarly-journals/pursuing-prestige-higher-education-stratification/docview/1806232416/se-2)

Poverty guidelines. ASPE. (2023, January 19). Retrieved March 23, 2023, from

<https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>

Rine, P. J. (2016). A shell game by any other name: The economics and rationale behind tuition

discounting. Minneapolis, MN: jCENTER for Innovative Higher Education.

Rine, P. J. (2019). The discounting dilemma: Institutional benefits, unintended consequences,

and principles for reform. *Christian Higher Education*, 18(1–2), 16–23.

<https://doi.org/10.1080/15363759.2018.1543242>

Rishel, J. F., & Demilio, P. (1997). *The spirit that gives life: the history of Duquesne University, 1878-1996*. <https://www.worldcat.org/title/spirit-that-gives-life-the-history-of-duquesne-university-1878-1996/oclc/36379746>.

Schultz, L., & Backstrom, B. (2021). Test-Optional Admissions Policies: Evidence from Implementations Pre-and Post-COVID-19. Policy Brief. *Nelson A. Rockefeller Institute of Government*.

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), 101. <https://doi.org/10.5688/ajpe816101>

US Department of Education (ED). (2023, February 3). *Federal Trio Programs Current-year low-income levels*. Home. Retrieved March 23, 2023, from <https://www2.ed.gov/about/offices/list/ope/trio/incomelevels.html#:~:text=The percent20term percent20 percent22low percent2Dincome percent20individual,of percent20the percent20poverty percent20level percent20amount.>

Whistle, W. (2020, September 2). *What Is Driving The \$1.5 Trillion Student Debt Crisis*. <https://www.forbes.com/sites/wesleywhistle/2020/09/01/what-drives-the-15-trillion-student-debt-crisis/?sh=6b76f9747aec>.

Winters, J. V. (2011). Human capital, higher education institutions, and quality of life. *Regional Science and Urban Economics*, 41(5), 446-454.