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Parental SES and Geographic Location as Predictors of Graduations in Southeastern High Schools Before and After COVID-19

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Walden University
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Abstract

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MSCE, University of West Alabama, 2016

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Developmental Psychology

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Abstract

African American students in the United States have long faced systemic barriers to high school completion, which were further intensified by the COVID-19 pandemic. The purpose of this quantitative, correlational-predictive study was to examine the extent to which parental SES and school location predict graduation outcomes among African American students in southeastern public high schools from 2019 to 2024. Grounded in Bandura's social learning theory, the study explored how environmental and socioeconomic contexts influence academic achievement. Three research questions guided the study: (1) To what extent do parental SES and location combined predict the number of African American graduates? (2) To what extent do these factors individually predict graduation outcomes? (3) To what extent do graduation rates differ before and after the COVID-19 pandemic? Secondary data from 12 school districts were used. Data analysis involved multiple regression and independent-samples t-tests. Key findings of the study showed that both school location and graduation year were statistically significant predictors of graduation outcomes, with urban schools demonstrating higher graduation rates and post-pandemic cohorts showing notable shifts in performance. Recommendations include developing interventions that address resource inequities, strengthen family engagement, and incorporate social-emotional learning frameworks that promote resilience and self-efficacy. The study's social change implications emphasize advancing educational equity through policies that prioritize rural infrastructure, targeted funding, and culturally responsive programming.

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Dedication

I first want to thank my Lord and Savior, Jesus Christ, for being my constant in a world that is forever changing. I dedicate this dissertation to my loving and incredible husband, Brandon Watkins, and our beautiful children; Brandon Watkins II, Ivy Watkins, and Zoe Watkins. Your unwavering love and support throughout this academic journey have been truly remarkable. I could never thank you enough. I honor my late grandparents, Lemuel and Lillie Jefferson, whose shoulders of which I stand. My uncles, the late Bobby and James L. Jefferson, their validation of my intelligence is a memory I will always cherish. To my brother-cousin, the late Keith Ricks, who constantly pushed me to strive for excellence; his encouragement still echoes within me. To my parents, Sarah Jefferson and Moses Hobbs, your unconditional love and encouragement made this journey possible. God had a special purpose for me through the two of you. To my bonus parents, George and Johnnie Franklin, thank you for your consistent support and belief in me. In honor of my Aunt Ella Ricks, your inspiration, wisdom, and steadfast support have fueled many of my dreams. I can never thank you enough for your lifelong support of my brilliance. To my pastors, Drs. Audra and Karockas Watkins, I thank you for your prayers, guidance, and support throughout this academic journey. In addition to my extended family, nieces (Brianna and Christian), nephews (Joshua and Jonathan), and all the children in the community, I have mentored over the years. Lastly, this dissertation is for every little girl who believes her life is defined by the socioeconomic status into which she was born. You are powerful, resilient, and capable of greatness. Be the change you want to see!

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Chapter 1: Introduction to the Study

Introduction

The purpose of this quantitative study was to examine the extent to which parental socioeconomic status (SES) and school location (urban vs. rural) predicted the number of graduates among African American students in southeastern high schools before and after the COVID-19 pandemic. Educational attainment was a critical predictor of economic stability, social mobility, and overall well-being. However, significant differences in the number of high school graduates continue, particularly among African Americans. Research indicates that among students in the Southeastern United States, the number of graduates was significantly lower than that of their peers due to systemic barriers, including socioeconomic disadvantages, absenteeism, and limited academic resources (Garcia & Thompson, 2022). These findings highlight the correlation of systemic inequalities with the number of graduates, emphasizing the need for targeted interventions to support this student population. The COVID-19 pandemic worsened educational disparities by disrupting traditional learning environments and widening preexisting achievement gaps (Santibanez & Guarino, 2021). This underscores the need for equitable educational policies and support systems to mitigate long-term effects. The specific research question for this study addressed to what extent, if any, parental SES and location can predict the number of African American male graduates in southeastern high schools before and after the COVID-19 pandemic.

This study examined the correlation between parental SES and school location (rural vs. urban) on the number of African American graduates in southeastern high schools, both before and after the pandemic. My interest in this subject originated from years of dedicated research on the academic experiences of African American males, particularly concerning the number of graduates and educational disparities. Despite ongoing studies and the implementation of various policies and interventions, the statistical trajectory for this population has remained essentially unchanged. Furthermore, within my own professional and community environment, the impact of these policy changes and interventions has not yielded significant, measurable improvements. This persistent stagnation underscores the need for more comprehensive, data-driven, and culturally responsive approaches to addressing the systemic barriers that continue to hinder academic success among African American students.

By providing data-driven insights, the research informed the development of targeted, culturally responsive interventions and policies, enhanced teacher training, and promoted equity and inclusion in academia. It also revealed the lack of resources and staffing crisis that many school districts face, making it extremely difficult for students to be successful due to overcrowded classrooms. This contributed to improved academic outcomes for these students, empowered communities, and inspired advocacy efforts; ultimately driving positive social change in education and fostering productive citizenship. However, its impact remains limited, as the full implementation and evaluation of these systemic changes have yet to be realized.

Chapter 1 introduces a research study on the number of graduates among African Americans before and after the pandemic. It identifies gaps in existing literature and defines the study's purpose. The theoretical framework was discussed, and secondary data sources were used. Limitations are acknowledged, and the study's significance was highlighted for its potential impact on educational policies and social change. Additionally, secondary data sources were used to support the quantitative approach, ensuring the reliability and validity of the research. This section also acknowledges potential limitations, such as constraints in data collection, methodology, or external factors that may impact the results. Finally, the chapter highlights the significance of the study, underscoring its potential impact on educational policies, intervention strategies, and broader social change. It concludes with a summary that synthesizes these key elements, providing a clear framework for the subsequent sections of the research.

Background

The COVID-19 pandemic exposed systemic inequities in education, particularly among African Americans in southeastern high schools. Disparities in the number of high school graduates between African American students and students of other ethnicities have been well-documented (Johnson & Williams, 2021). Several factors contributed to this inequity, including systemic challenges such as higher absenteeism rates, lower access to advanced coursework, and fewer financial resources for academic success. Research indicated that chronic absenteeism was a significant predictor of academic failure and dropout rates, particularly among African American students in urban schools (J. Smith et al., 2022). Furthermore, students from low-income households often face

educational disruptions due to economic instability, inadequate parental supervision, and limited access to technology for remote learning.

Despite the existing literature that explored the interplay between socioeconomic factors and educational outcomes; there remains a significant gap in knowledge regarding how these variables specifically affect African Americans in rural southeastern high schools. Most studies focus broadly on urban or suburban contexts, address the number of graduates without fully disaggregating data for African American males, or examine the unique challenges of geographic and systemic inequities. The pandemic further intensified these challenges, disproportionately affecting African American students due to greater economic hardships, increased digital divide, and heightened family stress (Lee & Harris, 2023). Rural schools also faced unique challenges, including underfunding, teacher shortages, and limited technological resources, which made it harder for students to transition to online learning and maintain academic engagement (Pajek, 2022). Although existing studies have explored these individual factors, there was limited research examining how the combination of absenteeism, parental SES, and the school's geographical location predicts the number of graduates among African Americans in southeastern high schools before and after the pandemic. This study aimed to address this gap by examining educational patterns before and after the COVID-19 outbreak to determine if these characteristics predict the number of graduates among this specific student cohort. Understanding the multifaceted nature of these challenges will provide actionable insights into developing equitable policies and interventions. This study was necessary because it focuses on an underserved population and aimed to contribute to the

broader discourse on educational equity, creating a foundation for improving academic outcomes for African Americans in historically marginalized communities.

Problem Statement

The specific research problem addressed in this study was the lack of understanding of how parental SES (as defined by the dataset as "economically disadvantaged") and geographical location (rural vs. urban) predict the number of graduates among African American students in southeastern high schools, both before and after the COVID-19 pandemic. Despite efforts to close the achievement gap, African Americans continue to experience a lower number of graduates, and the long-term effects of pandemic-related disruptions remain unclear (Rao et al., 2021). Previous studies have examined the impact of individual factors such as absenteeism or economic hardship on the number of graduates. This research study explored the relationship between these specific factors when combined during a significant global crisis.

It was unknown whether parental SES and environmental location (rural vs. urban) predict the number of graduates among African Americans in southeastern high schools before and after the COVID-19 pandemic. Gaining a deeper understanding of these influences was crucial for developing targeted interventions and support programs that address both the educational and the psychological needs of African American students, ensuring that they receive comprehensive and equitable support for their academic success. Stokes et al. (2024) investigated the role of relationships between students, families, and school personnel in reducing student absenteeism. Although absenteeism was recognized in the literature as a relevant factor, it was excluded from the

statistical model and was considered a background concept to provide contextual understanding.

The study examined the impact of interpersonal connections within educational settings on attendance patterns and explored the complexities involved in utilizing relationships to address absenteeism, particularly among underserved populations. The researchers found that while positive relationships between students, teachers, and school staff are crucial in reducing absenteeism, these relationships alone were not sufficient to address the systemic barriers that students from marginalized communities face. By acknowledging the broader systemic factors, this study justified the need for my research to investigate how these barriers, especially during the pandemic, affected the number of graduates.

Roberts (2018) conducted a phenomenological study that explored the lived experiences of academically proficient to high-achieving African American adolescents in rural southeastern communities. The findings revealed that even among high-performing students, perceptions of the achievement gap were deeply rooted in systemic inequities, including lowered teacher expectations, limited access to advanced coursework, and a lack of culturally relevant support systems. These disparities are compounded by environmental and geographical factors unique to rural education.

Recent findings by Garcia and Thompson (2022) highlighted how the COVID-19 pandemic has further intensified educational inequalities in urban settings. Their quantitative analysis showed that risk factors such as low SES, limited access to technology, and remote learning significantly affected students' academic performance,

resulting in lower credit attainment and GPAs. Together, these studies underscored the importance of examining how variables like parental SES and a school's geographical location have collectively predicted graduation outcomes for African Americans both before and after the pandemic. Understanding these intersections was crucial to developing effective, contextually relevant interventions and policies that close the achievement gap and support long-term academic success.

Given that educational success is linked to long-term socioeconomic outcomes, addressing these disparities is critical for both individual and community development. If factors such as parental SES and a school's geographical location significantly predict the number of graduates; this study's findings could guide the development of targeted interventions and educational policies aimed at lowering dropout rates and fostering equity in education. Understanding these challenges would enable educators and policymakers to create tailored support programs that address the unique needs of at-risk students. By implementing data-driven strategies, schools could enhance student retention and improve overall graduation outcomes.

Purpose of the Study

The purpose of this quantitative study was to determine the extent to which parental SES (as defined by the dataset as "economically disadvantaged") and school location (rural vs. urban) predict the number of graduates among African American students in southeastern high schools, both before and after the COVID-19 pandemic. This dissertation aimed to evaluate the statistical relationship between the predictor variables (parental SES and the schools' geographical location) and the outcome variable

of graduation rate, using pre- and postpandemic data to identify any significant changes in these associations. While absenteeism is strongly associated with academic failure and dropout risk, it was not included as a predictor variable in this study's regression model. Instead, it was reviewed to provide background context and support the rationale for focusing on socioeconomic and environmental predictors. Findings from this analysis were expected to provide empirical evidence on the relationship of educational outcomes over time and inform the development of targeted, data-driven interventions to improve the number of graduates among this population.

The school's geographical location was also examined to determine how urban and rural environments influence the number of graduates over a 6-year school calendar period (2018–2024) and a 5-year graduation period (2019–2024). By identifying patterns in the number of graduates across different school locations, the study aimed to provide insights into how location-specific factors may have amplified or mitigated educational inequities. Ultimately, this research aimed to contribute to the existing body of knowledge on academic disparities by identifying variables that are predicted to hinder the academic success of African Americans. The findings provide valuable data for educators, policymakers, and community leaders to develop targeted interventions that address the challenges affecting the number of graduates. Additionally, this study may inform future educational policies and strategies aimed at promoting equitable learning opportunities for historically marginalized student populations.

Research Questions and Hypotheses

RQ1: To what extent, if any, do parental SES (as measured by free lunch status; as defined by the dataset as "economically disadvantaged") and environmental differences (as measured by rural or urban locations) combined predict the number of graduates among African Americans?

HO1: Parental SES and environmental differences combined do not statistically predict the number of graduates among African Americans.

HA1: Parental SES and environmental differences combined do statistically predict the number of graduates among African Americans.

RQ2: To what extent, if any, do parental SES (as measured by free lunch status; as defined by the dataset as "economically disadvantaged") and environmental differences (as measured by rural or urban location) individually predict the number of graduates among African Americans within the overall model?

H022: Parental SES individually does not statistically predict the number of graduates among African Americans within the overall model.

HA22: Parental SES individually does statistically predict the number of graduates among African Americans within the overall model.

H023: Environmental differences individually do not statistically predict the number of graduates among African Americans within the overall model.

H23: Environmental differences individually do statistically predict the number of graduates among African Americans within the overall model.

RQ3: To what extent, if any, do the number of graduates differ before and after the COVID-19 pandemic?

H03: There is not a significant difference in the number of graduates before and after the COVID-19 pandemic.

HA3: There is a significant difference in the number of graduates before and after the COVID-19 pandemic.

Theoretical and/or Conceptual Framework for the Study

This study was grounded in social learning theory, which emphasizes the importance of observing and modeling behaviors within a social context (Bandura, 1977). Social learning theory posits that students' academic behaviors and engagement are influenced by their environments, family structures, and school cultures. Applying this theory to the study of parental SES and school environments based on geographical location may shape the academic persistence of African American males and the number of graduates. The theoretical framework is discussed in greater detail in Chapter 2.

Nature of the Study

This study employed a correlational-predictive quantitative research design, utilizing secondary data obtained from the state department of education and local school districts within the southeastern region of the United States. Upon receiving Institutional Review Board (IRB) approval, I requested and obtained access to the necessary datasets. The data included the number of high school graduates, student attendance records, and parental socioeconomic indicators spanning 5 years before and after the COVID-19 pandemic. Rural and urban school locations were used to disaggregate the data. A multiple regression analysis was conducted to assess the predictive power of parental SES and school location on the number of graduates. Additionally, independent samples *t* tests were employed to determine whether statistically significant differences exist in the number of graduates between the prepandemic and postpandemic periods.

Definitions

To promote clarity and consistency throughout this study, it was critical to define the key terms and constructs that form the foundation of the research. The following definitions provide operational meanings for the predictive variables parental SES, graduation rate, and geographical location. These constructs were integral to examining the multifaceted factors that may predict graduation outcomes among African Americans in southeastern high schools, both before and after the COVID-19 pandemic. Each definition was informed by existing scholarly, peer-reviewed literature.

Parental socioeconomic status (SES): Parental SES is a composite measure typically assessed through parental income, educational attainment, and eligibility for

free or reduced-price meals. The dataset for the SES is identified as “economically disadvantaged” in the data analysis. These factors significantly influence a child's access to academic resources, educational attainment, and overall school performance (Sirin, 2005). This plays a crucial role in shaping a child's educational experience by determining their access to high-quality academic resources, such as well-trained teachers, advanced coursework, technology, and extracurricular opportunities.

Number of high school graduates: Numerical high school graduation data refers to the actual number of students who complete high school within a designated timeframe, typically 4 years. It was a key indicator of the effectiveness of the educational system and long-term student success (Rumberger & Rotermund, 2012). The data representing the number of students who graduate suggests that schools are providing adequate support, resources, and academic interventions to help students meet educational requirements. In contrast, graduation numbers may indicate systemic issues such as inadequate funding, high dropout rates, or disparities in student support services. Additionally, the number of graduates is often used as a benchmark for policy evaluation and educational reforms aimed at improving student outcomes and workforce readiness.

Geographic location: Geographic location was a critical factor in educational research, as it helps explain disparities in academic achievement. Schools in urban areas often face distinct challenges compared to those in rural or suburban settings, including variations in teacher availability, funding, access to technology, and student socioeconomic backgrounds. Research suggests that students in rural and low-income urban areas face greater barriers to educational success due to limited resources and

socioeconomic disadvantages (T. R. Smith et al., 2023). These barriers often include inadequate school funding, limited access to advanced coursework, fewer experienced teachers, and insufficient technological infrastructure.

Assumptions

In quantitative research, assumptions refer to the foundational conditions or beliefs that are accepted as accurate without direct evidence yet are necessary for the design of the research and the interpretation of results. For this study, I assumed that the secondary data obtained from the state department of education were accurate, complete, and consistently reported across school districts. It was also believed that definitions and classifications for parental SES and the number of graduates was standardized across rural and urban settings. These assumptions were essential to ensure the validity of statistical analysis. However, if these assumptions do not hold; for instance, if data reporting practices vary significantly between districts, the generalizability of the study's findings to other populations or regions may be limited.

For this dissertation, it was essential to ensure that public education data were accurate and representative, providing a reliable foundation for analyzing trends in student outcomes. The classification of parental SES must also be standardized across districts to ensure consistency in measuring parental income, education level, and eligibility for free or reduced-price lunch. Additionally, the number of graduates must have been consistently reported before and after the pandemic to allow for valid comparisons and an accurate assessment of any changes over time. By maintaining these standards, the study produced meaningful insights into the relationship between SES and

geographical location in influenced graduation outcomes among African American male students.

Scope and Delimitations

The scope of the research focused specifically on African American male students in high schools in the Southeastern United States and examined the predictor variables of parental SES and geographical location concerning the number of graduates. The study's delimitations excluded other racial and ethnic groups, as well as students attending private schools, which may limit the generalizability of the findings to a broader student population. The data's focus was on African Americans in southeastern high schools. Additionally, due to constraints in manpower and financial resources, data collection was restricted to a specific region rather than encompassing schools across the United States or globally. Despite these limitations, the study aimed to provide valuable insights into the systemic challenges affecting African American students in the southeastern region and inform targeted educational policies and interventions.

Limitations

According to Price and Murnan (2004), limitations in a research study refer to the design or technique aspects that influence the interpretation of the research findings. This study had several limitations that should be acknowledged. First, as a quantitative study, it did not establish causation, but rather identified the correlations between parental SES, geographical location, and the number of graduates among African American male students. The aforementioned variables were the only factors considered for this study.

Researcher bias was less likely to be prevalent because the secondary data provided was established through the partnering entity.

I also acknowledge potential biases that may influence both data interpretation and societal perceptions of African American male students. One such bias is the stereotype that African American male high school students face similar academic struggles regardless of their household background. This generalization can lead one to overlook significant variations in SES, parental involvement, and access to educational resources that exist within this demographic. The definition of "African American" in this study was based on student self-identification rather than external classification, recognizing the complexity and diversity within racial identity. These biases highlighted the importance of examining both individual and systemic factors, rather than relying on generalized assumptions, when analyzing graduation outcomes and educational disparities. Data access and reliability also posed limitations, as variations in school reporting practices and data collection methods could impact the accuracy of findings. Despite these limitations, the study offered valuable insights into educational disparities and contributed to the broader discussion on enhancing graduation outcomes for marginalized student populations.

Significance

This research study offered valuable insights into the postpandemic educational recovery of African American male students, shedding light on the challenges and disparities that may have intensified due to pandemic-related disruptions. By analyzing key factors such as parental SES and geographical location, the research aimed to

uncover patterns that impact the number of graduates and overall academic success. The findings may inform the development of evidence-based policies to reduce dropout rates, foster culturally responsive interventions, and address systemic barriers that hinder equitable educational opportunities. Additionally, this dissertation highlights the need for targeted support systems, including mentorship programs, community engagement initiatives, and school-based interventions that cater to the unique needs of African American male students. This research contributes to ongoing efforts to promote educational equity, improve student retention, and drive positive social change within historically marginalized communities by identifying critical risk factors influencing graduation outcomes.

Summary

Chapter 1 provided an overview of the study, including the problem, purpose, research questions, theoretical framework, methodology, and significance. The next chapter will present a comprehensive literature review. The expanded definitions provide contextual depth for understanding how parental SES, geographical location (rural vs. urban), and the number of graduates are interconnected. This study aimed to examine how these factors influenced the educational trajectories of African Americans in southeastern high schools before and after the COVID-19 pandemic. By analyzing data from 2019–2024, I sought to contribute to the development of equitable educational policies and intervention strategies that address systemic barriers to academic achievement.

Chapter 2: Literature Review

Introduction

The number of African American students graduating from southeastern high schools has long been a subject of concern due to persistent disparities in educational outcomes (Garcia & Thompson, 2022; Santibanez & Guarino, 2021). These disparities were further compounded by the COVID-19 pandemic, which disrupted traditional learning environments and amplified preexisting challenges including limited access to technology, heightened academic gaps, and reduced availability of critical support services for students (Harmey & Moss, 2023). The purpose of this quantitative study was to analyze how the predictor variables of location and parents' socioeconomics affect the outcome variable of the number of graduates among African Americans in southeastern high schools before and after the COVID-19 pandemic, in both rural and urban geographical locations. These factors contribute to systemic barriers that disproportionately hinder educational success within this demographic.

According to Kearney (2021), current research has shown that school absenteeism is often linked to social, economic, and institutional challenges including chronic illness, inadequate transportation, and disengagement due to unwelcoming school climates. Parental SES is crucial in shaping students' access to resources such as tutoring, technology, and extracurricular opportunities which are vital for academic success (Dahl & Lochner, 2022). Furthermore, geographical location adds another layer of complexity as rural schools typically face funding shortages, limited access to advanced coursework, and fewer college preparation programs than their urban counterparts (Jordan et al.,

2012). These disparities contribute to reduced educational opportunities limiting students' academic growth and postsecondary readiness; which can ultimately impact the number of graduates and long-term success. Addressing these inequities requires targeted policy interventions, increased funding, and community partnerships to bridge the gap in educational resources and support systems.

This quantitative study will compare the complex relationship between parental SES, geographical location, and the number of graduates among African Americans in southeastern high schools before and after the COVID-19 pandemic. Absenteeism, often linked to disengagement and academic underachievement, was a key indicator of educational disparities (as noted in this study for contextual insight) and is particularly prevalent in marginalized communities (Santibanez & Guarino, 2021). As indicated by J. Smith & Johnson (2021), parental SES plays a pivotal role in shaping students' access to resources, extracurricular opportunities, and academic support, directly influencing their ability to succeed in school. Geographical location further compounds these challenges, as rural and urban schools experience unique systemic inequities that affect the quality of education and the availability of critical resources (Jordan et al., 2012). Rural schools, in particular, often face teacher shortages, outdated infrastructure, and limited access to extracurricular and enrichment programs, all of which can hinder student engagement and academic achievement. Addressing these disparities requires targeted interventions, such as increased funding, policy reforms, and strategic partnerships to ensure equitable educational opportunities for all students.

The chapter begins with an outline of the literature search strategy, including the databases and keywords used to identify relevant research. It is then followed by the study's theoretical foundation grounded in Albert Bandura's social learning theory, which highlights the impact of social and environmental factors on individual behavior and development (Bandura, 1997). A comprehensive synthesis of relevant literature was presented, offering evidence-based support for the significance of the research. The chapter concludes by identifying gaps in the existing body of knowledge, establishing the necessity for this study, and transitioning to a discussion of the research design and methodology.

Literature Search Strategy

The literature review for this dissertation involved a comprehensive search of multiple academic databases and search engines to ensure a thorough exploration of relevant studies. The primary databases utilized included APA PsycInfo, ERIC (Education Resources Information Center), EBSCOhost, CINAHL Plus with Full Text, SocINDEX, Google Scholar, and Walden's Library. Each database was selected for its capacity to provide scholarly articles, reports, and resources aligned with the study's focus on searching the following keywords: "African American males," "high school the number of graduates," "teacher resources," "social development," "parent's socioeconomic status," "virtual learning," "COVID-19," "Albert Bandura," "social learning theory," "interventions," and the "effects of the COVID-19 pandemic in the Southeastern United States."

These databases also enabled the review of interdisciplinary studies addressing educational and sociological factors influencing graduation outcomes. Additional key term phrases and clustered searches included "African American males" combined with "the number of graduates" and "southeastern high schools," as well as "urban schools" or "rural schools" with "teacher resources" and "COVID-19 impact" along with “educational disparities.” These terms were further refined and expanded as the review progressed to ensure comprehensive coverage of the relevant literature.

The literature review included publications over a vast timetable that address theory and identified variables within this research, emphasizing studies conducted during and after the COVID-19 pandemic. This period was selected to reflect preexisting challenges and the novel educational disruptions introduced by the pandemic. Foundational studies, including seminal theoretical frameworks from Bandura’s Social learning theory, were incorporated to guide the research (Zafar & Khushi, 2022). More recent peer-reviewed articles published after 2018 focused on the pandemic’s impact on education, including virtual learning adaptations and issues of educational equity. Additionally, dissertations and articles were included to address gaps in peer-reviewed studies, particularly those that explored rural and urban educational disparities affecting African Americans. Conference proceedings were also consulted for their insights into emerging challenges and innovative strategies within the academic landscape.

The review employed several strategies where research gaps existed, particularly regarding African American males in rural southeastern high schools (Jordan et al., 2012; Rogers et al., 2023). Older foundational studies were incorporated to establish context

and highlight historical trends in sparse areas of current research (Eamon, 2001; Ginsburg et al., 2014). Interdisciplinary insights were drawn from fields such as education, sociology, psychology, and public health to address the multifaceted nature of the problem (Molnar et al., 2021; Trevino et al., 2021). Qualitative studies, including dissertations and case studies, were integrated to offer in-depth narratives and a contextual understanding of lived experiences. These strategies enabled the synthesis of themes from limited but relevant studies, allowing for the identification of patterns that informed the research framework.

The review revealed various interconnected themes central to understanding the factors influencing the number of graduates among African Americans. These include disparities in resources and outcomes between rural and urban schools, the significant impact of SES on attendance and the number of graduates, and the unique challenges posed by virtual learning during the COVID-19 pandemic (Fishbane & Tomer, 2020; Kuhfeld et al., 2020). Social development and community influences also emerged as critical factors in shaping educational experiences (Sosu & Dare, 2021; Trevino et al., 2021). Rural schools often face teacher shortages, outdated infrastructure, and limited access to extracurricular and enrichment programs; all of which can hinder student engagement, career development, and academic achievement. Addressing these disparities requires targeted interventions, such as increased funding, policy reforms, and strategic partnerships to ensure equitable educational opportunities for all students.

This dissertation aimed to provide a comprehensive understanding of the systemic barriers and opportunities affecting African Americans in southeastern high schools

during and after the pandemic, drawing on a thorough review of these themes and their associated literature. This literature review demonstrated the depth of research needed to address the complex interplay of variables affecting graduation outcomes, highlighting areas where further investigation was required and providing a foundation for the study's methodological and analytical approach. Although the COVID-19 pandemic was a relatively recent global phenomenon, peer-reviewed research studies are rapidly emerging; yet, a significant gap remains in the literature regarding this particular demographic of students in the United States.

Theoretical Foundation

Albert Bandura's social learning theory (1977) serves as the primary theoretical framework for this study. Social learning theory emphasizes the interplay of social interactions, environmental influences, and individual cognitive processes in shaping behavior (Bandura, 1977). Bandura's Social Learning Theory explains that learning occurs through observation, imitation, and modeling. According to Bandura (1977), learning is mediated by four key processes: attention, retention, reproduction, and motivation. Additionally, Bandura (1991) introduced the concept of reciprocal determinism, which explains how behavior, personal factors (such as cognitive skills), and the environment interact dynamically to influence learning.

These processes suggest that learning was not solely an internal cognitive function, but was also shaped by external social and environmental factors. Reciprocal determinism emphasizes the continuous interaction between an individual's behavior and their environment, underscoring the idea that learning is both an active and reactive

process (Bandura, 1991). Understanding Bandura's framework was essential in educational and behavioral contexts, as it underscores the importance of modeling, motivation, and environmental influences in shaping learning outcomes. This perspective can inform teaching strategies, behavior interventions, and social development programs.

A key proposition of social learning theory is that individuals acquire knowledge not only through direct experience but also by observing others' behaviors and their consequences. The abrupt online learning dynamics enforced during the COVID-19 pandemic had a significant influence on social learning development, or the lack thereof. This concept was particularly relevant in educational settings, where students' learning was shaped by interactions with peers, teachers, and the broader community. Bandura's work on self-efficacy emphasizes the importance of individual agency, defining self-efficacy as the belief in one's ability to influence events and achieve goals despite social and environmental constraints (Bandura, 1985). Additionally, Bandura emphasized the importance of self-efficacy as an individual's belief in their ability to perform a task successfully; which plays a crucial role in motivation and persistence in learning (Luszczynska & Schwarzer, 2015). Observational learning enables students to develop new skills and behaviors without the need for direct trial and error, making modeling an essential teaching strategy.

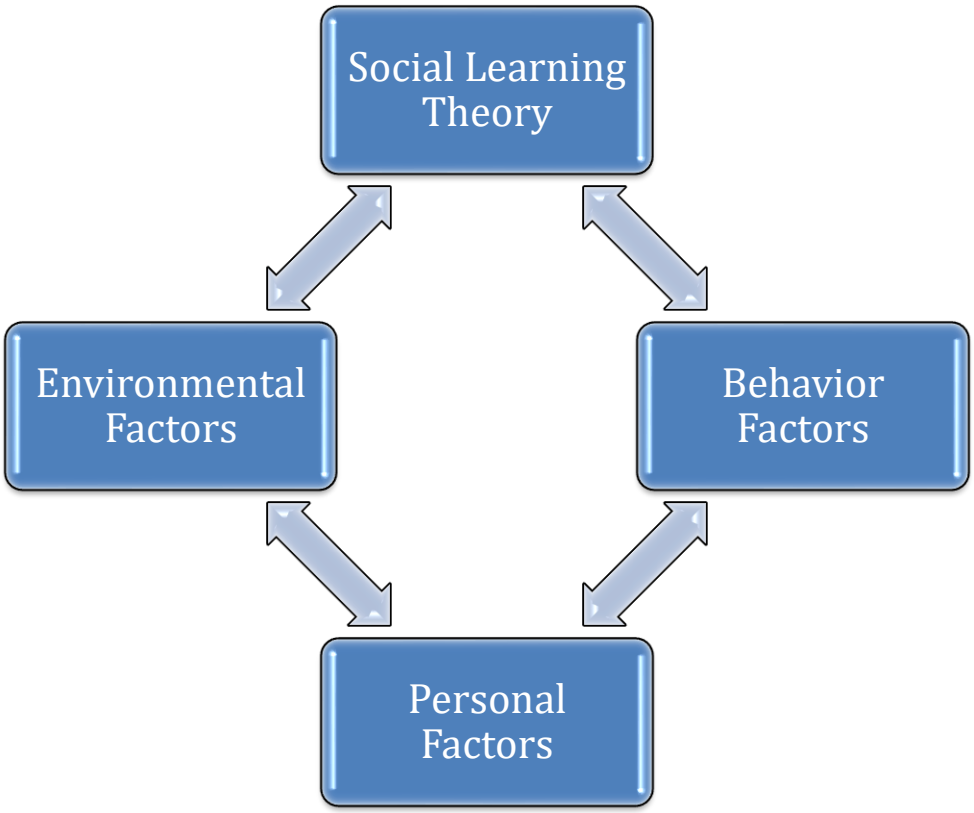
Figure 1

Social Learning Theory

Furthermore, students with high self-efficacy are more likely to embrace challenges and persist in difficult tasks, whereas those with low self-efficacy may struggle with motivation and academic resilience. By leveraging social learning principles, educators can create more effective and motivating learning experiences.

Figure 2

Social Learning Theory



The rationale for choosing social learning theory lies in its ability to explain how African Americans' educational experiences are shaped by their social and environmental contexts (Khozin et al., 2024; McLeod, 2011). The study's research questions build upon this framework by exploring the relationship between SES, geographical location, and the number of graduates. These variables interact dynamically within the framework of reciprocal determinism, demonstrating how systemic barriers and community support structures influence academic outcomes (as seen on Figure 1). Understanding the role of

observational learning and self-efficacy in education underscores the importance of supportive teaching strategies that enhance student confidence and engagement. By leveraging social learning principles, educators can create more effective and motivating learning experiences.

This study examined the concept of educational equity, defined as the fair distribution of resources, opportunities, and support to ensure all students achieve academic success, irrespective of their socioeconomic or geographic background (Robert, 2018). The phenomenon of educational disparities was central to this framework, focusing on how systemic factors such as parental SES and geographical location affect the number of graduates of African Americans. According to Meyer et al. (2024), researchers have extensively explored aspects of educational equity through their theoretical contributions and addressing disparities. This concept was particularly relevant in education, as it highlights how students' confidence in their abilities can shape their motivation, persistence, and academic success, even when facing systemic barriers. Salter et al. (2020) emphasized that students with higher levels of self-efficacy were better equipped to adapt to online learning environments, demonstrating greater motivation, persistence, and engagement despite the challenges posed by remote education.

The shift to virtual learning required students to rely more heavily on self-directed learning and time management skills (Molnar et al., 2021). According to the study, those with strong self-efficacy were more confident in their ability to navigate digital platforms, complete assignments independently, and seek help when needed. In contrast,

students with lower self-efficacy faced increased difficulties, including reduced participation and higher dropout rates. This highlights the role of self-efficacy in shaping students' responses to educational disruptions and their ability to adapt to new learning modalities.

These theoretical insights inform this study's exploration of educational inequities in the Southeastern United States, where structural disparities, such as those linked to SES, racial segregation, and resource allocation, have long influenced student outcomes (Devi et al., 2017). By applying Bandura's framework, I examined how fostering self-efficacy can empower students to overcome barriers while acknowledging the need for systemic reforms to create equitable opportunities (Bandura, 1985; McLeod, 2011). Key statements inherent in the theoretical framework include the recognition that systemic inequities disproportionately affect marginalized groups, such as African American males, and that targeted interventions can mitigate these effects.

Educational equity requires addressing resource allocation and the broader sociocultural and institutional barriers that hinder academic success (Freeman & Simonsen, 2015). Research demonstrates that social learning theory has been widely applied in educational studies to explore how environmental and social factors influence academic outcomes (McLeod, 2011; Tanner-Smith & Wilson, 2013). For instance, Bandura’s principles have been used to analyze how teacher modeling impacts student engagement and how peer interactions shape academic behaviors (Padmanabhanunni et al., 2023; Zimmerman & Schunk, 2004). Studies have also examined its relevance to marginalized communities by highlighting the influence of role models and social

environments on educational attainment (Murnane, 2013; Tanner-Smith & Wilson, 2013). The application of social learning theory in these contexts supports its relevance in understanding the factors that affect the number of graduates before and during the COVID-19 pandemic, as demonstrated throughout this study.

The rationale for choosing social learning theory lies in its ability to explain how African Americans' educational experiences are shaped by their social and environmental contexts. The study's research questions build upon this framework by exploring the relationship between SES, geographical location, and the number of graduates. These variables interact dynamically within the framework of reciprocal determinism, demonstrating how systemic barriers and community support structures influence academic outcomes (Bandura, 1977). By focusing on self-efficacy and observational learning, the theory offers a lens through which to examine how interventions can empower students to overcome systemic challenges.

Literature Review Related to Key Variables and/or Concepts

Introduction to Absenteeism

According to Dee (2024), chronic absenteeism in United States high schools was defined as missing 10% or more of school days and has long been a concern due to its detrimental effects on academic achievement and student well-being. The study revealed that, prior to the COVID-19 pandemic, approximately 15% of K-12 students nationwide were chronically absent during the 2018–2019 school year. Additionally, the results also explored how the onset of the COVID-19 pandemic in early 2020 increased existing

challenges related to student attendance. The transition to remote learning, coupled with health concerns and economic hardships, led to a significant increase in absenteeism.

By the 2021–2022 school year, the national rate of chronic absenteeism had nearly doubled to 28% (Dee, 2024). This surge was even more pronounced among African American male students, who were disproportionately affected by the pandemic's multifaceted impacts, including higher rates of COVID-19 infection in their communities, limited access to technology for remote learning, and increased familial responsibilities (Mireles-Rios et al., 2020). As schools transitioned back to in-person instruction, the elevated levels of absenteeism persisted.

Data from the 2022–2023 school year indicated only a marginal decline in chronic absenteeism rates, remaining significantly above prepandemic levels (Dee, 2024). The persistence of high absenteeism rates among African American male students highlights the need for targeted interventions that address the unique barriers they face. These may include culturally responsive engagement strategies, mentorship programs, and policies aimed at improving school climate and inclusivity (Hendron & Kearney, 2016). Addressing these challenges requires a comprehensive approach that considers the systemic inequities contributing to disparities in school attendance.

Absenteeism

This research study will evaluate the statistical relationship between the predictor variables: parental SES and the school’s geographical location. Absenteeism was discussed as a known risk factor supported in the literature, but will not be included in the statistical model. Chronic absenteeism serves as a key predictor of academic failure and

dropout rates (Gottfried, 2019; Kearney, 2021). With the number of graduates being an outcome variable, the number of graduates was significantly influenced by absenteeism; as students who are frequently absent miss essential instructional time, peer interaction, and opportunities to build relationships with teachers. These factors are crucial for fostering academic achievement and social development (Hendricks et al., 2020). Research has found that absenteeism was often influenced by individual, family, and community-level factors; including SES, family responsibilities, and health-related challenges (Wong, V. et al., 2020). For example, students from low-income households are more likely to face barriers such as unreliable transportation, food insecurity, and unstable housing, which can lead to higher absenteeism rates (Gottfried, 2019; Trevino et al., 2021). These barriers disrupt daily attendance and impact academic performance, as consistent attendance was closely linked to academic achievement and the number of graduates. Students who face these challenges may struggle to keep up with coursework, leading to a cycle of disengagement and further absences. Additionally, the lack of access to essential resources can diminish motivation and limit opportunities for academic success.

The pandemic amplified these challenges, with remote learning exacerbating absenteeism due to technological barriers and a lack of structured supervision at home (Molnar et al., 2021; Rogers et al., 2023). Addressing absenteeism requires a multifaceted approach, including school-based interventions, community partnerships, and policies that support at-risk students by reducing barriers to consistent attendance (Bowen et al., 2022; Kuhfeld et al., 2020). However, there was limited research that disaggregates data

to examine how absenteeism impacts African Americans, and males in particular, in southeastern high schools, where systemic inequities such as underfunded schools and a lack of resources are prevalent (Ginsburg et al., 2014; Rogers et al., 2023). The absence of focused research on African Americans, and particularly males in these contexts, leaves a critical gap in understanding the relationship between absenteeism and the number of graduates. Systemic issues such as inadequate school funding, limited access to advanced coursework, and fewer college preparation opportunities disproportionately affect these students, potentially compounding the negative effects of absenteeism.

Summary of Absenteeism

While absenteeism was a well-documented factor influencing academic success, it was addressed contextually in this study and was not included in the regression model. During the COVID-19 pandemic, there was an increased surge in chronic absenteeism in U.S. high schools, with African American male students disproportionately affected. Before the pandemic, approximately 15% of K-12 students were chronically absent; this figure nearly doubled to 28% by the 2021–2022 school year and remained elevated in subsequent years (Dee, 2024). African American male students faced unique challenges during this period, including limited access to technology for remote learning and increased familial responsibilities, contributing to higher absenteeism rates (Mireles-Rios et al., 2020). Addressing this issue requires targeted interventions that consider the systemic inequities contributing to absenteeism. Strategies such as culturally responsive engagement, mentorship programs, and policies aimed at improving school climate and inclusivity are essential; which ultimately makes a positive impact on attendance.

In conclusion, the pandemic has intensified existing disparities in school attendance, particularly among African American male students. A comprehensive approach that incorporates supportive leadership, community engagement, and policy reforms was essential for mitigating chronic absenteeism and promoting educational equity. Parental SES plays a critical role in absenteeism, as financial hardship, work constraints, and healthcare barriers limit students' ability to attend school consistently.

Introduction to Parental Socioeconomic Status

According to Reardon (2018), in high school, the number of graduates among African Americans in the Southeastern United States continues to reflect deep-seated disparities rooted in socioeconomic and systemic factors. Research consistently demonstrates that parental SES plays a pivotal role in shaping educational outcomes, with lower SES often correlating with reduced access to academic resources, technological tools, and stable living conditions necessary for academic success (Alexander et al., 2020). These disparities are further expounded by systemic inequities such as underfunded schools and limited community support systems, which disproportionately affect African American students in this region (Williams & Bryan, 2022). Additionally, the study showed that the broader national trends indicate persistent racial achievement gaps, raising concerns about the specific factors that contribute to the lower number of graduates among African Americans.

Although national statistics and general research highlight the impact of SES on educational outcomes, there was a notable lack of studies that disaggregate data to explore how SES and geographic location intersect to affect the number of graduates for

this particular demographic (Jackson & Reynolds, 2021). Understanding these intersections was crucial for developing culturally responsive interventions to close the achievement gap and support long-term academic success for African Americans in the Southeastern United States (T. R. Smith et al., 2023). Such interventions should address the unique challenges posed by socioeconomic disparities, including providing access to quality educational resources, implementing mentorship programs, enhancing parental engagement, and improving school funding. Additionally, policies tailored to reduce absenteeism by addressing transportation barriers, food insecurity, and housing instability are essential.

Parental Socioeconomic Status

Parental SES significantly influences the number of high school graduates among African Americans, particularly in the Southeastern United States. Lower SES often correlates with limited access to educational resources, technology, and stable housing, which can impede academic success (Sosu & Dare, 2021). The study also highlighted that financial constraints such as eligibility for free or reduced-price lunches are strongly associated with increased absenteeism, a factor closely linked to lower graduation rates. National data indicate that African American males, in particular, have a lower number of high school graduates compared to their peers.

In 2021, 76% of black boys graduated high school, compared to 87% of white boys, reflecting an 11-percentage-point gap. This disparity underscored the impact of SES and other systemic factors on educational outcomes (Brookings Institution, 2023). Research further suggested that persistent racial and economic inequality contribute to

the lower number of graduates, with many African American students in the southeast attending underfunded schools with limited resources (U.S. Department of Education, 2024). The impact of these disparities extended far beyond the classroom. A lower number of graduates correlates with reduced opportunities for higher education and employment, leading to a persistent cycle of economic disadvantages. This cycle not only affects individual students and their families, but also contributes to broader societal issues; including higher rates of poverty and reduced economic mobility within communities.

Parental involvement was another critical factor influencing academic achievement. Research indicates that positive perceptions of school climate and favorable attitudes towards involvement significantly predict increased parental engagement in their children's education (National Center for Education Statistics, 2019). This involvement was associated with higher academic performance and the number of graduates among African American students (Schott Foundation for Public Education, 2023). Furthermore, systemic barriers, such as economic instability and limited access to healthcare, can hinder parents' ability to actively engage in their children's education, thereby further increasing disparities in graduation outcomes (Kearney et al., 2020). Strategies such as expanding access to affordable healthcare, implementing supportive work policies, and offering community-based programs can alleviate some of the pressures on families.

Despite these insights, there was a scarcity of focused research examining how SES intersects with geographical location to affect graduation outcomes for African

Americans in the southeast. Addressing this gap is essential for developing targeted interventions to improve educational outcomes for this demographic (Hendricks et al., 2020). More research is needed to explore the unique challenges faced by African American students in the southeast after the COVID-19 pandemic, particularly in rural and economically disadvantaged areas.

Summary of Parental Socioeconomic Status

According to Klein & Dare (2024), parental SES plays a critical role in the number of high school graduates of African Americans, particularly in the Southeastern United States. Low SES often results in limited access to educational resources, technology, and stable housing; which in turn leads to increased absenteeism and lower number of graduates, as evidenced by financial constraints such as eligibility for free or reduced-price lunch. These challenges extend beyond academic performance, as they limit higher education and employment opportunities; thereby perpetuating a cycle of economic disadvantage that affect both individual families and broader communities. There remains a significant gap in research specifically addressing how geographical location and parental SES intersect to affect graduation outcomes for African Americans in the southeast after the COVID-19 pandemic; particularly in rural and economically disadvantaged areas, indicating a need for targeted interventions and further study.

Recent findings by Hendron & Kearney (2016) demonstrated that prolonged periods of absenteeism, especially during critical learning periods, significantly impede academic performance in key subjects like reading and mathematics. This was particularly detrimental to students in the Southeastern United States, where many

districts face systemic issues such as underfunding and inadequate access to educational services, impacting the number of graduates. Parents' decision to work or stay home during COVID-19 significantly impacted their children's attendance and academic success due to the need to complete virtual school assignments. Regional inequities and economic instability intensify educational disparities, emphasizing the urgent need for comprehensive, targeted interventions.

Introduction to Geographical Location

Geographical location has a significant influence on educational outcomes, with rural and urban schools facing unique challenges that contribute to disparities in student achievement. Rural schools often grapple with limited resources, including outdated teaching materials and insufficient access to digital technologies, which hinder the implementation of modern instructional practices (Williams et al., 2018). Conversely, urban schools, particularly those in low-income areas, face issues such as overcrowding and inadequate funding, leading to strained educational environments (Jordan et al., 2012). Existing literature highlights the importance of individual factors affecting academic outcomes but often lacks a comprehensive analysis of how these elements interact within the distinct contexts of rural and urban schools in the Southeastern United States.

This study examined how the COVID-19 pandemic has expanded societal disparities, disproportionately affecting marginalized communities, including African American families in the Southeastern United States. It also aimed to address this gap by employing a quantitative approach to examine the relationships among parental SES and

geographical location, and their combined impact on high school graduation outcomes. By doing so, it seeks to contribute to the broader discourse on educational equity and inform policies and interventions designed to enhance graduation success for African Americans in southeastern high schools.

Geographical Location

Geographical location plays a crucial role in shaping educational outcomes, with rural and urban schools experiencing distinct challenges (Jordan et al., 2012; Kuhfeld et al., 2020). Research shows that in rural areas, limited internet connectivity and access to digital devices hindered students' ability to attend virtual classes, further widening the gap in educational outcomes between rural and urban students (Claitt, 2023; Molnar et al., 2021). Similarly, Rural schools often face limited access to advanced coursework and experienced teachers, while urban schools in low-income areas struggle with overcrowding and insufficient funding.

The COVID-19 pandemic has further highlighted the importance of addressing this research problem (Fishbane & Tomer, 2020). School closures, shifts to virtual learning, and heightened economic stress during the pandemic disproportionately affected marginalized communities, including African American families in the Southeastern United States (Claitt, 2023; Wong, C. et al., 2020). The pandemic has introduced new complexities to understanding the dynamics of parental socioeconomic challenges and geographic inequities, making this research particularly timely and significant. The existing literature highlights the importance of individual factors influencing academic outcomes. Still, it lacks a nuanced understanding of how these factors operate within the

distinct contexts of rural and urban schools in the southeast. Location plays a pivotal role in shaping access to resources, community support, and institutional quality.

The gap in the existing knowledge lies in understanding how parental SES and geographic location collectively affect the number of graduates among African Americans, both before and following the pandemic (Ginsburg et al., 2014; Kuhfeld et al., 2020). This study attempted to fill this gap using a quantitative approach to analyze the relationships among these variables and their impact on educational outcomes (Claitt, 2023). By addressing this research problem, the study aimed to contribute to the broader field of educational equity and provide data-driven insights to inform policies and interventions that promote graduation success for African American males in southeastern high schools.

Summary and Conclusions

This chapter explored the complex interplay of parental SES and geographical location, and their impact on high school the number of graduates, particularly among African American males in southeastern high schools (Jordan et al., 2012; Rogers et al., 2023) These variables are profoundly interconnected and collectively shape educational outcomes before and after the COVID-19 pandemic (Garcia & Thompson, 2022; Kuhfeld et al., 2020). The interconnected nature of disruptions in one area can intensify challenges in others, like academic performance and student engagement, making understanding these relationships crucial for developing targeted interventions.

Absenteeism emerged as a critical factor, with chronic absence disrupting learning, reducing engagement, and increasing dropout rates (Santibanez & Guarino,

2021; Sosu & Dare, 2021). Students who missed significant portions of the school year, particularly during the shift to virtual learning, faced compounded challenges, including falling behind academically and disengaging from the school community (Fishbane & Tomer, 2020; Kuhfeld et al., 2020). For African Americans, absenteeism was further influenced by systemic barriers such as transportation issues, health disparities, and punitive attendance policies; although included contextually in this study.

Parental SES is critical in shaping students' educational environments, the number of graduates, and resilience to disruptions such as the COVID-19 pandemic (Garcia & Thompson, 2022; Masonbrink & Hurley, 2020). Addressing these disparities requires systemic interventions, such as equitable school funding, expanded broadband access, and targeted support for low-income families (Fishbane & Tomer, 2020; Harris et al., 2024). By tackling the root causes of these inequities, educational systems can improve outcomes for students across all socioeconomic levels, particularly for marginalized populations. Integrating community-based support systems and strong school and family partnerships is essential for fostering parental involvement; a key factor in improving educational outcomes. Given the ongoing disparities in educational access and achievement among African American students, targeted interventions are needed to address these challenges.

Geographical location, whether rural or urban, also significantly affects students' educational experiences (Jordan et al., 2012; Tso et al., 2020). This literature revealed that rural schools often lacked resources, advanced coursework, and access to broadband internet; while urban schools in underfunded areas struggled with overcrowding, teacher

turnover, and safety concerns. Both rural and urban educational contexts presented distinct challenges for African Americans, who have historically faced systemic inequities that impede their academic achievement. However, a significant gap in the existing literature lies in understanding how these contextual dynamics influenced the number of graduates of African Americans in the aftermath of the COVID-19 pandemic for 2024 graduates in the southeastern region; particularly concerning the social learning implications that shaped their educational trajectories during this period.

The COVID-19 pandemic magnified the identified disparities among African American students, and especially the male demographic of high school students; exposing and deepening the systemic inequities that have long impacted marginalized populations (Fishbane & Tomer, 2020). Virtual learning created new barriers, such as technological divides, non-conducive home environments, and reduced access to in-person support systems, disproportionately affecting African Americans. These challenges underscored the importance of addressing the root causes of disadvantages in parental socioeconomics and geographical inequities to promote equitable educational outcomes postpandemic. The research revealed that parents often faced the challenge of balancing work responsibilities with ensuring their children's academic accountability, a difficulty intensified by the abrupt transition to virtual learning. Given the persistent disparities in educational access and outcomes, targeted and holistic interventions are required to address these complex issues. Programs that examined the intersection of SES and geographic location, particularly within rural communities in the Southeastern United

States, are crucial for promoting educational equity and increasing the number of graduates from this population.

In conclusion, the predictor variables discussed in this chapter highlighted the multifaceted nature of educational disparities affecting African Americans in southeastern high schools. These disparities were further magnified in the aftermath of the COVID-19 pandemic. Understanding these dynamics was essential for developing targeted interventions that address systemic barriers, enhance engagement, and improve the outcome variable of the number of graduates for this population. The findings from this chapter provide a foundation for the subsequent discussion of research methodology in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to examine the extent to which parental SES and school location (urban vs. rural) predict the number of graduates among African American students in southeastern high schools before and after the COVID-19 pandemic. By providing data-driven insights, the research will inform the development of targeted culturally responsive interventions, enhance teacher training, and promote equity and inclusion in academia. This chapter describes the approach and design used to investigate the study's topics and hypotheses. The research design and rationale section addressed the study's quantitative approach, justifying the use of a correlational-predictive research design and explaining why multiple regression was chosen as the primary statistical method. It also outlines the predictor and outcome variables and how they relate to the study topics.

The data analysis plan includes a thorough overview of data preparation. It restates the study questions and hypotheses while describing the statistical tests performed to examine the correlations between variables. The challenges to validity section addressed potential threats to internal validity, which referred to whether there was a causal relationship between the independent and dependent variables; and external validity, which refers to the extent to which the study's results can be generalized to other settings, populations, and over time. This chapter also addresses ethical considerations, particularly in the context of utilizing secondary data. The ethical procedures section describes the steps taken to maintain confidentiality, ensure compliance with no student-

specific identifying factors, and comply with Institutional Review Board (IRB) approval. Chapter 3 finished with an overview of the research methods and a transition to Chapter 4, which includes the data analysis and findings.

Research Design and Rationale

This study used a quantitative, correlational-predictive approach to investigate the associations between parental SES and the high school's geographical location, as well as how these variables predict the number of graduates among African American male students in southeastern high schools from 2019 to 2024. A quantitative method was acceptable, as the study objectives aim to identify statistical correlations and predict patterns among factors using secondary school district and state education data. The nature of the data, numerical, large-scale, and non-experimental; requires statistical tools capable of identifying correlations and making predictions.

A qualitative technique was not chosen because the study does not investigate living experiences, narratives, or perspectives. Instead, the goal was to test hypotheses and examine how demographic and behavioral variables interact to influence high school graduation results over a large sample. Furthermore, experimental and quasi-experimental designs were not applicable because the data were observational and preexisting; no variables were manipulated or assigned at random. A correlational-predictive design was best suited for evaluating naturally occurring associations between variables and determining how well they can predict a binary outcome, in this case, whether a student graduated or did not graduate (Laerd Statistics, 2015). Given that the outcome variable, the number of graduates, was continuous, a multiple regression

analysis was employed due to the presence of multiple predictor variables. This statistical method was appropriate for examining the strength and direction of relationships between predictors and the outcome variable, particularly in non-experimental settings. Multiple regression also allows for assessing the predictive power of predictor variables without requiring a controlled experimental design (Laerd Statistics, 2015). Experimental designs were not practical for this applied research because it was neither feasible nor ethical to manipulate variables such as SES or environmental factors over time, especially when working with vulnerable student populations in real-world educational settings. The chosen research design advances knowledge in the field of educational disparities by providing empirical evidence on the association of parental SES and the geographical location of the number of graduates in southeastern high schools. Findings from this research can inform educational policy and intervention programs aimed at improving the number of graduates, particularly for marginalized student populations. This study contributes to the growing body of research on educational equity, enabling educators and policymakers to develop targeted, evidence-based strategies that reduce disparities in high school completion rates.

Methodology

This study used a quantitative, correlational-predictive approach to investigate the associations between parental SES and the high school's geographical location, as well as how these variables predict the number of graduates among African American male students in southeastern high schools from 2019 to 2024. Utilizing secondary data from state education departments and school districts allows for the analysis of existing

datasets to identify patterns and relationships among these variables. The target population consisted of African American students enrolled in public high schools across the Southeastern United States during the academic years 2019-2024. This population was selected due to historically lower numbers of graduates compared to other groups, highlighting the need for focused research to identify contributing factors and inform interventions.

All secondary data were drawn from the general student population attending high schools in the southeastern region of the United States. Within this broader dataset, the target population consisted specifically of African American students, and the number of graduates. A G*Power analysis was conducted to ensure the sample size was sufficient to achieve adequate statistical power for the planned analyses, thereby supporting the validity and reliability of the study's findings (Kang, 2021). This study utilized archival data obtained from the state education departments and participating school districts. The data included student-level records on parental SES (based on eligibility for free or reduced-price lunch) and geographical location as they pertained to graduation outcomes. In addition, parental SES data were identified as "economically disadvantaged" as referenced in the dataset. Although the data were publicly available, a data use agreement was secured from the school district providing the secondary data, as organizing and retrieving the data required assistance from the designated school district representative. In compliance with Institutional Review Board (IRB) requirements, I completed the student research certification and submitted all necessary documentation for approval. Upon IRB approval of the data source, the designated point of contact within the school

district was notified to facilitate the data download and reporting. No additional contact or documentation was required from the district. Utilizing archival data offered a cost-effective approach to examining large datasets and identifying trends across multiple years, eliminating the need for primary data collection.

Parental SES was measured using students' eligibility for free or reduced-price lunch programs, a common proxy for SES in educational research. This categorical variable distinguishes between students from low-income backgrounds and those from higher-income families. The high school's geographical location was categorized based on the National Center for Education Statistics (NCES) classification into rural and urban settings. Graduation status, the dependent variable, was dichotomized as "graduated" or "did not graduate" within the expected four-year timeframe. This binary outcome variable was suitable for logistic regression analysis, which was employed to predict the likelihood of graduation based on the independent variables.

Data Analysis Plan

This study utilized IBM SPSS Statistics software for data analysis. SPSS is widely recognized for its expansive capabilities in managing large datasets, performing statistical analyses, and handling complex statistical models (Field, 2018). The software allowed for efficient computation of descriptive statistics, an analysis of the relationship, and a logistic regression, which were central to this study's analytical framework. Additionally, SPSS includes built-in functions for data cleaning and screening, ensuring the accuracy and integrity of the dataset by detecting missing values, outliers, and

potential inconsistencies (Pallant, 2020). These features enable researchers to maintain data quality and reliability, ultimately leading to more valid and trustworthy analyses.

A systematic data cleaning and screening process was implemented to ensure the quality and integrity of the data. Initially, the dataset obtained from state education departments and school districts was reviewed for completeness. According to Mirzaei et al. (2022), when missingness falls between 5% and 10%, it represents a gray area in which the researcher must apply theoretical understanding of the construct under investigation before determining the most appropriate method for handling the missing data. Options included listwise deletion, imputation techniques, or likelihood-based methods depending on the nature and pattern of the missingness. This threshold is commonly used in research to balance data retention with quality concerns (Little & Rubin, 2019). Additionally, data were examined for outliers and inconsistencies, addressed through appropriate statistical methods or sensitivity analyses to minimize their impact on study results (Tabachnick & Fidell, 2019). All data cleaning procedures were thoroughly documented to maintain transparency and reproducibility in the research process. This study investigated the following research questions and hypotheses, as stated in previous chapters:

RQ1: To what extent, if any, do parental socioeconomic status (as measured by free lunch status) and environmental differences (as measured by rural or urban locations) combined predict the number of graduates among African Americans?

HO1: Parental socioeconomic status and environmental differences combined do not statistically predict the number of graduates among African Americans.

HA1: Parental status and environmental differences combined do statistically predict the number of graduates among African Americans.

RQ2: To what extent, if any, do parental socioeconomic status (as measured by free lunch status) and environmental differences (as measured by rural or urban location) individually predict the number of graduates among African Americans within the overall model?

H022: Parental socioeconomic status individually does not statistically predict the number of graduates among African Americans within the overall model.

HA22: Parental socioeconomic status individually does statistically predict the number of graduates among African Americans within the overall model.

H023: Environmental differences individually do not statistically predict the number of graduates among African Americans within the overall model.

H23: Environmental differences individually do statistically predict the number of graduates among African Americans within the overall model.

RQ3: To what extent, if any, do the number of graduates differ before and after the COVID-19 pandemic?

H03: There is not a significant difference in the number of graduates before and after the COVID-19 pandemic.

HA3: There is a significant difference in the number of graduates before and after the COVID-19 pandemic.

The statistical analysis followed a structured approach to test these hypotheses. The primary statistical test used was multiple regression, a method of analysis. According to Laerd (2015), the following assumptions are identified for a multiple regression analysis: Assumption #1- you have one dependent variable that was measured at the continuous level (i.e., the interval or ratio level), Assumption #2- you have two or more independent variables that are measured either at the continuous or nominal level, Assumption #3- you should have independence of observations (i.e., independence of residuals), Assumption #4- there needs to be a linear relationship between (a) the dependent variable and each of your independent variables, and (b) the dependent variable and the independent variables collectively, Assumption #5- indicated that your data needs to show homoscedasticity of residuals (equal error variances), Assumption #6 stated that your data must not show multicollinearity, Assumption #7 revealed that there should be no significant outliers, high leverage points, or highly influential points, and Assumption #8- checked the residuals (errors) are approximately normally distributed. Assumptions #1-2, 4-7 are all met within the research design. Assumptions # 3 and 8 do not apply to this research study.

The identified assumptions allow researchers to analyze the independent samples t-test for the number of graduates before and after the pandemic. The evaluation of these assumptions was based on the diagnostic output generated by the multiple regression analysis (Laerd Statistics, 2015). If any of these assumptions are violated, it may compromise the validity of the results, necessitating corrective measures such as data transformation, outlier removal, or the use of alternative statistical techniques more suitable for the data.

Threats to Validity

Babbie (2017) defined validity as the accuracy of measuring what is claimed to be measured. Ensuring the validity of a correlational-predictive quantitative study employing a logistic regression was critical for producing credible and generalizable findings. This study relied on secondary data obtained from state education departments and school districts, which introduced unique considerations regarding data accuracy, completeness, and representativeness. Threats to both internal and external validity must be carefully addressed to uphold the study's rigor and reliability. Internal validity threats focused on factors that may confound the relationship between the independent and dependent variables, thereby distorting the actual effect of the variables being studied (Warner, 2013). Common threats include selection bias, where differences between groups may influence outcomes; history effects, where external events impact participants during the study period; and maturation, referring to changes in participants over time.

The author defined external validity as the extent to which a study's results can be applied to other contexts. This highlights the importance of considering how well the study's findings apply to diverse populations, settings, and periods. Since this study utilizes archival data, the entire dataset was used. An external threat would be if certain schools or districts underreport the number of graduates, which could skew the dataset and lead to an inaccurate estimation of the effects. Additionally, the study's reliance on publicly available datasets means that data collection methods may vary across school districts, which could potentially introduce inconsistencies in reporting practices.

Ethical Procedures

Ethical considerations played a vital role in ensuring the integrity and compliance of this study, which focuses on the number of African Americans graduating from southeastern high schools before and after the COVID-19 pandemic. This research utilized secondary data obtained from state and local education agencies, including publicly available datasets and administrative records from school districts. To ensure ethical compliance, formal agreements were secured from these agencies prior to data access, and all required documentation was submitted to Walden University's Institutional Review Board (IRB) for approval. The study strictly adhered to ethical and legal regulations, such as the Family Educational Rights and Privacy Act (FERPA), ensuring that data-sharing practices align with research ethics and institutional policies (Ziskind, 1975). The research adhered to strict guidelines to maintain student information security, minimizing data breach risks and ensuring data-sharing practices comply with research ethics and institutional policies.

To protect the confidentiality and anonymity of individuals in the study, all data was de-identified as the first step if it contained any personal identifying information. In that case, it will all be anonymous. If it included student numbers, it would be confidential. Student numbers (or SSNs) would not be necessary for this analysis. The study focused on aggregate data rather than individual records to prevent any breach of privacy. Public datasets and the support of school administration were employed for categorical and structural analysis. These measures uphold academic integrity and ethical standards while ensuring the validity of research conclusions. By implementing these ethical procedures, this study ensured compliance with IRB regulations, respected participant confidentiality, and contributed valuable insights to educational research while upholding the highest ethical standards. There was no conflict of interest for me, as the school district does not employ me, and I do not have any children registered for any high school.

Summary

Chapter 3 of this study outlined the research methodology used to analyze the correlation between geographical location and parents' SES on the number of African American graduates in southeastern high schools before and after the COVID-19 pandemic. This study employed a quantitative correlational-predictive research design, using secondary data from state education agencies and school districts. By utilizing a multiple regression design to analyze the research question and a t-test statistical measure, I proposed to examine the effect, if any, of parental SES and geographical location on the number of African American graduates in southeastern high schools

before and after the COVID-19 pandemic from 2019 to 2024. The null hypothesis for all criterion variables explored whether parental SES or geographical location had no effect on the number of African American students graduating in southeastern high schools from 2019 to 2024, both before and after the COVID-19 pandemic. The alternative hypothesis determined whether there was a significant effect of parental SES or geographical location on the number of African American graduates in southeastern high schools before and after the COVID-19 pandemic from 2019 to 2024. The research design prioritized methodological rigor and ethical compliance, focusing on the proper handling of secondary data, addressing ethical research considerations, and mitigating potential validity challenges.

The methodology included a structured approach to data collection and analysis regarding the independent variables: parents' SES (determined by eligibility for free or reduced lunch programs) and school location (categorized as rural or urban), which were assessed in relation to the binomial dependent variable, which was the four-year graduation rate. The study utilized IBM SPSS Statistics for data cleaning, descriptive statistics, and three-way ANOVA to analyze the relationships between variables. To ensure validity, the research addressed potential threats, including selection bias and inconsistencies in school district reporting. Ethical considerations, including FERPA compliance and Institutional Review Board (IRB) approval, are implemented to maintain confidentiality and integrity. Since the study relied on publicly available datasets, personal student information was excluded, and all data was aggregated to protect privacy.

As the study moves into Chapter 4, the focus shifts to the data analysis and findings derived from the methodology outlined in Chapter 3. The next chapter will present statistical results, exploring trends and predictions between SES, geographical location, and the number of graduates. The findings could assist in formulating targeted educational policies and interventions to increase high school completion rates among African Americans. The transition from methodology to results highlights the importance of understanding systemic inequities and addressing them through informed, evidence-based strategies.

Chapter 4: Results

Introduction

The purpose of this quantitative study was to examine the extent to which parental SES and school location (urban vs. rural) predict the number of graduates among African American students in southeastern high schools before and after the COVID-19 pandemic. This chapter is organized as follows: first, it provides an overview of the data collection process and baseline demographic characteristics of the sample, drawn from 12 school district records across six academic years. Next, it describes the steps taken to assess the assumptions of multiple regression analysis. The results are then presented in alignment with each research question and hypothesis, including relevant descriptive statistics, inferential analyses, and effect sizes. The chapter concludes with a summary of findings and a transition into the interpretive content of Chapter 5. Grounded in Bandura's Social Learning Theory (1977), the study aimed to explore how environmental and structural influences shape educational behavior and outcomes in historically underserved communities.

Three research questions guided the analysis:

RQ1: To what extent do SES and school location combined predict the number of graduates among African American students?

H01: Parental socioeconomic status and environmental differences combined do not statistically predict the number of graduates among African American students.

HA1: Parental socioeconomic status and environmental differences combined do statistically predict the number of graduates among African American students.

RQ2: To what extent do SES and school location individually predict the number of graduates within the overall model?

H022: Parental SES individually does not statistically predict the number of graduates among African American students within the overall model.

HA22: Parental SES individually does statistically predict the number of graduates among African American students within the overall model.

H023: Environmental differences (urban vs. rural) individually do not statistically predict the number of graduates among African American students within the overall model.

HA23: Environmental differences individually do statistically predict the number of graduates among African American students within the overall model.

RQ3: To what extent, if any, do the number of graduates differ before and after the COVID-19 pandemic?

The corresponding hypotheses tested both combined and individual effects of SES and geographic location, as well as differences across pre- and postpandemic timeframes.

H03: There is no significant difference in the number of graduates before and after the COVID-19 pandemic.

HA3: There is a significant difference in the number of graduates before and after the COVID-19 pandemic.

The study specifically focused on graduation outcomes, using aggregate data provided by the Alabama State Department of Education, covering the five years from 2019 to 2024. Graduation data were not disaggregated by gender, so the analysis reflects the overall number of African American graduates rather than being specific to males. The predictor variables listed in the tables of the study are as follows: school year, geographical location (urban or rural), the number of economically disadvantaged students, and total male student enrollment. The dependent variable examined to determine its potential influence on the outcome was the number of graduates among African American students. My research included 12 school district records (N = 12) in the southeastern region of the United States.

Each record contained data on the school year, geographical classification (urban or rural), the number of economically disadvantaged students, the total number of male students, and the number of African American students. These districts were selected to reflect a range of contextual environments. Of the 12 records, six represent school years before or at the onset of the COVID-19 pandemic (2019–2021), while the remaining six represent the postpandemic period (2022–2024). This division allows for comparison of graduation-related factors before and after the pandemic's peak disruption to public education.

An initial review of the data revealed a consistent pattern in which urban districts reported significantly higher counts of both economically disadvantaged students and African American students than their rural counterparts. This disparity suggests a concentration of systemic socioeconomic challenges and racial demographics within urban educational environments, which may influence the availability of resources, instructional quality, and overall academic support systems. These differences in baseline demographics underscore the contextual complexity surrounding educational equity and graduation trends across geographic locations.

The study employed a correlational-predictive research design, which was appropriate for examining the degree to which multiple independent variables statistically relate to and predict a dependent variable without manipulating any of the conditions. This non-experimental design enabled the analysis of naturally occurring differences in the number of graduates based on geographical location (rural vs. urban), parental SES, and the number of graduates. Multiple regression analysis was used to assess the predictive strength of these variables when considered together. At the same time, independent samples t-tests were conducted to examine group differences in graduation outcomes between urban and rural districts. The design provided a framework for exploring whether statistically significant relationships existed between these contextual factors and the number of graduates, particularly considering the educational disruptions caused by the COVID-19 pandemic.

Data Collection

The data for this study were obtained from publicly accessible secondary sources, primarily the Alabama State Department of Education. No data was collected prior to the IRB approval: 06-09-25-1025116. These sources provided district-level records on high school graduation outcomes, parental SES, and the geographical location of the schools (categorized as either rural or urban). Additionally, while the study intended to focus on African American males, the available data did not disaggregate graduation statistics by both race and gender. As a result, the variable used for the number of graduates reflects the collective number of graduates of all African American students, rather than those of males exclusively. The dataset consisted of aggregated records from 12 school districts, representing graduation data for African American students from urban and rural school districts in the Southeastern United States. Each district contributed six years of data (2018–2024 academic years), corresponding to graduation cohorts from 2019 through 2024. Thus, the total sample size was N = 12, with n = 6 school records from the urban district and n = 6 from the rural district.

Results

The results of the quantitative analysis were conducted to examine the extent to which school location (urban or rural) and parental SES (as measured by economic disadvantage) predict the number of graduates among African American students in southeastern high schools before and after the COVID-19 pandemic. The descriptive statistics in Table 1 summarize the baseline characteristics of the sample, followed by inferential statistics that address each of the three research questions. Each research

question was presented along with the statistical findings and an interpretation of the results. Key tables are provided to support the analyses and to illustrate the distribution, relationships, and predictive value of the study variables. The results are organized to report the outcomes of the multiple regression analyses and independent samples t-test, including the evaluation of statistical assumptions, effect sizes, and significance levels.

The sample consisted of an even split between six urban and six rural district records. Table 1 also shows that the number of students with lower parental SES ranges from 40 to 402, with urban districts generally reporting higher numbers. Male student enrollment ranged from 0 to 183, and the number of African American students ranged from 29 to 325. Overall, urban districts showed higher counts of both lower parental SES and African American students compared to rural districts. These patterns highlight differences in student populations that may impact access to resources and graduation outcomes, particularly in relation to location. Descriptive statistics revealed a notable difference in graduation outcomes between urban and rural districts. Urban districts reported a higher mean number of African American graduates ($M = 164.00$, $SD = 15.88$) compared to rural districts ($M = 68.00$, $SD = 42.66$). The larger standard deviation among rural districts indicated considerable variability in the number of graduates across these areas, which may reflect differences in funding, resources, access to technology, smaller graduation classes according to the student population, teacher availability, and other structural challenges commonly associated with rural education settings. To determine whether this observed difference was statistically significant, an independent samples t-

test was conducted. Results confirmed a significant difference in the number of graduates between the two groups, $t(10) = 5.17$, $p < .001$.

Table 1

Baseline Description of Data and Demographics

School year	Geographical location	Lower parental SES	Total # of males	Total # of African Americans
2019	Urban	286	156	156
2019	Rural	87	115	59
2020	Urban	339	183	183
2020	Rural	40	95	40
2021	Urban	374	169	309
2021	Rural	59	97	40
2022	Urban	232	139	292
2022	Rural	96	0	61
2023	Urban	402	177	325
2023	Rural	70	57	70
2024	Urban	336	160	257
2024	Rural	55	40	29

Note. $N = 12$.

This chapter details the data collection procedures, including the use of publicly available secondary data from the Alabama State Department of Education, outlines the process of data cleaning and variable coding through IBM SPSS, presents baseline demographic and descriptive statistics of the sample, and organizes the statistical results according to each research question and corresponding hypothesis. The findings provide

empirical insight into the structural factors that influence educational attainment among African American students in the Southeastern United States. Before interpreting the results of the multiple regression analysis, it was essential to evaluate whether the data met the necessary assumptions for conducting a valid multiple regression. According to *Laerd Statistics* (2015), eight key assumptions must be assessed to ensure the results are both statistically reliable and generalizable. The following subsections present a detailed analysis of each assumption and its corresponding treatment in this study.

Assumption 1: Dependent Variable Is Continuous

The dependent variable in this study, *African American Graduates*, was measured on a continuous scale, as required for multiple regression. This variable represents the total number of African American students who graduated within the observed time frame at each school site. Therefore, this assumption was satisfied.

Assumption 2: Independent Variables Are Categorical or Continuous

All independent variables used in the model met the appropriate data level requirements. The independent variables included *Parental Socioeconomic*s (categorical), *Graduation Year* (continuous), *Urban or Rural* location (categorical), and *Total Number of Male Students* (continuous). As such, this assumption was met.

Assumption 3: Independence of Observations

The independence of observations implies that each case (i.e., each school site or year of graduation data) was unrelated to the others. The dataset used in this study included aggregated data from individual school districts and did not involve repeated measures or clustering. While SPSS diagnostics did not provide a Durbin-Watson test

result due to sample size constraints, conceptual independence was maintained through the data structure. Given the nature of the secondary data, this assumption was acknowledged but not directly tested.

Assumption 4: Linearity

Assumption 4 also required a linear relationship between each predictor variable and the criterion variable (Laerd Statistics, 2015). Partial regression plots were generated for each predictor variable and criterion variable. Figure 3 illustrates a scatterplot demonstrating the linear relationship between African American graduates and SES. Figure 3 shows a positive linear relationship.

Figure 3

Scatterplot of Economically Disadvantaged Status and African American Graduates

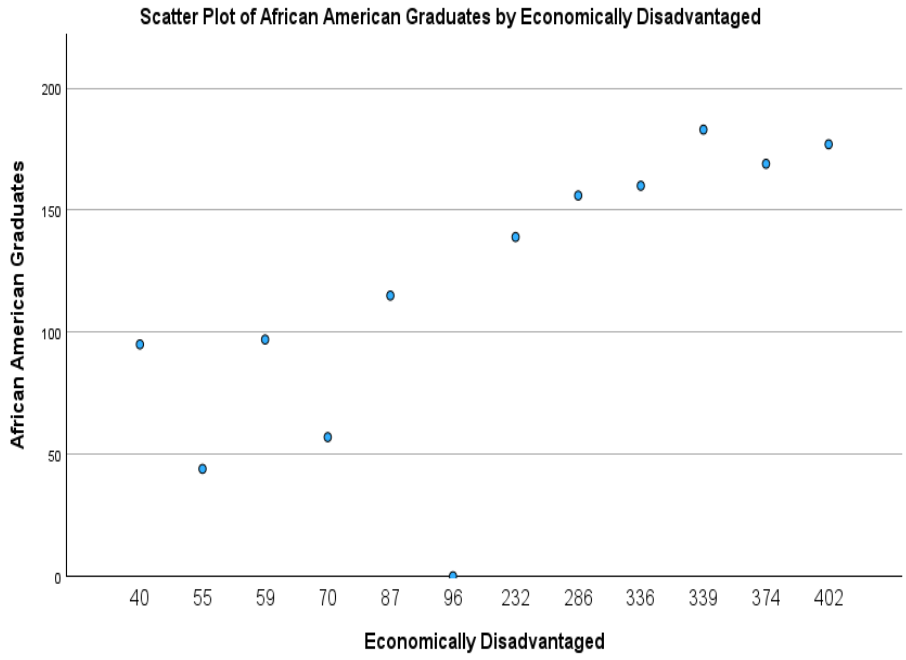
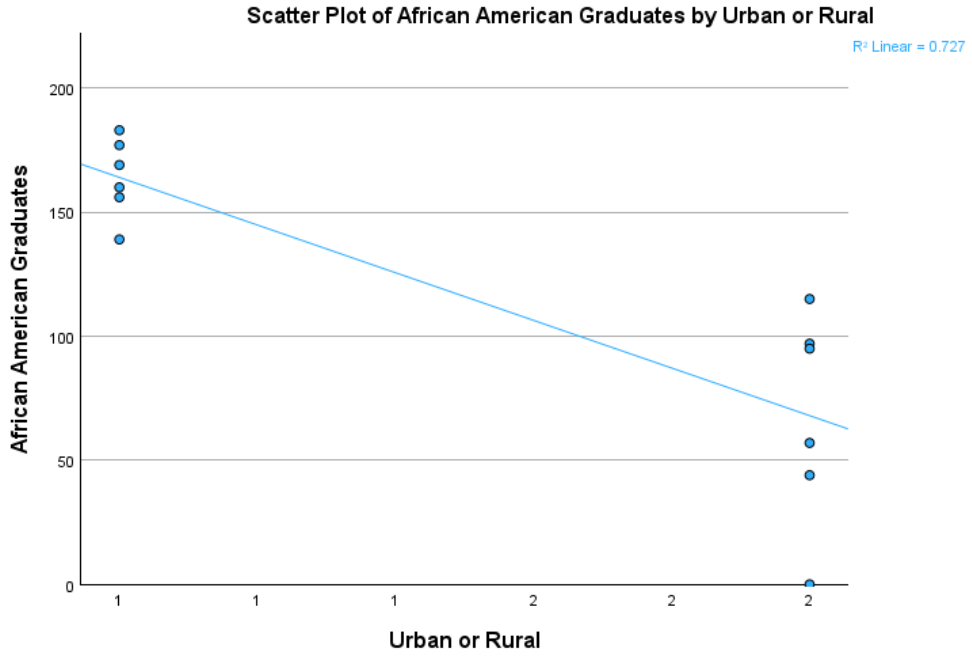


Figure 4 illustrates a scatterplot demonstrating the linear relationship between African American graduates and geographical location. Figure 4 presents a comparison of graduation outcomes based on the classification of schools as urban or rural. Figure 4 shows a positive linear relationship.

Figure 4

Graduation Outcomes Based on Urban Versus Rural Geographical Location



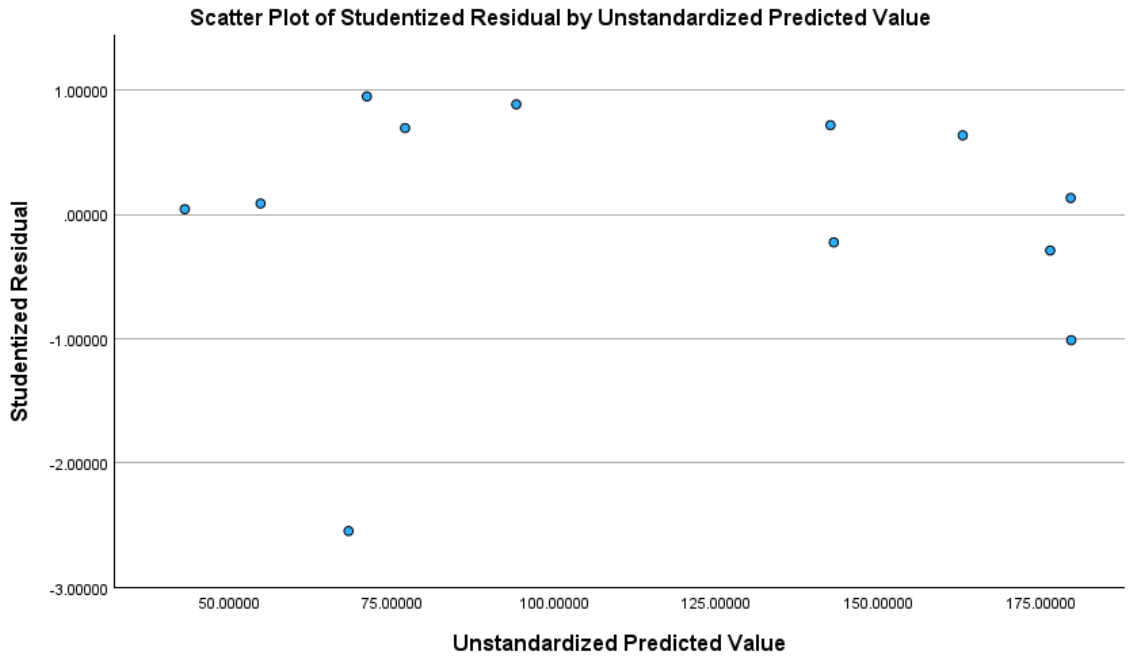
Assumption 5: Homoscedasticity

Homoscedasticity refers to the equal spread of residuals across predicted values (Laerd Statistics, 2015). To evaluate the assumption of homoscedasticity, a scatterplot of studentized residuals against unstandardized predicted values was examined (see Figure 5). The residuals appeared to be randomly and evenly distributed across all levels of

predicted values, with no clear pattern or funneling effect observed. Figure 5 demonstrates a positive assumption of homoscedasticity.

Figure 5

Scatterplot of Studentized Residuals Versus Unstandardized Predicted Values



Assumption 6: No Multicollinearity

Multicollinearity was assessed using tolerance and variance inflation factor (VIF) statistics. According to Laerd Statistics (2015), tolerance values less than 0.10 and VIF values greater than 10 suggest problematic multicollinearity. In Table 2, both variables, *parental SES and geographical location*, had tolerance values of 0.091 and VIF values of 10.971 and 10.946, respectively. These results indicate a violation of the assumption of no multicollinearity. However, these values are very close to the required values for confirmation of no multicollinearity, and they would become problematic only if they are

significant predictors of the number of African American graduates. In contrast, the variable *graduation year* demonstrated acceptable collinearity statistics, with a tolerance of 0.976 and a VIF of 1.024. I found through data analysis that the predictive variables individually did not predict graduation rates among African American students, but when combined, they did.

Table 2

Coefficients Table and Collinearity Statistics for Predicting Graduation Rates Among African American Students

	Unstandardized B	Coefficients std. error	Standardized coefficients beta	*t*	Sig.	Collinearity tolerance	Statistics VIF
(Constant)	191.561	125.436		1.527	.165		
Economically disadvantaged	.171	.210	.414	.810	.441	.091	10.971
Urban or rural	-51.590	57.484	-.458	-.897	.396	.091	10.946
Graduation year	-9.129	5.148	-.277	-1.773	.114	.976	1.024

Note. Dependent variable: African American graduates.

Assumption 7: No Significant Outliers, High Leverage Points, or Influential Observations

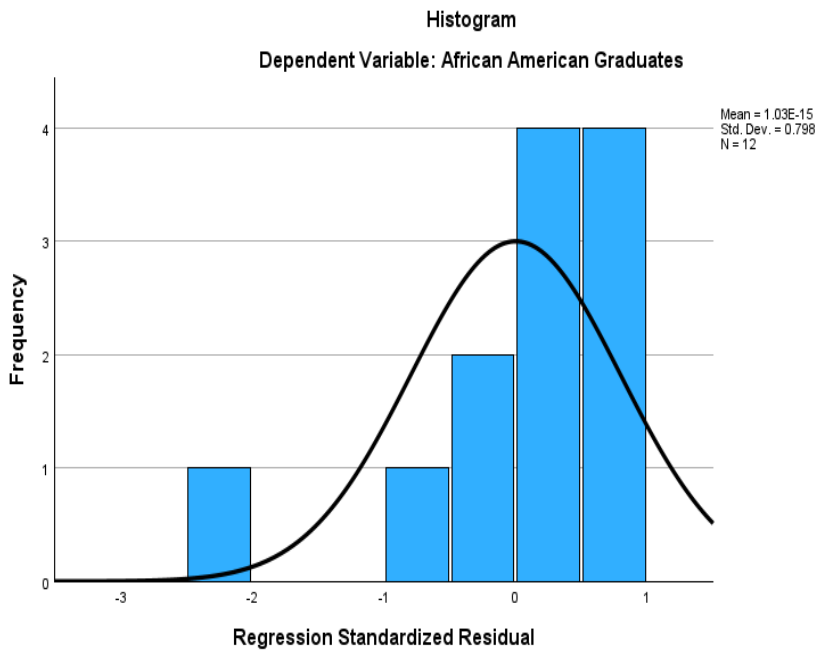
To detect outliers and influential data points, standardized residuals, Cook's distance, and leverage statistics were examined. No cases exceeded the threshold of ±3 for standardized residuals, with the standardized residuals data ranging from (-1.01174 to .94977) which did not exceed ±3. Therefore, this assumption was satisfied.

Assumption 8: Normality of Residuals

To evaluate the normality of residuals, a histogram was generated, as shown in Figure 6. The histogram of standardized residuals approximates a bell-shaped curve, indicating that the residuals from the regression model predicting African American graduates are approximately normally distributed. Most residuals cluster around zero and taper off symmetrically, supporting the conclusion that the assumption of normality was reasonably satisfied.

Figure 6

Histogram of Standardized Residuals for the Regression Model Predicting African American Graduates

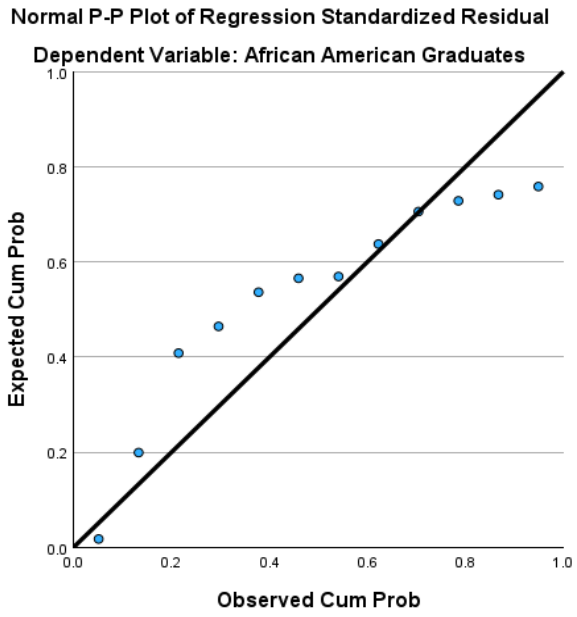


To evaluate the normality of residuals, a probability-probability (P-P) plot was generated, as shown in Figure 7. The P-P plot of the standardized residuals for the

regression model predicting African American graduates indicates that the data points closely follow the diagonal line, suggesting that the assumption of normality of residuals was reasonably met.

Figure 7

Normal P-P Plot of Standardized Residuals for the Regression Model Predicting African American Graduates



Research Question 1: Do Parental SES and Location Combined Predict the Number of Graduates?

H01: Parental socioeconomic status and environmental differences combined do not statistically predict the number of graduates among African American students.

HA1: Parental socioeconomic status and environmental differences combined do statistically predict the number of graduates among African American students.

A multiple linear regression was used to determine if the predictor variables of parental SES and location combined predicted the number of graduates among African American students. To determine this, the R-squared value (R^2) was computed. It was the coefficient of determination, representing the proportion of variance in the criterion variable that was explained by the predictor variables (Laerd Statistics, 2015). The adjusted R-squared value (R^2) corrects for the number of predictors in the multiple regression model. The R^2 for the overall model was .734 with an adjusted R^2 of .675. Therefore, 67.5% of the variability of the criterion variable, for the number of graduates, can be explained by the predictor variables of parental SES and location. Table 3 presents the model summary for the combined predictor variables.

Table 3

Model Summary for the Predictor Variables Combined

	Model	Sum of squares	*df*	Mean square	*F*	Sig.
1	Regression	27915.563	2	13957.782	12.447	.003 [a]
	Residual	10092.437	9	1121.382		
	Total	38008.000	11			

Note. Dependent variable: African American graduates.

[a] Predictors: (Constant), Urban or Rural, Economically Disadvantaged.

Statistical significance was assessed in the ANOVA within the multiple regression output. A $p < .05$ indicates a statistically significant result (Laerd Statistics, 2015). The results of the overall regression were statistically significant ($R^2 = 0.73$, F (2, 9) = 12.48, p = .003). Parental SES and location combined significantly predicted the number of graduates, F (2,9) = 12.45, p = .003. Therefore, the null hypothesis was rejected, as parental SES and location combined significantly predicted student graduation. Table 4 shows the ANOVA output from the predictor variables combined in the overall model.

Table 4

Regression Output—ANOVA—Predictors Combined

	Model	Sum of squares	*df*	Mean square	*F*	Sig.
1	Regression	27915.563	2	13957.782	12.447	.003 [a]
	Residual	10092.437	9	1121.382		
	Total	38008.000	11			

Note. Dependent variable: African American graduates.

[a] Predictors: (Constant), Location, Parental SES.

Research Question 2: Do SES and Location Individually Predict the Number of Graduates?

A multiple regression was used to determine if the predictor variables of parental SES and location individually predicted African American graduates. The predictor variables of parental SES and location did not individually have a significant effect on the number of African American graduates. The following null and alternative hypotheses for parental SES and location were created to answer each subcomponent of the model. The hypotheses for Research Question 2 are presented using data in Table 5.

Table 5

Regression Output—Coefficients

Unstandardized coefficients				Standardized coefficients		
Predictor variables		B	Std. error	Beta	*t*	Sig.
1	(Constant)	193.477	139.577		1.386	.199
	Parental SES	.113	.231	.275	.488	.637
	Urban or rural	-66.572	63.271	-.591	-1.052	.320

Note. Dependent variable: African American graduates.

H022: Parental SES individually does not statistically predict the number of graduates among African American students within the overall model.

HA22: Parental SES individually does statistically predict the number of graduates among African American students within the overall model.

A multiple regression was used to determine if parental SES predicted the number of graduates among African American students. Parental SES did not significantly predict the number of graduates for the sample in the target population, $\beta = 0.28$, $t = 0.489$, $p = 0.64$. This means that for this sample, a one-unit increase in parental SES does not have a significant effect on the total number of graduates. Because the result was higher than 0.05, there was no statistical significance, and the decision was made to fail to reject the null hypothesis.

H023: Environmental differences (urban vs. rural) individually do not statistically predict the number of graduates among African American students within the overall model.

HA23: Environmental differences individually do statistically predict the number of graduates among African American students within the overall model.

A multiple regression was used to determine if parental environmental differences predicted the number of African American graduates. Environmental differences did not significantly predict the number of graduates for the sample in the target population, $\beta = -0.59$, $t = -1.05$, $p = 0.32$. This means that for this sample, a one-unit increase in environmental differences does not have a significant effect on the total number of graduates. Because the result was higher than 0.05, there was no statistical significance, and the decision was made to fail to reject the null hypothesis.

Research Question 3: Do the Number of Graduates Differ Before and After the COVID-19 Pandemic?

H03: There is no significant difference in the number of graduates before and after the COVID-19 pandemic.

HA3: There is a significant difference in the number of graduates before and after the COVID-19 pandemic.

An independent samples t-test was conducted to examine whether there was a significant difference in the number of African American graduates before and after the COVID-19 pandemic. The results were not statistically significant, $t(2) = 0.545$, $p = .641$, indicating that the difference in the number of graduates between the two groups was not meaningful. The 95% confidence interval for the mean difference ranged from -231.18 to 298.18, which includes zero, further suggesting no significant effect. Since $p > .05$, the null hypothesis (H03) was not rejected, indicating that the number of graduates did not significantly differ before and after the COVID-19 pandemic.

Summary

The study focused on the following variables: the number of African American graduates, the number of male graduates, school district classification (urban or rural), and SES, as defined by the economically disadvantaged indicator. Additionally, while the study aimed to explore the number of graduates among African American males specifically, the data provided by the Alabama State Department of Education grouped African American graduates collectively, without disaggregating by gender. Therefore, the term "African American graduates" refers to the overall number of graduates for this racial group rather than being exclusive to males. The secondary data utilized for this study was obtained from the Alabama State Department of Education website, where they are publicly available. These data sets did not include personally identifiable student information, in accordance with FERPA regulations.

All analyses were conducted using aggregated district-level data including: the total number of African American graduates, the total number of male graduates, the number of economically disadvantaged students, and the rural or urban status of the school. The purpose of this study was to investigate factors that influence the graduation rates of African American students. Three research questions guided the analysis. With the assumptions met, I proceeded to conduct the multiple regression analysis.

The first results from the multiple regression revealed that parental SES and location combined significantly predicted graduation rates among African American students. Thus, the null hypothesis for research question 1 was rejected. In research question 2, the predictor variables were analyzed individually, and neither parental SES

nor location alone significantly predicted graduation rates. The null hypotheses for both individual predictors were not rejected, indicating that their combined influence is more impactful than their individual effects. For research question 3, an independent samples t-test showed no statistically significant difference in graduation rates before and after the COVID-19 pandemic. Therefore, the null hypothesis was not rejected, suggesting that the pandemic did not result in a significant change in the number of African American graduates in the sample. The findings highlight the importance of combined contextual factors such as SES and environment, rather than isolated variables, in predicting graduation outcomes for African American students. Building on the findings presented in Chapter 4, the following chapter (Chapter 5) provides a detailed discussion and interpretation of the results, explores their implications for practice and policy, addresses study limitations, and offers recommendations for future research aimed at improving graduation outcomes for African American students in southeastern high schools.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

This quantitative study examined the extent to which the variables of parental SES and school location (rural vs. urban) predicted the outcome variable of the number of graduates among African American students in southeastern high schools before and after the COVID-19 pandemic. The study utilized publicly available secondary data from the Alabama State Department of Education, which provided the aggregate number of graduates. However, the dataset did not disaggregate outcomes by both race and gender; therefore, the analysis reflects the number of graduates for all African American students, rather than specifically for African American males. Chapter 5 provides an interpretation of these findings, discusses their implications within the context of existing literature and theory, addresses study limitations, and offers recommendations for future research and practice.

This research was grounded in the broader national concern regarding persistent disparities in high school the number of graduates among African American students, particularly in southeastern states. Before the onset of the COVID-19 pandemic, this population already faced disproportionate barriers to educational attainment. Contributing factors included chronic underfunding of schools, limited access to culturally responsive instruction, insufficient availability of college preparatory programs, and unstable socioeconomic conditions. The onset of the pandemic introduced new and profound challenges, particularly in rural school districts. These included limited access to

technology, transportation barriers, and inconsistencies in instructional delivery, all of which exacerbated existing educational inequities and widened the opportunity gap.

Rural school districts in the southeastern region frequently face structural challenges, including a shortage of certified teachers, insufficient tax revenues to support education, limited access to high-speed internet, and geographic isolation. These systemic limitations directly affect academic outcomes and the number of graduates among African American students. Notably, the rural district in the dataset failed to report graduation data for the year 2022, highlighting concerns related to the reliability and sustainability of data infrastructure in such settings. Addressing these disparities requires both targeted educational interventions and broader improvements to district-level data collection and reporting systems.

In contrast, urban school districts, though not without their complexities, generally reported a higher number of graduates for African American students. Urban settings often benefit from increased access to educational resources, a larger pool of certified educators, and a stronger technological infrastructure to support remote learning. Additionally, the presence of community partnerships providing wrap-around services and established school-to-career pipelines through corporate partnerships may contribute to improved outcomes. While urban schools frequently face challenges such as overcrowding, disciplinary disparities, and underrepresentation in advanced academic programs; the availability of academic and social support structures may have served to mitigate some of the adverse impacts of the pandemic on student success. Recognizing

the contextual distinctions between rural and urban districts is critical for developing equitable and responsive educational strategies.

The predictor variables in this study were defined according to the indicators available in the dataset. Parental SES was operationalized using the "economically disadvantaged" designation, a widely accepted proxy in educational research. School location was determined based on state-defined district classifications as either rural or urban. Graduation year served as a temporal variable, allowing for a comparison of outcomes before (2019–2020) and after (2021–2024) the onset of the COVID-19 pandemic. The outcome variable was defined as the total number of African American high school graduates reported by districts.

The existing body of literature supported the relevance and selection of these variables. Numerous studies have documented strong associations between low SES and poor academic outcomes, particularly in high-poverty and rural settings. Additionally, researchers have investigated the long-term educational consequences of the COVID-19 pandemic, especially for marginalized and under-resourced communities. Guided by Bandura’s social learning theory, this study aimed to examine the extent to which social and environmental factors influence academic achievement. The theory posits that learning is shaped through observation, reinforcement, and interaction within one's environment, which are factors that can vary significantly depending on the geographic context and SES.

A correlational-predictive design was employed, allowing for the examination of relationships among existing variables using archival data. IBM SPSS Statistics was used

for data analysis. Initially, descriptive statistics were generated to summarize graduation trends across urban and rural districts. Independent samples t-tests were then conducted to assess significant differences in the number of graduates between the two groups. Finally, both full and reduced multiple regression models were performed to evaluate the predictive strength of each independent variable in relation to African American graduation outcomes.

Interpretation of the Findings

The findings of this study support and extend existing knowledge within the field, aligning with the peer-reviewed literature reviewed in Chapter 2. Specifically, the results indicated that the combination of school location (urban vs. rural) and parental SES (as measured by economic disadvantage) was a significant factor in predicting the number of graduates among African American students in southeastern school districts. The statistically significant difference in the number of graduates between urban and rural districts was consistent with prior research that has documented how structural disparities influence educational outcomes in rural settings (Jordan et al., 2012; Rogers et al., 2023). These studies consistently found that rural schools often contend with fewer financial resources, limited access to advanced coursework, minimal technology infrastructure, and a shortage of qualified educators. The present study reinforces these conclusions, demonstrating that urban schools, likely benefiting from greater educational resources, tend to report higher the number of graduates than their rural counterparts.

Although the variable of parental SES, operationalized through the “economically disadvantaged” designation, did not emerge as a statistically significant predictor of the

number of graduates for African American males exclusively in the regression analysis, its inclusion remains essential. A substantial body of literature supports the association between low SES and diminished academic achievement (Reardon, 2018; Sosu & Dare, 2021). The lack of statistical significance in the current study may be attributed to the limited sample size, which may not adequately capture the complexity of socioeconomic influences on educational outcomes. Nevertheless, the alignment of these results with prior research supports the continued use of SES as a key variable in future investigations.

This study contributes to the body of knowledge by offering postpandemic data that illustrates how the COVID-19 crisis significantly increased preexisting inequalities, particularly in rural communities. Numerous studies (Claitt, 2023; Kuhfeld et al., 2020) have demonstrated that the pandemic's impact, through school closures and limited access to remote learning, was disproportionately felt by minority and low-income student populations. The present findings support this perspective, identifying persistent location-based disparities that were likely intensified during the pandemic and continued into the years that followed. Through the lens of Bandura's social learning theory, these findings further underscore the importance of environmental context in shaping student learning. Bandura emphasized that learning is influenced not only by individual motivation; but also by exposure to models, reinforcement systems, and social interactions.

In rural settings, students may have had fewer opportunities to engage with academic role models, access community-based educational programs, or utilize

technology that supports learning and academic achievement. The stronger graduation outcomes observed in urban districts suggest that these environments may offer more favorable conditions for observational learning, sustained motivation, and peer and adult support; which are key components of social learning theory. The observed differences in the number of graduates between rural and urban areas lend theoretical support to the idea that learning is context-dependent and socially reinforced.

It is important to emphasize that the interpretations presented here remain grounded in the data and the study's design. This research employed a correlational-predictive methodology, which identifies statistical relationships but does not imply causality. Although school location emerged as a statistically significant predictor, this finding does not suggest that geography alone determines graduation outcomes. Other unmeasured variables such as school climate, instructional quality, and parental involvement may also play critical roles in shaping academic trajectories and warrant future examination. Furthermore, while the original intent of the study was to analyze the number of graduates among African American males, limitations in the publicly available dataset precluded disaggregation by gender. Consequently, the conclusions apply to African American students as a whole. This limitation highlights a broader need for state and district education agencies to improve the clarity, specificity, and accessibility of disaggregated data; particularly in studies addressing educational equity.

In conclusion, the findings of this study confirm and expand the existing literature on the impact of geographic and socioeconomic variables on high school graduation outcomes among African American students. Viewed through the theoretical framework

of social learning, these results demonstrate how environmental disparities can shape academic performance. The study underscored the importance of developing educational policies and interventions that are contextually informed and equity-focused, addressing both systemic barriers and the social dynamics that influence student achievement.

Limitations of the Study

The study revealed several significant limitations that impact the generalizability, validity, and reliability of its findings. The inability to disaggregate data by gender significantly constrained the study's capacity to explore the specific experiences of African American males. Although the research was initially designed to examine outcomes for this subgroup, the publicly available dataset from the Alabama State Department of Education reported the number of graduates only in aggregate by race, not by both race and gender. As a result, the conclusions drawn from this study apply broadly to African American students and should not be interpreted as representing gender-specific trends. This limitation revealed the broader issue of data transparency and granularity in publicly reported education statistics, which is particularly problematic when investigating equity among intersectional subgroups.

Third, the small sample size (n = 12), included 12 aggregated data points, representing disaggregated graduation data for African American students across six years (2018-2024) and graduation years of (2019-2024) from both urban (n = 6) and rural (n = 6) school districts in the Southeastern United States. This presents a significant constraint on the statistical power and generalizability of the results. A limited number of cases reduces the robustness of inferential analyses, increases the likelihood of Type II

errors, and limits the ability to detect small, but meaningful relationships among variables. The findings should therefore be interpreted with caution and not generalized beyond the specific regional and demographic context in which they were studied.

Additionally, the study's reliance on secondary, aggregate-level data introduces limitations to trustworthiness and reliability. Publicly reported datasets often vary in quality and completeness, depending on local reporting practices. Differences in how districts classify key variables such as "economically disadvantaged" status can introduce inconsistencies and reduce the internal validity of the study. For example, criteria for determining economic disadvantage may differ by district or change from year to year, which can obscure meaningful comparisons across time or geography. Furthermore, the absence of graduation figures for 2022 in one rural district raises concerns about data completeness and undermines the reliability of longitudinal trends.

The dataset used in this study met the essential assumptions for multiple regression analysis as outlined by *Laerd Statistics* (2015). Assumptions #1, #2, #4, #5, and #7 were all met. Assumption #3 (independence of residuals) was not formally tested due to sample constraints but is supported conceptually. Assumption #6 showed no evidence of multicollinearity, as these values indicate that these two variables are highly correlated and may share overlapping variance, which can reduce the reliability of the regression coefficients. Assumption #8 (normality of residuals) was evaluated visually and found to be reasonably satisfied.

In summary, while the study provides valuable insights into the relationship between school location, SES, and the number of African American graduates; its

findings are limited by several methodological and practical constraints. These limitations suggest the need for future research to utilize more comprehensive, disaggregated, and consistently reported data; thereby strengthening the validity and applicability of findings in educational equity research. The analysis was constrained using aggregated school data rather than disaggregated student-specific records. Together, these limitations underscore the need for cautious interpretation of the findings within the context of the study's design.

Recommendations

Based on the strengths and limitations of the current study, as well as the supporting literature reviewed in Chapter 2, several recommendations are proposed for future research to advance further understanding of the factors influencing high school graduation outcomes among African American students in the Southeastern United States. The school districts, particularly in rural areas, should prioritize the systematic collection and transparent reporting of disaggregated demographic data, including variables such as race, gender, SES, and disability status. The absence of gender-disaggregated data in the present study limited the ability to examine graduation outcomes specifically among African American males, a population that is consistently identified in the literature as being at higher risk for academic disengagement and dropout (Garcia & Thompson, 2022; Roberts, 2018). Enhanced data collection and reporting practices would allow future researchers to conduct more targeted, intersectional analyses and inform equity-focused interventions at the district and state levels. In addition, to reduce multicollinearity in future studies, researchers should

consider combining overlapping variables or selecting alternative variables that measure similar concepts without strong correlation to improve model accuracy and interpretation.

Rural school districts should consider implementing and evaluating comprehensive student support services that address both academic and social-emotional needs. The findings of this research study, along with prior research, highlight systemic disparities in rural education, including limited access to advanced coursework, under-resourced schools, and lower the number of graduates (Claitt, 2023; Jordan et al., 2012). Investments in mentorship programs, academic counseling, college and career readiness initiatives, and access to educational technology are crucial for improving outcomes for students in underserved communities. Additionally, the integration of socioemotional learning (SEL) frameworks may be particularly beneficial. SEL programs have been shown to improve student engagement, resilience, and self-regulation, which are critical factors in promoting long-term academic success, particularly for students navigating systemic barriers. The implications of this research extend well beyond the educational setting. Failure to complete high school places African Americans at significantly increased risk for numerous adverse outcomes, including persistent unemployment, lower lifetime income, heightened involvement in the criminal justice system, and reduced access to essential resources such as healthcare, housing, and social mobility. These challenges not only impact individual lives but also perpetuate cycles of intergenerational poverty and deepen systemic inequities. At the policy level, state education agencies and local school boards should consider revising funding formulas and resource allocation strategies to specifically address rural and urban disparities. Targeted investments could

include teacher recruitment and retention incentives for rural and high-needs schools, infrastructure improvements, broadband access, and partnerships with local organizations to strengthen wraparound services that support student persistence and graduation. These policy efforts should be informed by disaggregated data and tailored to the unique challenges faced by rural communities.

Lastly, future research should explore the longitudinal impacts of the COVID-19 pandemic on graduation trends, particularly among historically marginalized groups. This study captured a snapshot of postpandemic disparities, but further investigation is needed to understand the long-term academic and socioemotional effects of pandemic-related disruptions. Future studies should consider using larger, more representative samples and mixed-method approaches that combine quantitative analysis with qualitative insights from students, educators, and families. Such approaches could illuminate the lived experiences behind the data and inform more holistic interventions that address both structural and psychological dimensions of educational equity. These recommendations remain within the scope of the current study and are grounded in the observed patterns and gaps in both the data and the existing literature. Future research that builds upon these suggestions has the potential to deepen understanding of the factors influencing graduation outcomes and contribute to more effective, data-informed strategies for supporting African American students in diverse educational contexts.

Implications

This study examined the extent to which graduation year, economic disadvantage, school location (urban or rural), and total male student enrollment predicted the number

of African American high school graduates in southeastern public schools. The findings are particularly significant in light of persistent disparities in educational outcomes for African Americans, who remain one of the most underrepresented and academically vulnerable student populations in the United States. By isolating and analyzing key institutional and contextual predictors using quantitative methods, this research provides data-driven insight into how systemic factors influence high school graduation trends over time. Notably, the inclusion of graduation year as a variable allowed me to account for the impact of the COVID-19 pandemic across multiple cohorts, while school-level factors, such as urbanicity and total male enrollment, helped contextualize disparities between districts. The identification of these predictors contributes to a growing body of empirical work aimed at reducing graduation gaps. It provides valuable guidance for school leaders, mental health professionals, and policymakers seeking to implement equitable, evidence-based practices. Grounded in Bandura's Social Learning Theory, the study reinforces the idea that academic behavior and outcomes are shaped by a combination of environmental modeling, institutional structure, and individual self-belief; all of which are directly influenced by the variables analyzed.

At the individual level, the findings provide insights that can inform the early identification of students at risk of not graduating. Recognizing the relationship between economic disadvantage and the lower number of graduates among African American students supports the implementation of targeted interventions that enhance academic engagement and retention. These interventions may include mentoring programs,

culturally responsive counseling, and educational support structures tailored to the lived realities of economically disadvantaged African American students.

At the family level, the significant influence of economic disadvantage posits the importance of connecting families to socioeconomic supports that stabilize the home environment and foster school attendance and performance. School-based outreach and family resource programs can help mitigate challenges related to employment, housing, and access to educational resources. Enhancing communication between schools and families, particularly in economically disadvantaged areas, can foster collaborative partnerships that promote long-term academic success.

On the organizational level, the disparity in graduation outcomes between urban and rural school locations revealed in this study calls for differentiated resource planning and intervention models. Rural schools, in particular, may require increased staffing, expanded access to advanced coursework, improved technological infrastructure, and stronger community partnerships to offset the structural disadvantages commonly experienced in these settings. The role of overall school size, as reflected in the number of enrolled male students; may also influence school culture, classroom management capacity, and access to individualized attention, all factors that can be addressed through professional development and strategic staffing models.

At the societal and policy level, this study provides empirical evidence that supports educational policy reform focused on equity and context-sensitive resource allocation. The graduation year, as a predictor, reflects broader systemic shifts, such as the effects of the COVID-19 pandemic, which may have disproportionately affected

students in low-resource districts. Policymakers can use these findings to prioritize rural education investment, increase support for economically disadvantaged schools, and implement accountability frameworks that consider the specific needs of African American male students. These policy adjustments may help address long-standing disparities in the number of graduates and increase overall educational attainment in historically underserved communities.

Theoretically, the study contributes to the application of Bandura's Social Learning Theory by reinforcing the importance of environmental and structural influences on educational behavior and outcomes. The predictor variables of school location and economic status reflect external conditions that shape students' modeling experiences, self-efficacy, and academic engagement. These findings expand the empirical understanding of how social context impacts graduation outcomes within this theoretical framework. They also highlight the reciprocal relationship between students' sense of control and environmental constraints, showing how limited access to resources or role models may reduce confidence in academic success.

From a methodological standpoint, the study demonstrates the value of predictive modeling using archival data in educational research. Multiple regression and comparative analyses provided evidence of associations between contextual school-level variables and the number of African American graduates. This approach highlights the usefulness of secondary data in identifying systemic patterns and informing targeted, scalable interventions. Practice recommendations include integrating predictive data into school improvement planning, particularly in districts serving a high number of African

American male students. School leaders should consider investing in evidence-based programming that addresses the academic and social-emotional needs of students from economically disadvantaged backgrounds. Additionally, rural districts should be prioritized for infrastructure development and instructional support that aligns with their unique challenges.

Collectively, these actions can help close the graduation gap and advance educational equity for African Americans across the Southeastern United States. This study offers a focused contribution to the field of educational equity by identifying and quantifying school-level predictors of graduation outcomes. The findings support a range of practical and policy-level actions that if implemented strategically, may drive sustainable positive social change in communities historically impacted by educational disparities. By emphasizing the structural conditions that shape academic success such as economic disadvantages, geographic context, and enrollment demographics, the study provides a roadmap for school districts and policymakers to develop more targeted, context-specific interventions. Moreover, these results highlight the importance of continuous data monitoring and disaggregated reporting to ensure that progress was both measurable and equitable over time.

Conclusion

This dissertation investigated the school-level predictors that influence graduation outcomes for African American male students in southeastern public high schools, focusing on the variables of graduation year, school location (urban or rural), economic disadvantage, and total male student enrollment. Additionally, absenteeism was widely

recognized in the literature as a significant contributor to academic underachievement. While absenteeism was not included in this study's predictive model, it was discussed as a relevant contextual factor that frames the educational experiences of African Americans. This research aimed to identify patterns within these disparities through a quantitative, data-driven approach that could inform more equitable practices and policies.

A review of existing literature revealed that educational inequities are often increased by socioeconomic hardship, inconsistent access to academic resources, and location-based differences in school infrastructure. These factors, coupled with the widespread disruptions of the COVID-19 pandemic; have had a profound impact on the academic trajectories of African Americans. The theoretical foundation of social learning theory provides a lens for understanding how students' academic behaviors and beliefs are shaped by their environments, modeled experiences, and the structural conditions of their schools.

Using publicly available archival data, this study employed multiple regression and comparative analyses to evaluate the extent to which the selected predictors influenced the number of African American male high school graduates over a five-year period. The findings revealed that school location and graduation year were statistically significant predictors; with urban schools yielding higher graduation numbers and postpandemic cohorts reflecting notable shifts in outcomes. Although economic disadvantage and total male enrollment were not statistically significant in isolation, they

contributed meaningful context to the broader understanding of institutional and community-level disparities.

These findings confirm that academic success for African American students is deeply intertwined with structural and environmental factors beyond individual control. In particular, the geographic location of a school emerged as a key determinant of educational opportunity and access. The data also reveals acute external events, such as the COVID-19 pandemic, that compound existing inequities, particularly in under-resourced schools. The ability to quantify these influences supports efforts to design targeted interventions that are responsive to the realities faced by marginalized students and their communities.

By highlighting predictive factors at the school level, this study offers a valuable contribution to the ongoing dialogue on educational equity. It provides empirical support for implementing differentiated supports in rural and economically disadvantaged districts. It encourages educators and policymakers to invest in strategies that directly address disparities in access, engagement, and achievement. These may include expanded academic support services, culturally responsive programming, mental health resources, and community-school partnerships that strengthen both student and family involvement in education. Advancing educational success for African Americans requires not only targeted school and policy-level reforms but also a sustained commitment to dismantling the conditions that perpetuate academic disparities.

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