IMPACT OF PARENTAL INVOLVEMENT ON THE ACADEMIC PERFORMANCE OF AFRICAN AMERICAN ELEMENTARY SCHOOL STUDENTS: A MULTIPLE REGRESSION ANALYSIS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

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ABSTRACT

This quantitative, predictive correlational study investigated the influence of parental involvement on the academic performance of African American students in elementary school. This study is important in determining why African American academic scores and performance are low when compared to their White counterparts. The findings of this study will also be helpful to educational stakeholders, teachers, and the enrichment of existing literature; this is because the study provides more insight into how parental involvement in student learning can influence students' academic achievement. Participants for this study were sampled from elementary school parents/students via convenience sampling. The grade levels utilized include grades one through five, and the student gender included participating boys and girls from grades one through five. A sample of 108 students and their respective parents were selected from an African elementary school located in Lagos, Nigeria which offered both mathematics and language arts subjects. The researcher measured parental involvement using the Home-based Involvement Scale/Questionnaire. Data was analyzed using SPSS, and multiple regression was used to examine the differences in student achievement with and without parental involvement. The study found that high parental involvement increased students' performance. It is recommended that all stakeholders focus more on getting parents involved in students' learning activities, both at school and at home.

Keywords: parental involvement, school-based parental involvement, home-based parental involvement, academic achievement, grade level, student gender.

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Dedication

This dissertation is dedicated to my parents Isaac and Juliana Falayi for the role they played in my upbringing and my academic career. I thank them for helping me understand the importance of working and serving the Lord.

Acknowledgments

My heartfelt gratitude goes to everyone who contributed in one way or the other to the successful completion of this dissertation. I specifically thank my committee Chair and Member, Dr. Jeffrey S. Savage, and Dr. Heather Lynn Keahey for their support and the many feedback. I also profoundly thank my family for their support and understanding during the times I was away, writing and conducting research. God bless you all.

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List of Abbreviations

Adverse Childhood Experience (ACE)

Grade point average (GPA)

Statistical Package for the Social Sciences (SPSS)

CHAPTER ONE: INTRODUCTION

Overview

This quantitative, predictive correlational study aims to investigate the influence parental involvement on the academic performance of African American students in elementary school. Chapter one of this study provides a background for the research on the impact of Home-Based and School-Based parental involvement on the academic performances of African American elementary school students. The background includes an overview of the theoretical structure for this study, and the problem statement looks at the scope of the recent literature on this topic. This chapter also discusses the purpose of this study and explains the significance of the study as well. Finally, the research questions are stated, and definitions pertinent to the study are provided.

Background

The academic achievement gap in the United States is evident across ethnic and minority groups (Celeste et al., 2019). While the achievement gap has existed in the United States well before it could be measured by research, researchers have reported that African American students have continued to perform dismally in education (Celeste et al., 2019; Henry et al., 2020). The persistence of the achievement gap among African Americans is attributed to factors such as poverty and poor-quality education availed to African Americans (Coley et al., 2019). To describe the factors associated with the achievement gap, Coley et al. (2019) conducted a quantitative study with a longitudinal sample of 4,000 kindergarten children to investigate the impacts of economic and social inequality and found that poverty and poor socioeconomic status among African Americans contributed significantly to the academic achievement gap. Similar findings were reported by Henry et al. (2020), who also demonstrated the relationship between African Americans' achievement gap and poverty after analyzing data from a longitudinal

sample of 9,100 students in eighth grade in the United States. Other than poverty and poor socioeconomic status, poor student motivation, lack of experienced teachers in schools attended by African Americans, and implicit bias were also significant contributors to the achievement gap (Anderson, 2018; Legette, 2018; Patton Davis & Museus, 2019).

In this study, the researcher investigates the impact of parental involvement on student academic performance. Previous researchers found a positive relationship between parental involvement and academic performance. For instance, Lara and Saracostti (2019) analyzed data from a sample of 498 parents with children in second and third grade in sixteen elementary schools and found that high parental involvement increased students' performance, especially in reading and writing. Lara and Saracostti (2019) found that low parental involvement in their children's educational activities negatively affected the students' academic outcomes. Lambert et al. (2022) reiterated the findings of Lara and Saracostti (2019) after investigating parental involvement's role in improving high school students' academic performance. Analyzing data from a sample of 13,200 student-parent dyads obtained from a High School Longitudinal Study, Lambert et al. (2022) established that parental involvement reflected positively on students' academic outcomes. Therefore, in this study, the researcher provides a background of the problem that will be investigated, the problem statement, purpose statement, theoretical framework, research question, and significance of the study.

Historical Overview

Parental involvement in education emerged in the 1900s as a vital issue in public schooling and critical to the various aspects of American education, such as school management, governance, school finance, curriculum, and teacher education (Hiatt, 1994). According to Hiatt (1994), Goals 2000 (1994) incorporated parent involvement as one of eight national goals. They

embraced research funding for Family, School, Community Partnerships at John Hopkins University and at the Office for Educational Research. Other research has shown that parental involvement influences children's academic success (Boonk et al., 2018; Lara & Saracostti, 2019; Rogers et al., 2018). Rogers et al. (2018) conducted quantitative research with a sample of 825 youths to investigate the role of parental involvement on the academic outcome of youths. The findings revealed that parents who directly helped their children with school homework enhanced their performance and attendance. Similar findings were reported by Boonk et al. (2018), a systematic review of 75 studies found that parental involvement improved students' performance in different subjects tested. These findings were reiterated by Chun and Devall (2019), who analyzed a quantitative sample of 116 secondary students along the US/Mexico border on the role of parent involvement in their academic life. Like Boonk et al. (2018) and Rogers et al. (2018), Chun and Devall (2019) found that parental involvement improved the students' academic outcomes and socialization. Therefore, it is evident that parental involvement positively impacts students' academic performance.

Parents have certain academic expectations of their children and are often actively involved in helping them achieve these expectations. As an illustration, Cross et al. (2019) investigated parental expectations, parental involvement, and student's academic outcome. They found that achievable expectations improved the student's academic performance as they acted as a short-term goal or a motivator for the students. Liu et al. (2020) confirm that parents positively influence their children's academic outcomes by setting achievable expectations for their children. Furthermore, Schmid and Garrels (2021) analyzed data obtained from 25 semi-structured interviews on the role of parental involvement on students' academic performance.

They found that being involved, parental involvement enhanced the student's psychological well-being and improved their academic outcome.

Additional evidence of the significance of parental involvement in students' academic success was provided by Blake-Berryhill (2018), who collected and analyzed quantitative data from 528 single mothers. The findings revealed that home-based parental engagement improved academic outcomes for children in kindergarten. Antony-Newman (2019) concurred with Blake-Berryhill (2018), stating that parental involvement was positively associated with improved academic performance. Conducting a meta-analysis of 40 quantitative and qualitative studies, Antony-Newman (2019) found that parental involvement helped immigrant students earn good scores in reading and speaking English as a second language. Consistent with these findings, Kim (2022) examined 23 published studies to investigate the relationship between parental involvement and student performance. Agreeing with Antony-Newman (2019) and Blake-Berryhill (2018), Kim (2022) reported that parental involvement helped students achieve their expectations and achieve reading fluency associated with improved academic outcomes.

Home-based parental involvement has been found to improve students' academic performance. For instance, Tarraga Garcia et al. (2018) investigated the relationship between the academic achievement of primary school students and home-based family involvement using a quantitative sample of 96 children from all six levels of primary education. The findings revealed that family involvement had an insignificant impact on students' academic outcomes and also found that students whose parents were working and had a stable financial income performed better than those without employed parents. Contrary to the findings reported by Tarraga Garcia, Avnet et al. (2019) investigated the impacts of parental involvement on the educational attainment of students in elementary schools using a quantitative sample of 450 students, 66 of

whom were diagnosed with an autistic spectrum disorder. The findings revealed that home-based parental involvement positively influenced and improved student outcomes.

Besides home-based involvement, researchers have also investigated the impacts of school-based involvement on students' academic performance. Although similar, school-based involvement describes the interaction and communication between parents and teachers and the participation of parents in different school activities (Li et al., 2019). Parents participate in school-based activities, including volunteering for duties and attending conferences organized by teachers and other educational stakeholders (Li et al., 2019). Scholars of school-based parental involvement have established that, like home-based learning, it is critical to students' academic success. Previous researchers, including Park and Holloway (2018) and Duppong-Hurley et al. (2016), established that school-based parental involvement allowed parents to network, be trained to help their children with assignments, and improved student attendance.

Society-at-Large

Huguley et al. (2020) investigated the involvement of parents in African Americans' educational involvement for adolescents attending urban schools using a sample of 28 parents and 26 middle school children. The findings revealed that African American parents' involvement in their children's education improved their math and reading proficiency. Posey-Maddox and Haley-Lock (2020) conducted semi-structured interviews with five teachers and 17 mothers of children attending elementary school in the United States to investigate the significance of parental engagement. Posey-Maddox and Haley-Lock (2020) found that home-based parental engagement improved the student's psychological development and time management. Coupled with home tutoring, the scholars found that home-based parental involvement enhances students' performance. Keizer et al. (2022) concurred with Posey-Maddox

and Haley-Lock (2020) that home-based parental involvement improved the educational outcome of children. Analyzing data collected from 56 families, Keizer et al. (2022) found that the personalized support offered by parents enhanced their students' academic outcomes. The researchers agreed that regardless of families' socioeconomic status, home-based parental involvement provided students with the needed support, such as psychological support and home tutoring, that enhanced their academic achievement.

Parent involvement has been found to improve the academic performance of African American students. The study by Jarrett and Coba-Rodriguez (2019) supported this statement, which investigated the significance of home-based parental involvement among low-income African American mothers. Analyzing data from 20 semi-structured interviews with low-income African American mothers, Jarrett and Coba-Rodriguez (2019) found that home-based parental involvement adequately prepared students to transition to elementary schools. James et al. (2019) conducted a longitudinal study with 944 students from public and private schools to investigate the relationship between home-based and school-based parent involvement and student GPA scores. The study's findings revealed that school-based and home-based parent involvement improved student academic performance, as reflected in higher GPA scores.

Although the preceding discussion mentions the benefits of parental involvement in students' academic performance, some researchers have reported contradictory findings. For instance, Ntekane (2018) found that children could mistake parental involvement as their parents being controlling, and rather than embracing the involvement, they would tend to distance themselves. Cheung (2019) noted that parents' expectations of their children might be overwhelming and expose children to trauma or anxiety. Levinthal de Oliveira Lima and Kuusisto (2020) concurred with Cheung (2019), noting that some lack of knowledge and skills

on parental involvement and some expectations set on children might be unrealistic and unachievable birthing disappointment and causes of stress.

Theoretical Background

The theory of overlapping spheres of influence proposed by Epstein (1987), which describes the interaction and communication between families, communities, and schools, applies to this study. Epstein's theory of overlapping spheres of influence combines educational, psychological, and sociological perspectives of social institutions and describes how schools, the local environment, and parents interact. The overlapping aspect of this theory is centered on the relationship between the three spheres, whose focus is the child's academic success (Epstein, 1992). Epstein (1987) described the theory as the degree of overlap was influenced by time, family practices, communities, schools, philosophies, and experiences.

Epstein (1992) makes an important contribution to educational research, noting that while the three spheres overlap, some activities are effective when conducted separately. However, caution should be taken to ensure that the spheres are in sync for the educational benefit of children. Epstein's theory is critical in describing the benefits of active stakeholder engagement and involvement in different school activities. Epstein asserted that schools should be open to participation, and teachers should be willing to share the responsibilities of training students with the community and family members. Constantino (2003) studied Epstein's work, especially participating and sharing student learning activities with communities and families seeking to create a family-friendly learning environment.

The researcher will use this theory to describe the impacts of school-based and home-based parent involvement on the academic achievement of African American students in elementary school. This theory provides an understanding of how schools can foster school-

based parent involvement while at the same time encouraging parents to take an active role in monitoring and engaging with their children academically during holidays and academic breaks. Research examining the significance of parental involvement in education revealed that students whose parents actively participated in school activities and monitored their homework performed well academically (Lara & Saracostti, 2019). Rogers et al. (2018) established that by being involved, schools curbed chronic absenteeism and improved socialization among students as the collaboration between parents and teachers resulted in the development of a diverse curriculum that facilitated the diverse development of students. Given the achievement gap experienced by African American students at different levels of learning, describing, and understanding the impacts of parent involvement in education would provide a long-term solution for African American achievement gap.

The success of Epstein's theory of overlapping spheres of life is based on how Epstein describes the different types of family involvement in a child's education. According to Epstein and Sanders (2000), parenting is the first type of child involvement, which describes the parents' role in providing their children with basic needs, including nutrition, housing, and safety. This family involvement affords a conducive home environment for children to grow and learn. The second type of involvement is communication. Communication can be described as the interaction between the school and parents sharing information about the child's progress and performance. Communication here can be accomplished through meetings, email messaging, report cards, and phone calls. The third type of family involvement is volunteering which Epstein (1987) described as some parents' decision to willingly work in school and contribute to different academic programs without expecting anything in return. Other than working,

volunteering may also mean parents attending different school activities, including sporting activities, without being invited.

The fourth type of family involvement is learning at home. Epstein and Sanders (2000) described this involvement as parents engaging in activities promoting their children's education at home. Learning at home may encompass a range of activities, including helping with a school assignment, discussing school, and helping their children decide on which courses to enroll in. Epstein and Sanders (2000) describe the other family involvement as decision-making, where parents are engaged by the school when designing school policies and management decisions. Lastly, community collaboration describes the use of resources available in the community to support their child's education. Extending the overlapping spheres of influence theory, Epstein (2011) described the strategies, including interactive child-parent homework and volunteer programs to enhance home-based and school-based parent involvement.

Problem Statement

The problem that is addressed in this study is the lack of research examining the influence of home-based and school-based parental involvement on the academic performances of African American students in elementary school. While researchers have reported significant benefits of parental involvement on students' academic performances (Boonk et al., 2018; Lara & Saracostti, 2019), Mata et al. (2018) established a lack of parental involvement could negatively impact the academic success and motivation of students. Extending Mata et al. (2018) findings, Paul et al. (2021) found that students who lacked parental support at whichever level were likelier to drop out of school than those with parental support. Therefore, it is important to understand in-depth the influence of lack of parental involvement in African American elementary school students' lives as espoused by Puccioni et al. (2022). Parental involvement

positively influences students' academic achievement. For instance, Boonk et al. (2018) found that parental involvement enhanced students reading fluency. Similarly, Rogers et al. (2018) reported that parental involvement improved students' ability to socialize and interact with peers.

The focus of this research is to examine the influence of parent involvement on the academic achievement of African American students in elementary schools. Studies currently exist that examine how parental involvement influences the performance of elementary school students. For instance, Lara and Saracostti (2019) found that parental involvement in elementary school improved students' performance, but the students in this study were not African Americans. Similarly, Tarraga Garcia examined the relationship between academic achievement and parental involvement using students from primary school who were also not African Americans. Posey-Maddox and Haley-Lock (2020), in a qualitative study of mothers attending elementary schools, found that parental engagement improved their children's academic performance. This study will build on previous research focusing on African American students, for example, Jarrett and Coba-Rodriguez (2019), conducted a study focused on home-based parental involvement experiences of low-income, African American families with young children. Puccioni et al. (2022) also examined the associations among African American parents' beliefs about school readiness, home-based involvement, and measures of school readiness for children during the transition to kindergarten. The mentioned studies encouraged further research into the relationship between parental involvement and academic achievement of African American students in elementary school. The problem is the lack of extensive research focusing on the influences of parental involvement on the academic achievement of African American students in elementary schools.

Purpose Statement

The purpose of this quantitative, predictive correlational study is to investigate the influence of parental involvement on the academic performance of African American students in elementary school. Li et al. (2019) defined parental involvement as parents' active role or participation or the allocation of resources to improve their children's academic outcomes and support their academic progress. The predictor variables for this study include parental involvement, grade level, and student gender (see definitions below). Parental involvement will be measured using the Home-based Involvement Scale developed by Fantuzzo et al. (2000). The grade levels will include grades one through five, and the student gender will include participating boys and girls from grades one through five (Berkowitz, 2020). The criterion variable is academic achievement, which refers to the extent to which a student has achieved a stated educational goal (Pinquart & Ebeling, 2020). It is collected in terms of numerical course averages for elementary school African American students. The data on numerical course averages will be collected from the institution's records, notably, the latest academic performance scores in two principal subjects, math and language arts. It is measured by taking the sum of both subjects' numerical grades per student and dividing that sum by the total number of subjects taken (Conesa & Dunabeitia, 2021). Participants will be recruited from a group of elementary school parents and students via purposive sampling after signing a consent form indicating their willingness to participate in the study.

Significance of the Study

African American academic scores and performance are low compared to their White counterparts (Henry et al., 2020). The findings of this study will be important to educational stakeholders, teachers, and existing literature. Coley et al. (2019) established achievement gaps

among African American students, citing factors such as parental investments in learning resources, poverty, lack of academic resources, and poor quality of education as key factors contributing to the achievement gap. Therefore, to educational stakeholders comprising policymakers, communities surrounding schools, and parents, establishing the relationship between home-based and school-based parent involvement might help narrow this achievement gap and allow African Americans career growth and employment opportunities. To policymakers, the positive outcome of this finding will encourage the establishment of academic policies guiding how parent-teacher and community-school relationships can be developed and maintained (Antony-Newman, 2019). Additionally, schools can develop a framework to train teachers to enhance school-based parent involvement.

The findings of this study will be important to parents in two significant ways. First, researchers have established that students with parents who are generally involved in their education display good academic achievement (Naite, 2021). Therefore, findings will provide new information to parents about how they can engage with their children and help them succeed academically. Second, the findings of this study will seek to inform parents about the value of participating in school activities and being part of their children's academic journey (Allen & White-Smith, 2018). Other than parents, the findings of this study will also be an essential addition to the literature regarding parent involvement and student performance, specifically among African Americans. While research exists on the influence of parental involvement on students' academic performance, studies on African Americans are mediated by socioeconomic and other social factors (Henry et al., 2020). Therefore, this study will focus on parent involvement, both home-based and school-based, and the academic performance of African American students in elementary school.

Research Questions

The proposed study will seek to answer the following research questions

RQ1: How accurately can African American elementary school students' academic performance regarding math numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

RQ2: How accurately can African American elementary school students' academic performance regarding reading achievement numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

Definitions

1. *Parental Involvement:* The participation of parents in regular, two-way, meaningful communication involving student academic learning and other school activities (Antony-Newman, 2019).
2. *Parental Sensitivity:* The parent's ability to accurately interpret his/her child's behaviors and communication and determine the child's needs and wants (Avnet et al., 2019).
3. *Parental Control:* The manners and methods used by the parent to enforce rules with their child (Avnet et al., 2019)
4. *Learning at Home:* The provision of ideas and information to parents about how they can best assist their children with homework and curricular-related decisions and activities (Cheung, 2019).
5. *Collaborating with the Community:* The identification and integration of communities' services and resources to support and strengthen schools, students, and their families (Grijalva-Quinonez et al., 2020).

6. *School-based Parental Involvement:* The participation of parents in different school activities within the school setting (Grijalva-Quinonez et al., 2020).
7. *Home-based Parental Involvement:* The activities undertaken by parents that provide students with learning support and a conducive environment for learning while at home (Grijalva-Quinonez et al., 2020).
8. *Grade Level:* The level of the educational program studied by a student. (Berkowitz, 2020).
9. *Student Gender:* The sex of individual students and includes the students gender identity and gender expression. (Berkowitz, 2020).
10. *Academic Achievement:* The extent to which a student has achieved a stated educational goal. (Pinquart & Ebeling, 2020).

CHAPTER TWO: LITERATURE REVIEW

Overview

An organized review of the literature was carried out to examine the impacts of home-based and school-based parental involvement on the academic performances of African American students in elementary school. This chapter will review recent literature related to the subject of study. The first part of this review discusses a theory applicable to the impacts of home-based and school-based parental involvement. A blend of current research works of literature with respect to home-based and school-based parental involvement followed this. Finally, literature regarding the various forms of research that have been carried out and how far the research has impacted home-based and school-based parental involvement in the academic performances of African American students in elementary school. In the end, a gap in the literature was pointed out to support the need for the current study.

Theoretical Framework

The theoretical framework that guides this study is the theory of overlapping spheres of influence proposed by Epstein (1987) which describes the interaction and communication between families, communities, and schools. The theory combines educational, psychological, and sociological perspectives of social institutions and describes how schools, the local environment, and parents interact. The overlapping aspect of this theory is centered on the relationship between the three spheres, whose focus is the child's academic success (Epstein, 1992). Epstein (1987) described the theory as the degree of overlap was influenced by time, family practices, communities, schools, philosophies, and experiences.

The success of Epstein's theory of overlapping spheres of life is based on how Epstein describes the different types of family involvement in a child's education. According to Epstein

and Sanders (2000), parenting is the first type of child involvement, which describes the parents' role in providing their children with basic needs, including nutrition, housing, and safety. This family involvement infers a conducive home environment for children to grow and learn. The second type of involvement is communication. Communication can be described as the interaction between the school and parents sharing information about the child's progress and performance. Communication here can be accomplished through meetings, email messaging, report cards, and phone calls. The third type of family involvement is volunteering which Epstein (1987) described as some parents' decision to willingly work in school and contribute to different academic programs without expecting anything in return. Other than working, volunteering may also mean parents attending different school activities, including sporting activities, without being invited.

The fourth type of family involvement is learning at home. Epstein and Sanders (2000) described this involvement as parents engaging in activities promoting their children's education at home. Learning at home may encompass a range of activities, including helping with a school assignment, discussing school, and helping their children decide on which courses to enroll in. Epstein and Sanders (2000) describe the other family involvement as decision-making, where parents are engaged by the school when designing school policies and management decisions. Lastly, community collaboration describes the use of resources available in the community to support their child's education. Extending the overlapping spheres of influence theory, Epstein (2011) described the strategies, including interactive child-parent homework and volunteer programs to enhance home-based and school-based parent involvement.

This theory will be utilized to describe the impacts of school-based and home-based parent involvement on the academic achievement of African American students in elementary

school. The theory provides an understanding of how schools can foster school-based parent involvement while at the same time encouraging parents to take an active role in monitoring and engaging with their children academically during holidays and academic breaks. Research examining the significance of parental involvement in education revealed that students whose parents actively participated in school activities and monitored their homework performed well academically (Lara & Saracostti, 2019). Rogers et al. (2018) established that by being involved, schools curbed chronic absenteeism and improved socialization among students as the collaboration between parents and teachers resulted in the development of a diverse curriculum that facilitated the diverse development of students. Given the achievement gap experienced by African American students at different levels of learning, describing, and understanding the impacts of parent involvement in education would provide a long-term solution for African American achievement gap.

Related Literature

Parents' active involvement in different school activities improves students' academic achievement at various levels. Researchers have reported that involving parents in school activities enhanced the students' performance and boosted the morale of teachers (Anastasiou & Papagianni, 2020; Ntekane, 2018; Vinopal, 2018). Other scholars also established that parental involvement enhanced students' academic outcomes, reduced unnecessary absenteeism, and boosted students' academic confidence (Alinsunurin, 2020; Boonk et al., 2018; Henderson et al., 2020). Similarly, Ilik and Er (2019) and de Oliveira Lima and Kuusisto (2019) asserted that parental involvement supported active student engagement in the classroom and improved student academic behavior.

Although researchers have established the benefits of parental involvement, some scholars found that overcontrolling and over-involved parents interfered with students' freedom in terms of engaging with their peers and negatively influenced their academic outcomes (Barger et al., 2019; Bartolome et al., 2020; Jabar et al., 2021). de Oliveira Lima and Kuusisto (2019) and Ntekane (2018) found that the students reported elevated anxiety levels and academic pressures due to high academic expectations from their parents. Given parental involvement's benefits and drawbacks, some strategies to influence parents into participating in different school activities are worth reviewing (Boonk et al., 2021; Correia et al., 2021; Kirksey et al., 2022). The purpose of this chapter is to present a synthesis of the literature on the relationship between parental involvement and student performance, focusing on African American students. The issues discussed below are the major themes identified from existing literature.

Determinants of Parental Involvement in Education

Parental involvement is critical to the learning process. Some scholars have established a direct link between parental involvement with positive student academic outcomes (Correia et al., 2021; Kirksey et al., 2022; McCarthy-Foubert, 2022). Others have linked parental investment to increased teacher morale and student behavior (Gross et al., 2020; Oberfield, 2020). This section will discuss different factors that influence parental involvement in education.

Parenting Self-Efficacy

Parenting self-efficacy may influence parental involvement among parents. For instance, Shin (2018) conducted a quantitative study with 304 parents to investigate parental empowerment and the role of self-efficacy in parental involvement in the United States. In their findings, Shin (2018) established that parenting self-efficacy enables parents to exert more effort in the area of focus, persevere in the face of difficulty, and respond resiliently to diversity to

ensure the goals are achieved as aspired for their children's future. Individuals with self-efficacy are less prone to self-defeating thought patterns and experience less stress and depression than low self-efficacy (Shin, 2018). Similar findings to Shin (2018) were replicated in a qualitative study by Huang et al. (2018), who found that parenting self-efficacy positively influenced parental involvement in their children's activities to ensure their academic achievement is according to future goal aspirations. Valdes-Cuervo et al. (2020) also reported that parental self-efficacy significantly impacts their involvement in their children's education. The studies discussed indicate that parenting self-efficacy may positively influence parental involvement among parents.

Parenting self-efficacy is likely to influence parental involvement in the children's academic and career aspiration activities. To support the finding reported by Huang et al. (2018), Albanese et al. (2019) conducted a systematic review of 115 peer-reviewed articles to investigate the role of parenting self-efficacy in child and parental well-being in the United States. Extending Huang et al. (2018) and Shin's (2018) findings, Albanese et al. (2019) reported that self-belief and resiliency from parents have been understood to be critical factors influencing parental involvement among parents. Parenting self-efficacy enables parents to organize and execute courses of action required to produce given attainment for parents and their children (Albanese et al., 2019). Extending Albanese et al. (2019) findings, Buchanan and LeMoyne (2020) reported that parenting self-efficacy is domain-specific, with experience concerning a given domain affecting the parent's sense of confidence in engaging in their children's career and academic achievement (Buchanan & LeMoyne, 2020). Kong and Yasmin (2022) investigated the role of parental self-efficacy on parental involvement and found that parental self-efficacy significantly influences parents' engagement in their children's education.

Although Kong and Yasmin (2022) extended earlier findings, the investigators did not generalize the findings with a diverse sample size. In addition, the researchers used one geographical location and investigated the relationship between parental self-efficacy and parental involvement in their children's academic achievement. In this regard, Kong and Yasmin (2022) advocated for additional research using different geographical settings and diverse sample sizes with unique characteristics to generalize the findings. Thus far, the studies reviewed indicate differing results regarding the impact of parental self-efficacy on educational involvement. Shin (2018) and Huang et al. (2018) agreed that parenting self-efficacy positively influenced parental involvement in their children's activities to ensure their academic achievement is according to future goal aspirations. In contrast, Buchanan and LeMoyne (2020) reported that parenting self-efficacy is domain-specific, with experience concerning a given domain affecting the parent's confidence in engaging in their children's career and academic achievement (Buchanan & LeMoyne, 2020). Given the findings, it is evident that parental self-efficacy could significantly influence parents' involvement in their children's education.

Parental Aspirations

Parental aspirations for their children may influence their involvement in education. For instance, Kim (2020) systematically reviewed 15 peer-reviewed articles to investigate parental involvement and students' achievement in the United States. The findings indicated that parents with high aspirations for their children's future will likely be more willing to exert efforts to ensure that those aspirations are actualized. Parental involvement enhances the academic achievement of children; comparable findings to Kim (2020) were replicated in a quantitative study with 150 parents, teachers, and students conducted by Hill et al. (2018). The findings revealed that educational and occupational aspirations are linked to how parents shape their

children’s activities, time, and learning environment (Hill et al., 2018). Parents have goals and ambitions they want their children to achieve, influencing their parental involvement (Hill et al., 2018). In a study by Trinidad (2019), who investigated 7,635 students regarding the impact of parental aspirations on student outcomes, the researcher found that high parental aspirations could result in adverse student outcomes and parental involvement. Overall, studies reviewed indicate that parental aspirations may influence parental involvement among parents in their children’s education.

Parents' future goals may significantly impact involvement concerning their children’s future career development. As an illustration, Tazouti and Jarlegan (2019) conducted a quantitative study with 203 parents and their children to examine parental self-efficacy and engagement's impact on students’ academic achievement in the United States. In their findings, Tazouti and Jarlegan (2019) found that parental aspirations, the idealistic hopes or goals that parents may form for their children, enhanced parental involvement, such as ensuring their children access to quality education. Day and Dotterer (2018) corroborated Tazouti and Jarlegan's (2019) findings and revealed that parental involvement is mostly influenced by the aspirations of the parents, thereby promoting their children’s academic achievement. Parental aspirations ensure that children achieve their academic and life goals through follow-up on their progress by the parents (Day & Dotterer, 2018). Duan et al. (2018) investigated the effect of parental involvement and parental aspirations on student academic achievement. They found that parental aspirations promote parents’ involvement in their child’s academic progress in school. The articles reviewed indicate that parental aspirations may enhance parental involvement in their children's career and academic achievement.

The aspirations among parents could influence their involvement in their children's education. Pinquart and Ebeling (2020) conducted a systematic review to investigate the effect of parental expectations on parental involvement in education in the United States. The findings demonstrated that parental educational aspirations and expectations significantly influence parents' involvement in their children's education. Parents communicate effectively with their children regarding their educational expectations, which affect their involvement in their children's academic progression, such as checking their homework and providing requisite educational materials. The findings of Pinquart and Ebeling (2020) were supported by Lv et al. (2018) in a quantitative study with 829 elementary students to investigate the association between parents' aspirations and parental involvement in education. The results indicated that the mother's aspirations were associated with their children's academic achievement. High parental aspirations led to lower academic self-efficacy and achievement among children because of differences in the level of aspirations between parents and children (Lv et al., 2018). Similar findings to Lv et al. (2018) were reported by Marrun (2018), indicating that their educational aspirations for their children inspired parental involvement in their children's education.

Perceptions of the School Toward Parental Involvement

The school is likely to affect parents' degree of involvement. To support this assertion, Lindstrom Johnson et al. (2019) conducted a quantitative study with 1117 parents to investigate the role of school policies and practices in influencing parental involvement in the United States. Lindstrom Johnson et al. (2019) reported that if teachers care about the child's welfare, communicate respect for parents, and develop effective means of communicating with families, parents are more willing and able to become involved in their children's education. These

findings were supported by Snell et al. (2020), who established that positive family-school engagement might enhance parental involvement, whereby parents are more willing to get involved in their children's academic matters. Another study by Wei et al. (2019) reported that school perceptions and attitudes toward parental involvement had a significant effect on the involvement of parents in their children's education. Similar findings to Wei et al. (2019), Chou et al. (2018) also reported that schools influence parental involvement by inviting parents to participate in various school programs for their children's academic progress. In summary, studies indicated that the school's perceptions of parental engagement may impact parental involvement among parents.

In contrast, Lareau (2019) conducted a quantitative study to examine parent engagement in schooling and its impact on parental involvement in their children's education. The findings revealed that although the perceptions of teachers and school principals towards parental involvement may be positive, it does not influence positive school achievement but negatively impacts academic achievement. Contradictory findings to Lareau (2019) above were echoed by Oswald et al. (2018), who investigated the influence of parental engagement on student academic achievement and the role of school perceptions. Oswald et al. (2018) highlighted that parental satisfaction with services offered to their children instigated negative school perceptions, resulting in lower parental involvement in their children's education. Jeynes (2018) also reported that school principals who understand the importance of involving parents in their children's education are likely to influence parental involvement in education positively. Although the findings discussed are inconsistent regarding the relationship between school perception and parental involvement, perception of the school may significantly impact parental engagement in education.

Barriers to Parental Involvement in Education

Although parental involvement plays an important role in education, several barriers affect the process (Oberfield, 2020). The barriers make it challenging for parents to actively participate in the learning process (Houri et al., 2019). The discussed below are some of the barriers to parental involvement in education.

Untimely Communication with Parents by Schools

A lack of timely information sent to parents about their children's education can create conflicte-related barriers. As an illustration, Wilt and Morningstar (2018) conducted a quantitative study to examine the barriers to parental engagement in transitioning from school to adult life among students in the United States. The findings revealed that lapse in communication between parents and teachers resulted in parents missing out on school meetings for special needs children. Houri et al. (2019) conducted a quantitative study with 51 students to investigate parental trust in school programs through the school-parent communication system in the United States. Houri et al. (2019) established that parents' work schedules and other commitments might hinder their availability for school parent meetings. However, strengthening parental trust through timely communication may enhance parental involvement in education programs (Houri et al. (2019). Lechuga-Pena and Brisson (2018) also reported that a lapse in communication between parents and teachers by creating time conflicts affected parental involvement negatively. In sum, studies reviewed indicate that a lack of timely information sent to parents may impede parental involvement in education.

When parents do not receive timely information regarding involvement in meetings that discusses education programs, it may hinder their ability to participate in their children's learning activities effectively. For instance, Kerbaiv and Bernhardt (2018) systematically reviewed the

literature to investigate parental involvement interventions in schools in the United States. The findings revealed that teacher-parent communication might significantly affect parent involvement in special education school programs. Parents need timely information to schedule their plans to fit into school programs to avoid last-minute calls for school meetings. Such actions may hinder parental involvement in their children's school special education programs (Kerbaiv & Bernhardt, 2018). Extending Kerbaiv and Bernhardt's (2018) findings, Francis et al. (2019) conducted a qualitative study with 26 parents of children with special needs to investigate the barriers to parental involvement in schools in the United States. The findings demonstrated that poor communication strategies in special education schools negatively affected parent-school relationships. The lack of timely information to parents may cause time conflicts, resulting in parents not attending school programs, thereby impeding parental involvement in schools. Tan et al. (2020) contradicted Francis et al. (2019) findings by reporting that parent-school lack of communication could lead to negative parental involvement in education. Overall, parents' lack of timely information may influence parental involvement in education.

Further research indicates that a lack of timely information sent to parents regarding school meetings may hinder their availability for school education programs. For instance, Rossetti et al. (2020) conducted a qualitative study to examine parents' availability to participate in school programs. The findings indicated that parental involvement in education was hampered by parents' limited access to information and a lack of accountability from teachers (Rossetti et al., 2020). Although Rossetti et al. (2020) extended earlier results, the researchers did not use diverse populations or geographical locations to generalize the findings. In this regard, Rossetti et al. (2020) advocated for additional research using different settings and diverse sample sizes with unique characteristics such as gender to generalize the findings (Rossetti et al., 2020).

Contradictory findings to Rossetti et al. (2020) were reported by Gabrielli and Impicciatore (2022) and Puccioni (2018), who both indicated that despite the lapse in communication between parents and school, they found that parents are mandated to get involved in their children's education. Thus far, studies have demonstrated that delayed information to parents may hinder their involvement in school programs.

Lack of Childcare Support to Parents

Limited support for childcare among parents may prevent those interested in attending the education programs. Jeynes (2018) supported this assertion by conducting a quantitative study investigating the challenges to parental engagement and involvement in special education school programs in the United States. The findings indicated that most parents who intended to attend meetings lacked childcare support to attend the special education school programs (Jeynes, 2018). Jeynes suggested that schools implement childcare support centers for parents to attend with much ease. Comparable findings to Jeynes were reported by Feely et al. (2020), who reported that family responsibilities such as childcare roles limited the parents' time to attend school programs for their children (Feely et al., 2020). Schneider (2018) also reported that parents had more home responsibilities, such as house chores and childcare, hindering them from attending school programs for their children. Given the findings, it is evident that lack of childcare support may negatively influence parental involvement in attending special education school programs for their children.

Inadequate support for childcare may hinder parental involvement. Similar findings to Feely et al. (2020) and Jeynes (2018) were echoed by Steed and Leech (2021), who reported that parents failed to attend school programs because of home roles hindering them from finding time for meetings in school. In corroborative findings to Steed and Leech (2021), Ressler (2020)

conducted a quantitative study to explore the barriers and opportunities for parental engagement in school programs in the United States. In their results, Ressler (2020) established that most parents willing to attend special education school programs had more family roles that impeded their attendance in the school programs, negatively affecting parental involvement among parents (Ressler, 2020). Mitchall and Jaeger (2018) added to Ressler's (2020) results by indicating that low-income parents had limited support for childcare to attend school programs for their children. In general, the findings thus far indicate that parents have limited time to attend school programs because of family engagements, hindering parental involvement in special education school programs.

Parents lack childcare support, thereby hindering parental involvement in school programs. Comparable findings to Ressler (2020) were reported by Turney (2019) in a quantitative study with 500 parents, reporting that parents only attend special education school programs when they have childcare support. However, a lack of childcare support may hinder them from finding time to attend special education school programs. In similar findings to Turney (2019), Barnett et al. (2021) also conducted a quantitative study with 223 therapists to investigate the barriers to parent-child engagement in special education school programs in the United States. Barnett et al. (2021) also reported that most parents were not involved in their children’s education programs because of a lack of childcare support caused by social distancing restrictions amid the COVID-19 pandemic, thereby hindering their involvement in education, thereby negatively affecting parental involvement (Barnett et al., 2021). In contrast, Willemse et al. (2018) reported that lack of time to attend school programs hampered parental involvement. Generally, the studies discussed thus far indicate that parents lack time to attend school programs

because of family schedules, thereby impeding parental engagement in special education school programs.

Professionals' Counter Narrative

Negative views by professionals may impede parental involvement in school programs among parents. As an illustration from empirical literature, Jay et al. (2018) conducted a qualitative study with 16 parents to investigate the role of parental involvement in supporting children with learning disabilities in the United States. The findings demonstrated that some professionals think parents are uninformed and, therefore, cannot make informed decisions regarding their children. Most professionals assumed that parents had a low level of knowledge and skills in education, thereby hindering parental involvement in school programs (Jay et al., 2018). Further, Romanuck Murphy (2018) also replicated Jay et al. (2018) findings in a systematic review of 11 peer-reviewed articles to examine inclusive education and parental engagement in special education schools in the United States. In their findings, Romanuck Murphy (2018) opined that negative regard for parents among special education professionals might harm parental involvement in education among parents. The findings reported by Papadakis et al. (2019) revealed that negative perceptions from teachers and school principals led to limited parental involvement in education. The studies reviewed demonstrate that professionals' negative views may obstruct parental contribution to special education school programs among parents.

Some professionals develop negative views about parents' engagement in education programs. To support this statement, Cooc (2019) conducted a quantitative study with 121,173 teachers to examine parental engagement and the teaching of students and revealed that special education professionals' negative views hindered parents' participation in education programs for

their children. According to Cooc, parents were thought to be uninformed regarding parental education, and they lacked the requisite knowledge and skills concerning education. Corroborative results to Cooc were reported by Pfeiffer et al. (2019), who established that negative perceptions and resistance from professionals negatively influenced parental engagement in special education school programs (Pfeiffer et al., 2019). In contrast, Lara and Saracostti (2019) revealed that the lack of parental invitations by teaching professionals resulted in low parental involvement in education. In conclusion, the findings above demonstrate that special education professionals perceive parents as uniform and cannot make decisions, thereby impeding parental involvement in special education school programs.

Strategies for Increasing Parental Involvement

Parental Education and Parental Involvement

Educating parents about their role in their children's educational success will likely increase their participation. For instance, Ishimu et al. (2018) investigated family engagement and equitable collaboration to increase parental academic involvement. The findings revealed that educating parents through capacity building and relationship building informed them of their positive role in improving students' academic engagement and increasing their willingness to participate in different school activities. Similar findings were reported by Wong et al. (2018), who found that many parents that did not engage with their children academically lacked the knowledge of what to do. However, training and educating these parents on strategies to engage with their children academically increased their participation in school activities and programs. Hornby and Blackwell (2018) consistently established that parental education increased parental involvement and active participation in designated school activities. Hill et al. (2018) also found

that while black parents were less likely to participate in school programs, informing them of the benefits of such involvement encouraged their cooperation and engagement.

Parental workshops and seminars have been reported as the means used by schools to educate parents about the benefits of parental involvement and get as many parents to participate in different school activities. Ishimaru (2019), for instance, reported that capacity and relationship-building activities enhanced the relationship between parents, teachers, and students, positively impacting and increasing parental academic involvement. Erdener and Knoeppel (2018), while studying parents' perceptions regarding school involvement, reported that training workshops and capacity-building activities increased parental involvement. Like Erdener and Knoeppel (2018), Stefansen et al. (2018) reported that through workshop training, parents were informed of the benefits of engaging in sporting activities with their children as an academic involvement strategy.

Although different from the research conducted by Stefansen et al. (2018), Hamlin and Flessa (2018) found that workshops increased parental involvement as they provided parents with strategies to interact and actively engage with their children academically. Overall, parental education informs them of the benefits of being involved and the strategies they can employ to engage with their children and teachers.

Personalized Parent Involvement

Another strategy that researchers have found to increase parental involvement is personalization, especially for underperforming children. Personalizing parental involvement is described as engaging with parents and families of children attending specific schools to engage and involve parents in improving student performance (Kiyama & Harper, 2018). Parents and families of students in a particular school are different. As such, a strategy that can work for one

family may not work for the other hence the need to personalize involvement based on parental and family characteristics (Kiyama & Harper, 2018; Park & Holloway, 2018; Touloupis, 2021). For instance, among African American families, parental involvement is low compared to White families because of the economic activities engaged by both groups, the perceived role of parents on student's academic performance, and areas of residence (Borup et al., 2019; Marchand et al., 2019; Musetti et al., 2021).

Marchand et al. (2019) argued that the unavailability of black parents limited their involvement; however, personalizing parental involvement encouraged them to participate as they felt the school was taking the initiative to improve students' academic achievement. Comparably, Gennetian et al. (2019) and Houri et al. (2019) also found that personalizing parental involvement resulted in a positive relationship with teachers who used this as an opportunity to regularly contact, inform and recruit parents of minority students for school activities and volunteering programs. Thus, personalizing parental involvement assures that parents experience and witness their involvement in improving their children's academic outcomes.

Regular Communication and Parental Involvement

Besides personalized parental involvement, regular communication with parents is also an important strategy for increasing parental involvement. For instance, Hill et al. (2018) investigated parental involvement in ethnically diverse middle schools and found that active, open, and regular communication between teachers and parents increased parental involvement. Communication was used as a strategy by schools to provide parents with student academic updates, inform parents of upcoming school activities, and as means of asking parents to offer their opinions about school programs or strategies that can be used to improve students'

academic outcomes (Cheng & Chen, 2018; Cortes et al., 2021; Harper et al., 2019). Communication as a strategy was also key in informing parents of the assignments and homework assigned to students and that it was on parents to ensure that all the assignments were completed and presented for grading (Harper et al., 2019; McSweeney, 2018). Therefore, if teachers communicate effectively, they will increase the number of active parents engaged in their children's education.

In the extant literature, researchers have investigated and reported on the different communication styles schools and teachers use to increase parental involvement. For instance, teachers have recently increased their use of text messaging to communicate and seek parents' opinions regarding different classroom activities (Ehrenreich et al., 2019; Epstein, 2018; Singh et al., 2020). In earlier research, Smythe-Leistico and Page (2018) found that communication through text-messaging increased parental participation in ensuring children attended school and were actively engaged in their learning process.

Comparably, Bajar and Bajar (2019) reported that parents kept tabs on their children's academic performance and classroom behavior by consulting with the teachers through text messaging. Extending the above findings, Bigelow et al. (2020) asserted that texting provided teachers with an easier means of inviting parents to attend seminars and workshops to increase their participation and involvement in different school activities to improve students' academic performance.

Volunteering Programs and Parental Involvement

Researchers have found that asking parents to volunteer in school programs has improved and increased their involvement in their children's academic scores (Gokturk & Dinckal, 2018; McDowell et al., 2018; Mendez & Swick, 2018). For instance, Mendez and Swick (2018) found

that volunteering programs such as invigilating exams and being teammates with students during sporting activities increased parental participation and involvement. Concurring findings were reported by McDowell et al. (2018), who, despite identifying the insignificant role of parental involvement on students' academic outcomes, acknowledged that developing programs that would appeal to parents positively influenced their willingness to volunteer, thus increasing the number of parents engaged in school activities. Gokturk and Dinckal (2018) revealed that inviting parents to monitor students' learning in classrooms or as guards during sports in schools increased the number of parents willing to undertake other programs and grew their curiosity about their specific children's academic outcomes.

Similar to Gokturk and Dinckal (2018), Ilik and Er (2019) found that many teachers did not know how to invite parents to participate in school activities and more often used volunteer programs to get parents on board. Hamlin and Li (2020) consistently reported that by volunteering, parents ensured that students were provided with a safer learning environment that encouraged their overall positive performance. Volunteering programs other than increasing parental participation equipped them with the knowledge of preparing their children for school and helping with assignments (Barnett et al., 2020; Freeman & Jacob Kirksey, 2022; Montes & Montes, 2020). Volunteering programs also increased collaboration between the school and surrounding communities; besides providing students with security, they also provided opportunities for advice on good behavior and the benefits of hard work in performing well academically (Grace et al., 2018; Malluhi & Alomran, 2019; McIntosh & Hayden, 2021).

Parent-Instructor Partnership

A positive relationship between teachers and parents has also increased parental involvement. DeSpain et al. (2018) found that a positive teacher-parent interaction increased the

willingness of parents to participate in school and specific class activities that involved their children's academic life. Kelty and Wakabayashi (2020) also found that parent-teacher partnership was a strong motivator for parents seeking to get involved in knowing their children's academic progress. Further, Koch (2020) established that parents who interacted with teachers regularly used the opportunity to participate in different school activities that increased their involvement. In previous findings, Grace and Gerdes (2019) found parent-teacher association to increase the number of parents willing to participate in different academic and non-academic programs. Similar findings were reported by Harpaz and Grinshtain (2020), who found that parent-tutor engagement helped parents actively monitor the needs of special students and provide them with the necessary parental and tutor help they require to succeed academically.

Parental Involvement and Academic Achievement

Parents play an important role in their children's academic success at different educational levels. Researchers have established that when parents are actively involved in their children's education, they are likely to perform much better and record high-performance scores (Jeynes, 2018; Klein et al., 2022; Rogers & Feller, 2018). Consequently, some scholars have also established that limited or lack of parental involvement has been associated with students' dismal and poor performance (Cheung, 2019; Ntekane, 2018). With regard to academic success, Ntekane (2018) established that parents' involvement in their children's academic life reduced cases of unnecessary absenteeism that will negatively impact student performance. Besides reducing absenteeism rates, parental involvement has also been shown to boost students' confidence in their academics, promote robust academic engagement and improve student behavior, all of which promote enhanced academic achievement (de Oliveira Lima & Kuusisto, 2019; Ntekane, 2018).

The link between parental involvement in education and student behavior has attracted the interest of several researchers. Moreno–Ruiz et al. (2019) reported that parental involvement in education positively influences students' behavior. Additionally, De Dieu and Andala (2021) conducted a cross-sectional study to establish the link between parental involvement in education and student behavior by recruiting 400 participants. De Dieu and Andala (2021) revealed that parental involvement in education is important in instilling discipline in learners. Learners who hailed from a family with strong moral values were disciplined as opposed to children from families with less moral beliefs. Based on the evidence reviewed, parental involvement in education instills discipline in learners by ensuring that they are taught societal coexistence values during their early education stages.

Improved Academic Performance

Empirical evidence shows that actively involving parents in different school activities increases students' overall academic performance at different levels. Boonk et al. (2018), in a systematic review of 75 studies, reported that active parental involvement promoted students' exemplary academic performance. Similarly, Oswald et al. (2018), in a systematic review of 16 published articles, revealed that parental involvement was an important strategy that researchers found to influence students' school attendance and academic performance positively. Concurring with these findings, Ntekane (2018) analyzed the findings of different published articles on the role of parental involvement in students' academic performance and established that parents who took part in different school activities were keen on how their children performed. Knowing that their parents are actively monitoring, students will likely put in more effort and improve their overall performance.

Home-Based Parental Involvement and Academic Achievement

Extending the above findings, Antony-Newman (2019) investigated the impacts of home-based parental involvement on students' academic engagement and overall performance. Using a meta-analysis of 40 qualitative and quantitative studies, Antony-Newman (2019) found that home-based parental involvement in academic revising and reading tasks improved students reading and speaking scores, especially for immigrant children. Similar findings were reported by Rogers et al. (2018), who, while they did not study immigrant students, analyzed the responses of 825 students on the role of parents in their academic achievement. Agreeing with Antony-Newman (2019), Roberts et al. (2018) established that due to parental involvement, students did their homework on time, received assistance in case of need, and attended school regularly, which boosted their overall academic outcome. Consistent findings were reported by Lara and Saracostti (2019), who investigated the impacts of parental involvement using a sample of 498 guardians and parents and established that active parental involvement motivated elementary students to work hard, pass and impress their parents. Thus, evidence indicates that students whose parents are actively involved in their academic life, whether in high school or elementary school, report improved academic performance and achievement.

Parents are an active ingredient in the recipe for their children's academic progress and success. For instance, Roberts et al. (2018), while studying the role of home-based parental involvement, revealed that by helping their children with reading assignments, such students performed exemplary well in reading tests. Similar findings were reported by Blake-Berryhill (2018), who analyzed quantitative data from 528 mothers and found that home-based parental involvement enhanced the reading and comprehension of kindergarten children. Tarraga Garcia et al. (2018) extended the above findings reporting that home-based parental involvement

positively influenced the academic outcome regarding reading comprehension for primary school-going children. Consistently, Avnet et al. (2019), in a study that included a sample of 450 students and 66 with autism, reported that home-based parental involvement improved their comprehension and reading with a widespread impact on improved academic performance. Home-based parental involvement has been found to improve student academic performance.

Additional researchers, such as Chun and Devall (2019) have also investigated the impacts of parental involvement on students' academic outcomes. In a study that included a total of 116 secondary school students, Chun and Devall (2019) reported that for the students whose parents were active in different school activities and programs, their performance was high compared to students whose parents were not actively involved in different school activities. Cross et al. (2019), like Chun and Devall (2019), also investigated the role of parental involvement on students' performance and found that some parents had expectations of their children, which acted as a target for these children. Cross et al. (2019) reported that many students had improved grades by attaining or fulfilling these expectations. While academic expectations by parents motivate students, Erdem and Kaya (2020), in a systematic review of 55 independent studies, reported that higher academic expectations resulted in children feeling unnecessary pressures that negatively impacted their academic achievement.

School-Based Parental Involvement and Academic Achievement

Li et al. (2019) investigated how students performed academically with active school-based parental involvement. They found that engaging in different school activities increased their knowledge of what their children needed to perform better or achieve better scores. Liu et al. (2020) also investigated the benefits of active parental involvement in different school activities. Concurring with Li et al. (2019), Liu et al. (2020) found that through participation,

parents identified their children's academic needs, and attending to such needs improved student performance. Comparably, Huguley et al. (2020) also investigated the significance of parental involvement in the academic achievement of African American students in urban and middle schools. These findings were consistent with the results of both Li et al. (2019) and Liu et al. (2020) that parental involvement enhanced student performance. The research by Posey-Maddox and Haley-Lock (2020) supported these findings, who found that both home-based and school-based parental involvement helped address key academic challenges that hindered students from performing well. Therefore, by addressing these challenges and providing students with the academic environment and materials they need for their education, scholars have found that individual student performance increases.

Recently published studies have also evidenced the importance of parental involvement in students' academic performance. For instance, Schmid and Garrels (2021) analyzed responses from 25 semi-structured interviews. They found that parental involvement was a psychological booster and support for children with confidence and self-esteem issues. Knowing that one's parent is ready to help either in supervision or consultation improves the student's mentality and performance. Keizer et al. (2022), in a study different from Schmid and Garrels (2021), reported that personalized support offered by parents improved the students' academic achievement.

Bonanati and Rubach (2022), using a sample of 254 parents, established that home-based involvement positively influenced reading and comprehension for grade 1 students. Consistently, Tan et al. (2022) revealed that with school closures during Covid-19, parents played the role of tutors and supervisors, ensuring the continuity of the learning process. Alharthi (2022) also revealed that during the lockdown, children whose parents took an active role in training and providing support during online learning sustained higher performance, with others reporting

improved academic scores. Overall, a positive relationship exists between parental involvement, whether home-based or school-based and improved students' academic outcomes.

Parental Involvement and Reduced Absenteeism

Parents' active involvement in their children's academic activities is to familiarize themselves with school activities and school programs to encourage their children's attendance and mitigate absenteeism while simultaneously improving their children's academic performance. In the extant literature, scholars have identified that active parental involvement in academics significantly reduces absenteeism among school-going children (Allison et al., 2019; Gottfried, 2019; Robinson et al., 2018). A randomized controlled experiment performed by Robinson et al. (2018) in 10 school districts revealed that actively involving parents in education enhanced the regular attendance of K-5 students with a positive consequence on students' academic performance. Rogers and Feller (2018) concurred with Robinson et al. (2018) that involving parents in their children's education mitigated absenteeism. Analyzing responses from a longitudinal sample of 28,080 parents of high-risk 12th-grade students, Rogers and Feller (2018) revealed that by participating in school activities, parents were empowered on the academic significance of their children attending school and their role in ensuring their children were never absent.

Parental involvement in school activities and planning school programs discourages students from missing school. Extending the findings of Rogers and Feller (2018), Allison et al. (2019) investigated the relationship between school attendance, good health, and academic performance. The findings revealed that teachers and parents were crucial in ensuring that children were in good health and regularly attended school. Agreeing with Allison et al. (2019), Crouch et al. (2019) investigated adverse childhood experiences' role on children's academic

success and parental involvement. Analyzing data adapted from the National Survey of Children's Health using the ACE module revealed that although adverse childhood experiences resulted in absenteeism and poor academic achievement, active and positive parental involvement countered these negative effects by increasing students' school attendance, confidence, and overall academic performance.

Collaborating with parents in developing school programs and activities has helped parents advise their children against missing school. Gubbels et al. (2019) investigated the risk factors for chronic absenteeism and dropout in a meta-analytic review of 75 published articles and found that substance abuse, low parental involvement, and poor academic performance compounded the key reasons for chronic absenteeism and dropout. However, Gubbels et al. (2019) reported that students' with high and positive parental involvement reported decreased absenteeism, dropout, and improved academic performance.

Similarly, Bonal and Gonzalez (2020), using data from an online survey with 35,419 responses, established that parental involvement during Covid-19 ensured that their children were engaged in virtual lessons as scheduled by schools, which maintained their scores despite not being physically attending school. Cepada and Grepon, (2020), in a study that included 60 students from middle school, found active parental involvement to mitigate student absenteeism besides encouraging improved academic performance. Islam and Shapla (2021) reiterated that parental involvement decreased absenteeism and increased academic achievements for k-12 students.

While scholars have shown the academic benefits of school attendance, Gubbels et al. (2019) reported that poor school attendance due to substance abuse and low parental involvement resulted in students performing dismally. Klein et al. (2022) reported similar

conclusions when investigating the relationship between school absenteeism and academic achievement. With a sample of 4,419 Scottish students, Klein et al. (2022) found that frequent absenteeism resulted in poor academic achievement and overall grade scores for children attending Scottish schools. Given the negative impacts of absenteeism on student performance, scholars in the preceding discussion have evidenced that active parental involvement encourages students' school attendance and improved academic performance.

Parental Involvement Improves Teacher Morale

In students' academic success, teachers play an important role. Highly motivated teachers will provide students with all the necessary support and consultation to ensure that they succeed. Nunez et al. (2019) further stated that motivated teachers actively engaged with parents to develop activities and programs that would favor students' academic performance and outcome. Boonk et al. (2018) also established that parental involvement was key in improving teachers' morale besides reporting the benefits of parental involvement on students' academic performance. Concurring with Boonk et al. (2018), Mata et al. (2018) reported that active parental involvement encouraged teachers to keep teaching by providing insights about issues and taking an active role in curriculum development. Both Boonk et al. (2018) and Mata et al. (2018) reported that having parents who engage and commend teachers for the job well done is motivation enough for teachers to continue training students and seeing that their achievement continues to increase.

Wright et al. (2018) extended the above findings by studying a quantitative sample of 3,681 K-12 students and their teachers in Texas. Similar to Boonk et al. (2018), Wright et al. (2018) found that being active in school activities and developing school programs gave the teachers the support they needed and the assurance that they were not alone in training students.

The Support provided by parents ensured that the programs students were involved in were beneficial and improved their performance. Engin (2020) also studied the significance of parental involvement in improving teachers' morale and subsequently enhancing students' academic achievement. As per the findings of Engin (2020), motivated teachers motivated students and encouraged their active academic involvement and subsequent performance. In previous research, Nunez et al. (2019) investigated what students perceived as the role of teacher and parent involvement in their academic outcomes. The findings revealed that parent involvement encouraged teacher active participation, enhancing students' cognitive engagement and overall academic achievement.

Supporting the results by Nunez et al. (2019), Jungert et al. (2020) reiterated that parents' enthusiasm for improving their children's academic outcomes motivated teachers to engage with students at different levels and ensure their performance is improved. Waluyandi et al. (2020) also informed that the insights of parents on how teachers can improve their delivery of content translated to improved students' academic achievement. Across the different studies reviewed, it is evident that parents' active involvement in their student's academic life motivates teachers who draw their support and confidence from these parents. However, Ilrath and Govender (2021) and Morris et al. (2020) noted that low parental involvement and aggressive parents demotivated teachers and often blamed them for their children's poor performance.

Previous research has shown that parental involvement in education may increase teachers' job satisfaction. To cite evidence, Park and Holloway (2018) conducted a meta-analysis study to examine how parental involvement in education leads to teachers' job satisfaction and motivation. Teachers who are aware that parents are involved in their children's education progress are more motivated to assist the learners to achieve more in academics (Park &

Holloway, 2018). Parental involvement in education through language training help learners develop skills that are needed for learning, making it easy for teachers to teach them and leading to job satisfaction (Park & Holloway, 2018). Toropova et al. (2021) reported that parents' commitment to education through constant communication between parents and teachers regarding the child's performance motivates teachers to go the extra mile in assisting the learner, such as creating extra time for consultations. Parents' commitment to education, such as regular visits to the school, constant communication, and feedback on a child's performance, may improve teachers' job satisfaction and motivation.

Parental Involvement Improves Student Self-Esteem and Confidence

Research has revealed that students with high self-esteem and confidence in their abilities report improved academic achievement. For instance, Koruk (2017) found that students with high self-esteem engaged positively and robustly with teachers and colleagues and often reported improved performance. Similarly, Subon et al. (2020) reported that high self-esteem was positively related to enhanced academic achievement. Consistent findings were reported by Zhao et al. (2021), who investigated the relationship between students' self-esteem and academic achievement. Concurring with Subon et al. (2020), Zhao et al. (2021) found that improved students' self-esteem enhanced their educational efficacy and overall performance. Further, Zhao et al. (2021) established that parental and teacher involvement was key in improving the students' self-esteem, confidence, and overall academic achievement.

Concerning parental involvement, Jeynes (2018) established that parental and teacher improvement enhanced student self-esteem, which resonated positively and improved student academic outcomes. Barger et al. (2019) reiterated that parental involvement positively improved student performance, academic confidence, and self-esteem after analyzing data from 448

independent studies. Silinskas and Kikas (2019), after analyzing data from 512 students and 420 mothers, found that parental support increased students' academic persistence and math performance. Across the different studies discussed, parental involvement increased students' self-esteem and academic achievement.

Student Gender and Grade Level

Another predictor variable thought to have a significant impact on students' academic performance is gender. According to numerous studies, boys and girls perform differently (Aguillon et al., 2020; Siddiq & Scherer, 2019). However, despite the overwhelming evidence supporting the impact of other personal and environmental factors on academic performance, the gender role in academic performance continues to draw increased scientific attention, largely due to the reported results' mixed results (Alnjadat et al., 2019). For instance, studies showed no discernible gender difference in students' academic success (Alnjadat et al., 2019; Klein et al., 2019). Khesht-Masjedi et al. (2019) found minimal gender differences in test scores for standardized mathematics in a meta-analytic study. Similarly, Aguillon et al. (2020) discovered no appreciable differences between male and female students' achievement and retention scores in mathematics.

Numerous studies have discovered a strong correlation between students' entry-level scores and their academic performance/entry qualification. For instance, Epstein (2019) investigated the relationship between entry qualification and university students' academic performance and discovered a significant favorable correlation between the two scores. Adams and Blair (2019) examined the relationship between admission requirements and students' academic progress in undergraduate study programs and discovered a significant positive relationship between the two, a correlation. Browning and Rigolon (2019) examined students'

prior academic qualification scores and cumulative grade point averages (CGPA) from their universities. The primary level examination scores and university CGPA were not correlated in this study; however, the O-level and A-level examination scores correlated significantly positively with university CGPA. Students' high school grades and university performance were examined by citing at one Canadian university. They discovered a strong association between the two factors. Rubright et al. (2019) highlighted three sizable US studies in an education testing service (ETS) study on the role of SAT scores and high school grades in predicting students' success in postsecondary education. The high school grade point was observed.

Parental Involvement and Improved Classroom Behavior

Improved classroom behavior has been associated with enhanced academic achievement. Studying a quantitative sample of 631 students, Mata et al. (2018) found that parental involvement enhanced student motivation and student behavior. Boonk et al. (2018) reiterated that when children knew their parents were actively involved in school activities, they were less likely to misbehave and will concentrate on their academic progress and performance. On the other hand, Robinson et al. (2018) noted that parental involvement decreased student absenteeism associated with misbehavior, enhanced student value of education, and improved academic achievement.

The link between parental involvement in education and student performance has attracted many researchers' interests. Wong et al. (2018) conducted a meta-analysis investigating the relationship between parental involvement in education and students’ performance by recruiting 507 Grade 3 schoolchildren. Parental involvement in education through parent tutoring and helping with homework led to improved learners’ performance (Wong et al., 2018). Additionally, Boonk et al. (2018) conducted a systematic review of 75 studies published between

2003 and 2017 to examine the correlation between parental involvement in education and students' performance. Parental engagement in education through parental encouragement, support for learning, communicating expectations, and supporting homework yielded positive results in students' performance by improving overall grades in school (Boonk et al., 2018). Similarly, Jeynes (2018) reported that parental involvement and engagement in education improved learners' perception of self-cognitive skills, such as sustained attention and pattern recognition which improved learners' achievement. Based on the evidence reviewed, one can conclude that parental involvement in education through supporting homework, communicating expectations, and parental encouragement may improve learners' educational achievement.

While scholars have evidenced parental involvement's positive impacts on student academic performance, some scholars have reported contrary findings. For instance, Hornby and Blackwell (2018) found that excessive parental control and inflexibility negatively influenced students' active participation and academic performance. Similar conclusions were reported by Ntekane (2018), who asserted that besides being overcontrolling, the pressure the students were under due to their parents' active engagement in their academic activities decreased performance rather than increased performance. Ntekane (2018) argued that over-controlling parents pressured their children to focus on education, which affected their freedom to socialize and interact with peers. Furthermore, Cheung (2019) established that parental over-involvement negatively influenced teacher-student relationships influencing students' academic achievement. In the existing studies, scholars have evidenced that while parental involvement improves' academic performance, over-involvement results in poor academic achievement and outcomes.

Summary

The analysis revealed parents' active involvement in school activities and school programs discouraged drop-out and cases of absenteeism that might impact students' academic performance (Gottfried, 2019; Ilik & Er, 2019). The literature review analysis also revealed that parental involvement catalyzed good behavior among students, improved their academic engagement, and enhanced their academic achievement (Alinsunurin, 2020; Anastasiou & Papagianni, 2020; Henderson et al., 2020). Parental involvement improves students' academic performance, classroom engagement, self-esteem, confidence, and behavior (Gross et al., 2020; Jabar et al., 2021; Kirksey et al., 2022). Although several studies have been conducted on parental investment in education and student performance, limited research has focused on the relationship between parental involvement and the performance of African American students (McCarthy-Foubert, 2022). This study will address this gap in the literature by exploring the relationship between parental involvement and the performance of African American students. The next chapter presents the research methods and methodology used to conduct the study.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative, predictive correlational study was to examine the impact of home-based and school-based parental involvement on students' academic performance. Based on the findings of background literature earlier in this study, there was a lack of research examining the impacts of home-based and school-based parental involvement on the academic performance of African American students in elementary schools in the United States (Mata et al., 2018). Mata et al. (2018) found that little or no parental involvement in students' academic life was associated with significantly lower academic performance of students. In this chapter, a discussion of the methods used to collect and analyze data is conducted. The chapter is organized as follows: research design, research questions, research hypotheses, participants and setting, instrumentation, data collection procedures, plan for data security, and data analysis methods.

Design

A quantitative non-experimental correlational design was used to examine whether a significant association exists between parental involvement and students' academic performance. A correlational design is used when a researcher intends to establish whether a non-causal association exists between two variables (Fischer et al., 2014). As Fischer et al. (2014) emphasized, correlation does not imply causation; hence, the interpretation of findings from correlational studies should be made with caution (Nelson et al., 2017). Unlike an experimental design, which establishes whether one variable potentially causes the other, a correlational design examines the strength and direction of the relationship between two variables of interest (Baker, 2017). In this study, the choice of a correlational design aligned with the research

questions and purpose. In particular, the core purpose of the study was to examine whether a significant relationship exists between parental involvement and students' academic performance.

Prior studies of this nature have also employed the correlational design to examine the relationship between parent involvement and academic performance. For instance, Lambert et al. (2022) used a correlational design to examine the role of parent involvement in reducing the gap in academic achievement among high school students with behavioral challenges. In another study, Tarraga Garcia et al. (2018) also used a correlational design to establish whether home-based parent involvement was associated with students' academic achievement. Other researchers that have used the correlational design in the parent involvement and academic achievement contexts include Lara and Saracostti (2019), Mata et al. (2018), and Paul et al. (2021).

The predictor variables in this study are parental involvement, grade level and student gender. Parental involvement is the participation of parents in regular, two-way, meaningful communication involving student academic learning and other school activities (Antony-Newman, 2019). Grade level is the level of the educational program studied by a student (Berkowitz, 2020), while student gender refers to the sex of individual students and includes the students gender identity and gender expression (Berkowitz, 2020). The criterion variable is students’ academic achievement, and it refers to the extent to which a student has achieved a stated educational goal (Pinquart & Ebeling, 2020). Students’ academic achievement was represented by numerical course averages of students across math and language arts subjects. The data on numerical course averages was collected from the institution's records, notably, the latest academic performance scores in two principal subjects, maths and language arts. It was

measured by taking the sum of both subjects and dividing that sum by the total number of subjects taken, which is two (2) (Conesa & Dunabeitia, 2021).

Research Questions

Based on the purpose of this study, the following research questions was answered at the end of the study:

RQ1: How accurately can African American elementary *school students'* academic performance regarding math numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

RQ2: How accurately can African American elementary *school students'* academic performance regarding reading achievement numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

Hypotheses

Each of the two research questions above has a null hypothesis. The null hypothesis for this study is listed below for each research question:

$H_0$1: There is no significant predictive relationship between the criterion variable (math numerical course averages) and the linear combination of predictor variables (parental involvement, grade level, and student gender) of African American elementary school students.

$H_0$2: There is no significant predictive relationship between the criterion variable (reading achievement numerical course averages) and the linear combination of predictor variables (parental involvement, grade level, and student gender) of African American elementary school students.

Participants and Setting

In this section, a discussion of the target population, research setting, and participants is

presented. The population of interest consisted of African American students and their respective parents in Ohio, United States. But, due to general lack of response to the invitation to participate by parents in Ohio, the data was collected from black parents/students in an African elementary school based in Lagos, Nigeria. The setting of the study was certain elementary school in Lagos, Nigeria. Participants were drawn from this study population.

Population

The population of interest in this study consisted of students in a particular school district in Ohio, but the data was collected from an elementary school in Lagos, Nigeria, and their respective parents because the Ohio parents did not generally respond to the invitation to participate. The education system in Nigeria is similar to that of the United States, it is broken into three levels, primary, secondary and tertiary levels of education (Aduwa & Omojuwa, 2021). When compared with the American system, the primary schools are for elementary students, the secondary schools are for middle and high school students and the tertiary institutions are colleges/universities.

This study's target population consists of African American elementary school students in public schools in a specific school district in Ohio, United States. The target population also includes parents of these students since information on their involvement in students' academic life is needed. However, the data used was collected from an elementary school in Lagos, Nigeria because the Ohio parents did not generally participate in the study.

Participants

The participants in this study initially included parents and students in four schools in an Ohio school district, the data was however collected from an elementary school in Lagos, Nigeria. Warner's method estimated the minimum sample size required for this study. According

to Warner (2013), when conducting a multiple regression analysis, the number of predictors in the model influences the sample size required to detect if a significant effect truly exists. Warner (2013) recommended that the appropriate sample size should be $N>50+8k$ or $N>104+k$, where k is the number of predictors in the model and there are three predictor variables, therefore k = 3. Applying Warner's first formula $N>50+8k$ yields a sample size of 75. Applying Warner's second formula $N>104+k$, yields a minimum sample size of 108. The second formula yields a larger sample size, which will be selected for this study. Thus, the minimum sample size required for this study is 108 participants.

Stratified sampling was used to recruit students from each of the grade levels in elementary school stated above. Stratified sampling is a probabilistic sampling approach that involves initially dividing the population of interest into categories based on a pre-existing criterion (Parsons, 2014). Random sampling was then applied to each category (strata) to select a proportional sample for inclusion in the study (Parsons, 2014). In this study, the population of interest, consisting of students in elementary school, was divided into five categories, each representing a certain grade level. As stated earlier, the students are from grades one through five (primary 2 through primary 6). This represents five grades from which the sample was selected. Random sampling was then applied to each of the five categories to select participants for inclusion in the study. The number of students selected in each grade was proportional to the number of black students, though the students are mostly black. The sample of students was then used to obtain a sample of parents. The researcher worked with the school Administrator to ensure parents with multiple students do not participate for more than one student.

Setting

The setting of the study was an Africa based elementary school. The elementary school has enrolled students from grade one to grade five (primary two to six). The school offers at least two main courses at each of the grade levels one through five; Mathematics, and Language Arts. Sampling, participant recruitment, and data collection were done during the fall semester of the 2023-2024 school year.

Instrumentation

The Home-based Involvement Scale

Parental involvement was measured using the home-based involvement questionnaire (See Appendix A for the instrument) initially developed by Fantuzzo et al. (2000) and validated by other scholars such as Tarraga Garcia et al. (2018). The questionnaire was developed to measure family participation in early childhood education. Several studies utilized the same instrument (e.g., Bonanati & Rubach, 2022; Duenas et al., 2021; Tarraga Garcia et al., 2018). The home-based involvement questionnaire was validated by Fantuzzo et al. (2000) by conducting a series of common factor analyses with both orthogonal (varimax, equamax) and oblique (promax) solutions. The authors selected a three-factor varimax solution since it mostly satisfies the standard multiple criteria for retention (McDermott, 1993), the elements selected were within the constraints indicated by Cattell's (1966) scree plot and parallel analysis (Lautenschlager et al., 1989). The elements selected displayed numbers greater than 5% of the total variance and showed sufficient internal consistency, with alpha (a) coefficients > .70. Fantuzzo et al. (2000) noted that the resulting solution decreased intercorrelation of used unit-weighted factors and items with main loadings on more than one factor. Fantuzzo et al. indicated that the resulting solution was consistent with existing theoretical models. The three-factor

solution displayed through the factor analysis includes school-based involvement, home-based involvement, and home-school conferencing. All the three constructs displayed high reliability (alpha (a) = 0.85, 0.85, and 0.81, respectively).

Additionally, all factor loadings on the home-based involvement subscale on the family involvement questionnaire loaded strongly on the construct 'family involvement.' As such, the home-based involvement questionnaire is a valid and reliable instrument for measuring parents' home-based involvement in their children's academic activities. The questionnaire has 13 items rated on a four-point Likert scale such that a score of 1 represents the lowest degree of home-based parent involvement while 4 represents the highest degree of home-based parent involvement. Notably, the rating points on the Likert scale are as follows: 1 = rarely, 2 = sometimes, 3 = often, and 4 = always. Scoring is conducted by summing scores on all the items and dividing the total score by 13 to find the average, since there are 13 items on the questionnaire. Each item can have a minimum of 1 score and a maximum of 4 scores. Though the developer did not state specifically the time frame used to complete the questionnaire since the parents were gathered in classrooms and supervised by research assistants. Participants had two weeks to complete the questionnaire from when their students took them home to them. See Appendix B for permission to use the instrument.

Procedures

To achieve the purpose of this study, a sample of 108 students and their respective parents was selected from the school. The acquisition of data required to achieve the purpose of this study was conducted systematically. The first data collection step involved obtaining approval for conducting this type of research from the Institutional Review Board (IRB). Once IRB approval was granted, the researcher proceeded to request site administrators to grant access

to and data collection rights from the pre-identified school. The request was delivered through formal writing to the school's principal.

The formal request letter (shown in Appendix C) detailed the purpose of the study, the type of data the researcher intends to collect, how the data will be collected, and the school's resources including students and parents that will aid the data collection process. The school principal also responded in formal writing affirming the request and the researcher commenced participant recruitment. Notably, two types of participants that are crucial for this study: parents and students.

The researcher began by selecting a pre-determined number of students in each grade level for grades one through five with the principal's and teachers' assistance. With the principal's and teachers' assistance, the researcher contacted all parents of the pre-selected students. Each parent was contacted formally by sending hard copies of the invitation to participate, consent forms and questionnaire through the students to their parents. Parents who accepted the invitation to participate signed the consent form, executed the questionnaire and returned it back to school through their students.

Data on students' academic performance though was provided by the parents, it was also collected from the institution's records to ensure accuracy. Notably, the latest academic performance scores in two principal subjects – math and language arts – were collected for each student included in the study.

All the data was merged into a spreadsheet of eight columns. The first column was the participant ID. The second and third columns contained data on academic performance scores in math and language arts. The fourth column contained data on the average academic performance of students across the two subjects. Data in this column was obtained by averaging math and

language arts scores. The fifth column contained data on parental involvement. The sixth column contained data on the grade level of students. This is a categorical variable with five levels representing grade levels one through five. Lastly, the seventh column contained data on the gender of students, while the eighth column contained data on the gender of the responding parent.

Data collected both via hard copy questionnaires and from institutional records are stored on a password-protected computer to minimize the chances of illegal third-party access. Hard copies bearing information related to the participants are locked in a safe to minimize third-party access. The data will be retained for a period of five years after completion of this study. After the five-year period elapses, the hard drive on which the data was stored will be erased. Hard copy material locked in the safe will also be shredded after the end of the five years.

Data Analysis

Two multiple linear regressions were conducted in the process of the analysis. As specified earlier, two types of data were collected: numerical course averages in maths, and language arts, parental involvement, grade level, and student gender. Data on academic performance scores for each student was obtained from the school records. Conversely, data on parent involvement was obtained from the survey conducted on parent participants.

Data Screening

Data screening included visual screening for missing and inaccurate entries. Data in the spreadsheet file was subjected to thorough inspection to identify any errors and correct them where necessary. Possible types of errors that were encountered include unexpected values in some cells. For instance, since academic scores range between 0% and 100%, negative scores or scores larger than 100% in math or language arts would be erroneous. Values that cannot be

corrected such as academic performance scores greater than 100 were omitted from the data set. The researcher also thoroughly inspected the data to ensure correct parent-student matching and the credibility of the findings.

Descriptive Statistics

After thoroughly inspecting the data, the spreadsheet file noted previously was imported into SPSS for further analysis. Descriptive statistical analysis was conducted to gain a more profound understanding of the sample. Measures of frequency, dispersion, and central tendency were included as part of the descriptive statistics. Measures of frequency include percentages and ratios. For instance, the percentage of students in each grade level and gender was calculated. The average performance across grade levels and genders was also calculated. Measures of central tendency included means and standard deviations. These measures were appropriate for continuous variables such as academic performance and extent of home-based or school-based involvement, not grade level or gender. Measures of dispersion included a range of values. For instance, the range of students' performance in math was determined by subtracting the lowest score recorded from the highest score recorded in the sample.

The researcher then embarked on multiple linear regression analysis in SPSS. The regression model that was ran consisted of three predictor variables and one criterion variable. The criterion variable is the academic performance of students. The numerical course averages of students across math and language arts subjects represented this variable. The predictor variables included parental involvement, grade level, and student gender. A linear regression analysis was considered appropriate since the criterion and predictor variables are measured on a continuous scale. According to Nelson et al. (2017), linear regression is only appropriate where the criterion variable is continuous and the predictor variables are either continuous or binary.

Assumptions Testing

Prior to conducting the linear regression, parametric assumption of a linear regression was tested. According to Laerd Statistics (2022), there are eight key assumptions of a multiple linear regression: criterion variable measured at a continuous level, predictor variables measured at a continuous level, assumption of independence of observations, approximate normal distribution of regression residuals, absence of homoscedasticity, absence of multicollinearity, linearity, and absence of outliers.

There is one criterion variable and it was measured at a continuous level, and the predictor variables are three and was measured at a continuous level. The third assumption is the independence of observations, and it was examined using the Durbin-Watson statistic. The Durbin-Watson statistic can range from 0 to 4. If the value indicates a number that is approximately 2, it indicates that there is no correlation between residuals. The normality assumption holds that residuals of the regression model are approximately normally distributed (Warner, 2013). This assumption was tested using the normal PP plot. For this assumption to be met, the regression residuals must fall approximately on the regression line on the normal PP plot. The fifth assumption, homoscedasticity, holds that the variances along the line of best should remain consistently similar as one move along the line. This assumption was tested using scatter plot of regression residuals against predicted values. If the scatter plots indicate residuals are evenly spread out around the line of best fit, the assumption will have been met (Warner, 2013).

Sixth, multicollinearity refers to the presence of high correlations among predictor variables. To meet this sixth assumption, there should be low correlations among the predictor variables. This assumption was tested using the Variance Inflation Factor method. If any one or

both of the two variables will have a Variance Inflation Factor greater than 10, one of the variables will be excluded from the analysis. The seventh assumption, linearity, holds that there must be a linear relationship between the criterion variable and each of the predictor variables. To test this assumption, two scatter plots were used. The scatter plots illustrated the relationship between the criterion variable and each of the predictor variables. Lastly, absence of outliers was tested using box plots drawn in SPSS. Since two multiple linear regressions will be conducted, a Bonferroni correction is needed to guard against type I error. The alpha level was calculated to be: 0.05/2 = .025, rounded to .03 (Warner, 2013).

Results

Multiple regression analysis produces three output tables. First, a summary table will report the model's explanatory power to fit the data with the coefficient of determination (R2) used to measure the effect size. Second, an ANOVA table will show if the explanatory power of R2 is statistically significant. Finally, a table of coefficients will signify which, if any, of the individual independent variables are statistically significant predictors of the outcome variable (Laerd Statistics, 2022; Warner, 2013). The alpha used is the probability of Type I error in the hypothesis test, and when it occurs, the null hypothesis is rejected at the 95% confidence level—the value of 0.05 has been used for alpha (Gall et al., 2007).

CHAPTER FOUR: FINDINGS

Overview

The academic achievement gap in the United States is evident across ethnic and minority groups (Celeste et al., 2019). While the achievement gap has existed in the United States well before it could be measured by research, researchers have reported that African American students have continued to perform dismally in education (Celeste et al., 2019; Henry et al., 2020). The problem that was addressed in this study is the lack of research examining the influence of parental involvement on the academic performances of African American students in elementary school. While researchers have reported significant benefits of parental involvement on student's academic performances (Boonk et al., 2018; Lara & Saracostti, 2019), Mata et al. (2018) established a lack of parental involvement could negatively impact the academic success and motivation of students. This quantitative, predictive correlational study aimed to investigate the influence of parental involvement on the academic performance of African American students in elementary school.

Research Questions

RQ1: How accurately can African American elementary *school students' academic performance* regarding math numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

RQ2: How accurately can African American elementary *school students' academic performance* regarding reading achievement numerical course averages be predicted from a linear combination of parental involvement, grade level, and student gender?

Null Hypotheses

$H_0$1: There is no significant predictive relationship between the *criterion variable* (math numerical course averages) and the linear combination of predictor variables (parental involvement, grade level, and student gender) of African American elementary school students.

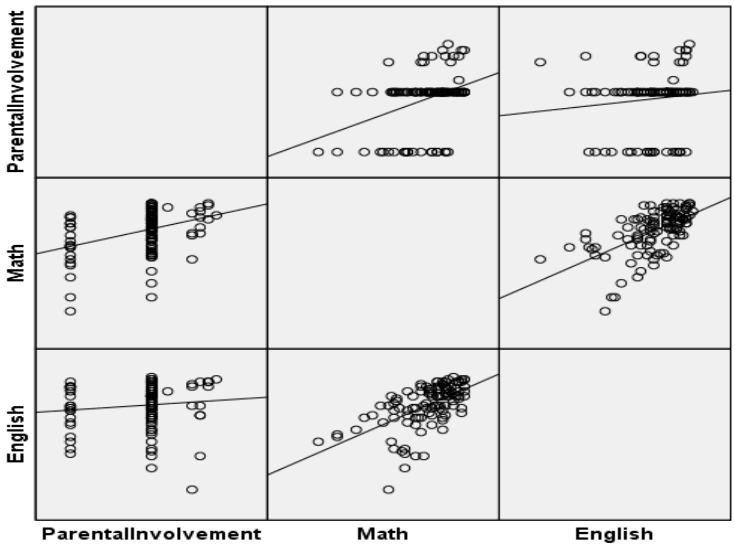
$H_0$2: There is no significant predictive relationship between the *criterion variable* (reading achievement numerical course averages) and the linear combination of predictor variables (parental involvement, grade level, and student gender) of African American elementary school students.

Data Screening

The researcher sorted the data and scanned for inconsistencies in each variable. No data errors or inconsistencies were identified. A matrix scatter plot was used to detect bivariate outliers between predictor and criterion variables. No bivariate outliers were identified. See Figure 1 for the matrix scatter plots.

Figure 1

Matrix Scatter Plot of Reading, Math, and Parental Involvement



Descriptive Statistics

The participants in this study initially included parents and students in four schools in an Ohio school district; however, due to a lack of response, the data were collected from an elementary school in Lagos, Nigeria. The data consisted of students' academic performance in two principal subjects, math and language arts, students' grade level (1-5), students' gender (male or female), and level of parental involvement. Parental involvement was measured using the home-based involvement scale utilizing 13 items rated on a four-point Likert scale such that a score of 1 represents the lowest degree of home-based parent involvement. In contrast, 4 represents the highest degree of home-based parent involvement. The average responses to the 13 items were calculated and served as an overall measure of parental involvement. There were *n* = 108 participants in this study, including 48 (44.4%) females and 60 (55.6%) males. There were approximately equal students at each of the five grade levels. This information is provided in Tables 1 and 2.

Table 1

Descriptive Statistics: Gender (n =108)

	Frequency	Percent
Female	48	44.4
Male	60	55.6
Total	108	100.0

Table 2

Descriptive Statistics: Grade Level (n = 108)

	Frequency	Percent
1.00	22	20.4

2.00	22	20.4
3.00	22	20.4
4.00	22	20.4
5.00	20	18.5
Total	108	100.0

Table 3

Descriptive Measures of Math, Reading, and Parental Involvement Scores

	Min.	Max.	*M*	*SD*	Skewness	Kurtosis
Math	46.00	100.00	86.27	10.88	-1.251	1.851
Reading	52.00	99.00	87.17	9.06	-1.296	1.845
Parental Involvement	2.00	3.80	2.89	.47	-.817	.228

Table 4

Descriptive Statistics: Math and Reading Scores by Grade (n = 108)

Grade Level		Min.	Max.	*M*	*SD*
1.00	Math	69.00	98.00	83.14	7.45
	Reading	52.00	96.00	82.82	11.59
2.00	Math	79.00	100.00	92.77	4.81
	Reading	79.00	99.00	92.59	5.33
3.00	Math	78.00	100.00	91.82	7.42
	Reading	61.00	98.00	89.32	8.28
4.00	Math	46.00	100.00	79.91	14.55
	Reading	69.00	97.00	86.09	8.01
5.00	Math	53.00	96.00	83.45	11.56
	Reading	68.00	97.00	84.80	8.16

Assumptions Testing

Multiple regression requires eight assumptions—two methodologically determined and six statistically assessed. The first two methodological assumptions were met in the present study by having one criterion variable measured at the continuous level and two or more predictor variables measured at the dichotomous or continuous level (Barthlow et al., n.d.; Lewis-Beck, 1980; Warner, 2013). The other six assumptions are analyzed below by research question.

Assumption of Independence of Observations

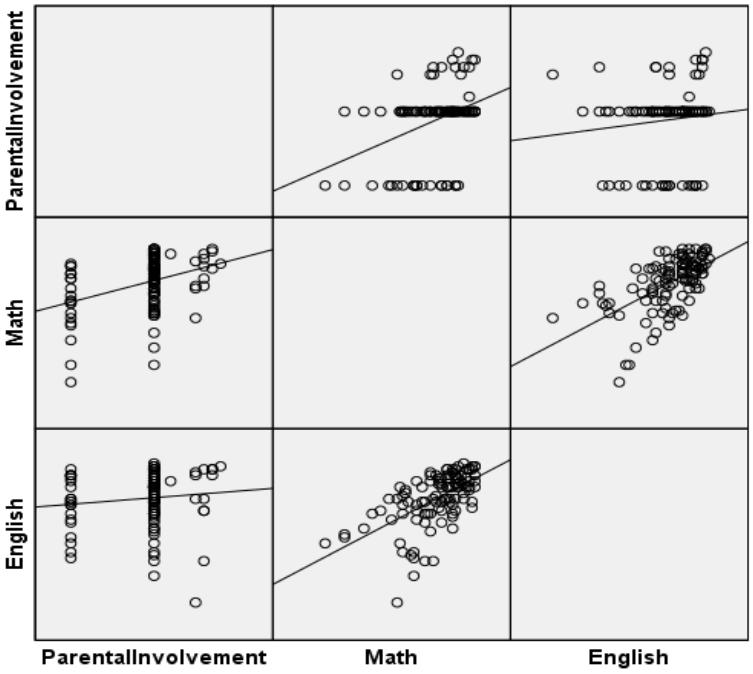
The third assumption of assumption of independence of observations was assessed by Durbin-Watson (DW) statistics. In both regression models, the value was within the acceptable range from 1.5 to 2.5. Precisely, DW = 1.939 for RQ1 model and DW = 1.862 for RQ2.

Assumption of Linearity

The fourth assumption of linearity was assessed through visual inspection of a matrix scatter plot. The plots revealed a mainly linear association between Math, Reading, and parental involvement. Because two of the predictor variables were categorical, nominal-level (grade level and gender) and one often produces statistical results similar to an ordinal variable because of its four levels of rank order (parental involvement), vertical and horizontal lines of linearity are to be expected (Field, 2018). Lines of best fit are provided within the matrix scatter plot (Figure 1).

Figure 1

Matrix Scatter Plot of Reading, Math, and Parental Involvement



Assumption of Homoscedasticity

The fifth assumption of homoscedasticity was assessed through visual inspections of scatter plots of predicted standardized regression residuals versus regression residuals. Both scatter plots revealed a random pattern suggesting no violation of this assumption (Figures 2 and 3).

Figure 2

Scatter Plot of Predicted Standardized Regression Residuals versus Regression Residuals (RQ 1)

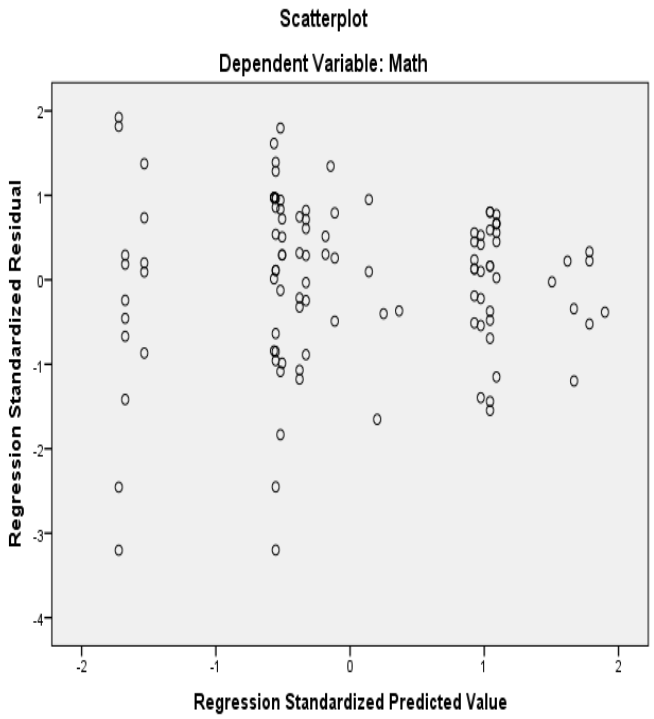
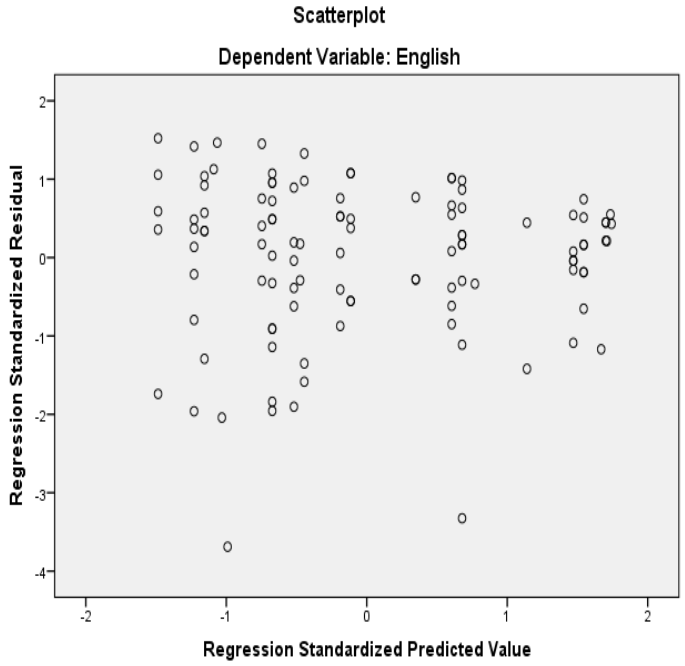


Figure 3

Scatter Plot of Predicted Standardized Regression Residuals versus Regression Residuals (RQ 2)



Assumption of Multicollinearity Absence

The sixth multicollinearity assumption was assessed through variance inflation factors (VIFs). VIFs ranged from 1.250 to 2.014, suggesting no issues with multicollinearity, as values greater than 10 are of concern (Field, 2018).

Assumption of No Significant Outliers

The seventh assumption of no significant outliers was assessed through inspection of standardized values of regression residuals. These standardized values ranged from -3.69 to 1.52. There were two values that were outside -3 to +3 standard deviations, specifically -3.69 and -3.32. These values were not data entry errors and were left in the analysis upon the recommendation of Warner (2013) and Field (2018).

Assumption of Approximate Normal Distribution of Regression Residuals

The eighth and last assumption for multiple linear regression is approximate normal distribution of regression residuals. This was assessed through P-P plots for both regression models. The plots suggested approximate normality of residuals (Figures 4 and 5).

Figure 4

P-P Plot of Regression Residuals (RQ1)

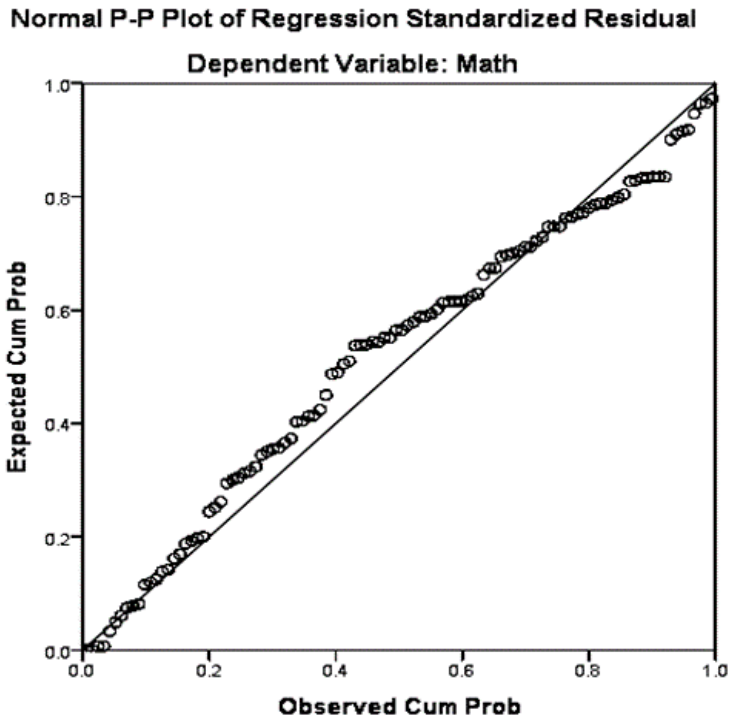
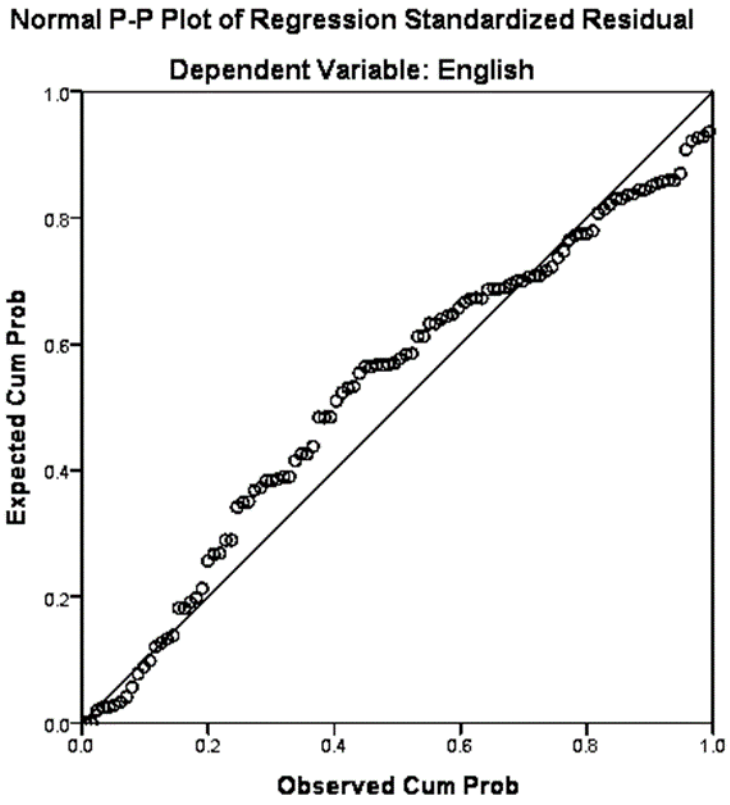


Figure 5

P-P Plot of Regression Residuals (RQ2)



Results

Null Hypothesis One: Math as the Criterion Variable

A multiple regression analysis was conducted to assess if a relationship existed between African-American elementary school students' academic performance—measured with math and reading numerical course averages—and a linear combination of parental involvement, grade level, and student gender. For the first research question and hypothesis, the predictor variables were parental involvement, grade level, and student gender. The criterion variable was math numerical course averages. The researcher rejected the null hypothesis at the 95% confidence level where $F(6, 107) = 7.224$, $p < .001$. There was a significant relationship between the predictor variables (parental involvement, grade level, and student gender) and the criterion variable (math numerical course averages). Table 5 provides the regression model results.

Table 5

Regression Model Results

Model		*SS*	*df*	*MS*	*F*	*Sig.*
1	Regression	3803.804	6	633.967	7.224	.000[b]
	Residual	8863.409	101	87.757		
	Total	12667.213	107			

a. Dependent Variable: Math
b. Predictors: (Constant), Gender, Grade3, ParentalInvolvement, Grade1, Grade2, Grade4

The model's effect size was large, where $R = .548$. Furthermore, adjusted $R^2 = .259$, indicating that approximately 26% of the variance in student math scores can be explained by the linear combination of parental involvement, grade level, and student gender after adjusting for the number of predictors. Table 6 provides a summary of the model.

Table 6
Model Summary

Model	*R*	*R2*	*Adjusted R^2*	*SEM*
1	.548[a]	.300	.259	9.36785

a. Predictors: (Constant), Gender, Grade3, Parental Involvement, Grade1, Grade2, Grade4
b. Dependent Variable: Math

Because the researcher rejected the null, analysis of the coefficients was required. Based on the coefficients, it was found that parental involvement was significant ($B = 6.898$, $p = .002$), as were grade 2 ($B = 8.825$, $p = .004$) and grade 3 ($B = 9.521$, $p = .002$). Table 7 provides the regression coefficients.

Table 7

Regression Coefficients (RQ 1)

	Unstandardized Coefficients		Standardized Coefficients	*t*	*Sig.*
	B	*SE*	*B*		
(Constant)	62.272	6.871		9.063	.000
Parental Involvement	6.898	2.154	.298	3.201	.002
Grade1	1.058	2.949	.039	.359	.721
Grade2	8.824	2.964	.328	2.977	.004
Grade3	9.521	2.939	.354	3.239	.002
Grade4	-.076	3.176	-.003	-.024	.981
Gender	.285	1.886	.013	.151	.880

a. Dependent Variable: Math

Null Hypotheses Two: Reading as the Criterion Variable

A multiple regression analysis was also conducted to determine if a relationship existed between African-American elementary school students' academic performance—measured with reading numerical course averages this time—and a linear combination of parental involvement, grade level, and student gender. For the second research question and hypothesis, the predictor variables were parental involvement, grade level, and student gender—exactly the same as hypothesis one. The criterion variable for $H_0 2$ was reading course averages. The researcher rejected the null hypothesis at the 95% confidence level where $F(6, 107) = 3.003$, $p = .010$. There was a significant relationship between the predictor variables (parental involvement, grade level, and student gender) and the criterion variable (reading numerical course averages). Table 8 provides the regression model results.

Table 8

Regression Model Results (RQ2)

Model		*SS*	*df*	*MS*	*F*	*Sig.*
1	Regression	1328.553	6	221.426	3.003	.010[b]
	Residual	7446.447	101	73.727		
	Total	8775.000	107			

a. Dependent Variable: Reading
b. Predictors: (Constant), Gender, Grade3, ParentalInvolvement, Grade1, Grade2, Grade4

The model's effect size was medium, where $R = .389$. Furthermore, adjusted $R^2 = .151$, indicating that approximately 15% of the variance in students' reading scores can be explained by the linear combination of parental involvement, grade level, and student gender after adjusting for the number of predictors. Table 9 provides a summary of the model.

Table 9

Model Summary (RQ2)

Model	*R*	*R2*	*Adjusted R2*	*SEM*
1	.389[a]	.151	.101	8.58645

a. Predictors: (Constant), Gender, Grade3, Parental Involvement, Grade1, Grade2, Grade4
b. Dependent Variable: Reading

Because the researcher rejected the null, analysis of the coefficients was required. Based on the coefficients, it was found that grade 2 ($B = 7.812$, $p = .005$) was the only significant predictor. Compared to grade 5 students, grade 2 students had an average increase in reading scores by 7.812. Table 10 provides the regression coefficients.

Table 10

Regression Coefficients (RQ2)

	Unstandardized Coefficients		Standardized Coefficients	*t*	*Sig.*
	B	*SE*	*B*		
(Constant)	81.306	6.298		12.910	.000
Parental Involvement	1.163	1.975	.060	. 589	.557
Grade1	-1.701	2.703	-.076	-.629	.531
Grade2	7.812	2.716	.349	2.876	.005
Grade3	4.762	2.694	.213	1.768	.080
Grade4	1.966	2.911	.088	.675	.501
Gender	-.260	1.729	-.014	-.151	.881

a . Dependent Variable: Reading.

CHAPTER FIVE: CONCLUSIONS

Overview

Parental involvement in their children's education could be a significant motivating factor in enhanced academic achievement among elementary school students in the United States. Parents have certain academic expectations of their children and are often actively involved in helping them achieve these expectations. Chapter five of this study discusses findings concerning empirical literature on the impact of Home-Based and School-Based parental involvement on the academic performance of African American elementary school students. The discussion includes the interpretation of findings compared with the previous literature outcomes concerning parental involvement in their children's academic achievement in elementary schools in the United States and how the study findings contribute to the literature. This chapter also discusses the implications of the study and explains the limitations of the study as well. Finally, the recommendations for further research are discussed, and the study's conclusions are provided.

Discussion

The purpose of this research was to examine the influence of parental involvement on the academic performance of African American students in elementary school. Parental involvement includes parents' active participation in improving their children's academic outcomes and supporting their academic progress. Parental engagement in their child's education indicates a high level of concern and passion for high achievement for their children in elementary schools in the United States. This discussion section was organized according to each research hypothesis, as presented below.

$H_0$1: There will be no significant predictive relationship between the criterion variable (math numerical course averages) and the linear combination of predictor variables (parental

involvement, grade level, and student gender) of African American elementary school students.

The research data revealed that parental involvement can significantly impact elementary students' academic achievement. According to the study findings, parental involvement affected student math grades. An increase in parental engagement resulted in an increase in math grade scores among elementary school students. The result implies that parental involvement greatly impacts students' academic achievement due to their influence on their children and the expectation of their children's attainment. As per the findings, parental involvement significantly influences student academic achievement by impacting their math grade scores. These findings were also confirmed by Ntekane (2018), who found that parental involvement reduced unnecessary absenteeism among students that would negatively affect their performance. Parents who engage in their children's education reduce absenteeism rates, which boosts students' confidence in their academics, promotes robust academic engagement, and improves student behavior, all of which promote academic achievement. The implication is that parents can ensure their children attend school without failure to promote consistency in their academic practices, thus contributing to improved math and reading scores.

Current study findings support previous literature indicating that parental involvement is of utmost importance to attaining academic success among students. The findings can be observed in Lara and Saracostti (2019), who found that high parental involvement increased students' performance, especially in reading and writing. However, low parental involvement in their children's educational activities negatively affects the student's academic outcomes due to reduced motivation and focus (Lara & Saracostti, 2019). Lambert et al. (2022) established that parental involvement reflected positively on students' academic outcomes as indicated by high math, science, and reading scores. Students whose parents are concerned with their children's

education have high academic scores compared to those whose parents have no interest in their children's education.

According to the current study findings, parental involvement has been a key contributor to students' academic performance. The findings have been confirmed in past research findings of Keizer et al. (2022), reporting that personalized support offered by parents improved the students' academic achievement through increased mentorship, doing homework, and hiring private home tutors to improve subject grades for their children. As indicated in current research outcomes, parents can use their influence on their children to mentor them concerning the importance of focusing on their academic activities for improved academic performance in elementary schools, thus enhancing their academic attainment. Consistent with current study results, Bonanati and Rubach (2022) established that parental home-based involvement positively influenced math, science, reading, and comprehension for grade 1 students in elementary schools.

On the same note as the current study findings, Tan et al. (2022) revealed that parents played the role of tutors and supervisors during COVID-19, ensuring the continuity of the learning process and improving their children's academic achievement. Current research data confirmed that parents who engaged with their children in academics led to improved academic achievement. The findings reported by Alharthi (2022) confirm this current study's outcomes by demonstrating that during the lockdown, children whose parents took an active role in training and providing support during online learning sustained higher performance, with others reporting improved academic scores. The current study result agrees with previous research findings reported by Kim (2020), who indicated that parents with high aspirations for their children's future would likely be more willing to exert efforts to ensure that those aspirations are actualized

by getting involved in their children's education. Parental involvement enhances the academic achievement of children. Similarly, the current findings were also reported by Hill et al. (2018), demonstrating that educational and occupational aspirations are linked to how parents shape their children's activities, time, and learning environment by engaging in their children's education, leading to improved performance.

In contrast to the current study findings, previous research indicates that parental goals and ambitions about their children's achievement can impact students' academic achievement because parents without goals are unlikely to be involved in a child's academic activities (Trinidad, 2019). Contrary to the current study findings, other studies indicate that high parental aspirations could result in adverse student outcomes and parental involvement, thereby contributing to low academic achievement (Chun & Devall, 2019). The current study findings imply that students whose parents get involved in their academic affairs are more likely to achieve higher grades compared to students whose parents do not engage in their education. The findings are consistent with previous research, which indicated that students whose parents were active in different school activities and programs had a high performance compared to students whose parents were not actively involved in different school activities (Cross et al., 2019).

Parents with high expectations of their children's achievement promoted increased involvement in academic activities, which can lead to improved academic performance among elementary students. Similar claims were reported in past studies, revealing that many students had improved grades by attaining or fulfilling their parent's expectations (Erdem & Kaya, 2020). While parental involvement may improve student performance, higher academic expectations result in children feeling unnecessary pressures that negatively impact their academic achievement (Erdem & Kaya, 2020). A similar agreement with current study findings can be

observed in past research results reported by Roberts et al. (2018), who established that because of parental involvement, students did their homework on time, received assistance in case of need, and attended school regularly, which enhanced their overall academic outcome. The findings have also supported Epstein's (1987) theory by indicating that parental involvement improves student academic achievement. Epstein (1987) stated that parents' decision to willingly work in school and contribute to different academic programs without expecting anything in return would contribute to the high academic achievement of their children in schools. Other than working, parents volunteering may also mean parents attending different school activities, including sporting activities, without being invited, thus motivating teachers and students' This leads to enhanced academic effort among students and teachers, contributing to improved academic attainment (Oswald et al., 2018).

Agreeing with current study findings, Epstein and Sanders (2000) termed parental involvement as parents engaging in activities promoting their children's education at home, including helping with a school assignment, discussing school, and helping their children decide on which courses to enroll in. As a result, involving parents in different school activities increases students' overall academic performance at different levels. Boonk et al. (2018) reported that active parental involvement promoted students' exemplary academic performance. The implication is that parental involvement could be an essential approach to influence students' school attendance and academic performance positively. Concurring with these current study findings, Ntekane (2018) established that parents who participated in different school activities were keen on how their children performed in schools, contributing to increased motivation among students who may endeavor to succeed academically.

The findings also revealed that grade levels significantly impacted student achievement, as those in lower grades mostly performed better than higher grades because of the effect of parental involvement. The finding implies that parental involvement had a more significant impact on student's academic achievement in lower grade levels than in higher grade levels. This research outcome refutes other studies that demonstrated that excessive parental control and inflexibility negatively influenced students' active participation and academic achievement (Hornby & Blackwell, 2018). The findings also disagree with Ntekane (2018), who asserted that besides being excessive control, the unnecessary pressure on students due to their parents' active engagement in their academic activities reduced their academic performance rather than increased performance. Ntekane (2018) argued that over-controlling parents pressured their children to focus on education, which affected their freedom to socialize and interact with peers. The current findings imply that grade levels of students can significantly affect how they prioritize their academic activities, affecting their academic success and achievement.

Although the current study findings demonstrated that parental involvement contributes to high academic performance among children in elementary schools, Cheung (2019) established that parental over-involvement negatively influenced teacher-student relationships, influencing students' academic achievement. However, the current findings support past research, which indicates that when parents are actively involved in their children's education, they are likely to perform much better and record high-performance scores (Jeynes, 2018; Klein et al., 2022). Therefore, a lack of parental involvement can be linked to dismal students' performance (Cheung, 2019; Ntekane, 2018). Besides reduced absenteeism rates, parental involvement improves students' confidence in their academics, promoting robust academic engagement and

improving student behavior, which leads to enhanced student academic achievement (de Oliveira Lima & Kuusisto, 2019).

However, student gender did not significantly impact student academic performance as it does not predict their academic achievement. The findings confirm previous literature highlighting no evident gender difference in students' academic success. Converse to current study findings, Khesht-Masjedi et al. (2019) also found minimal gender differences in test scores for standardized mathematics. The implication is that gender has a limited impact on students' academic achievement. Thus, it cannot predict academic success among elementary students. Previous research by Aguillon et al. (2020) also discovered no appreciable differences between male and female students' achievement and retention scores in mathematics. Contrary to current study findings, other studies indicated that gender significantly impacts student academic performance, with boys and girls performing differently, such that girls perform better than boys (Aguillon et al., 2020; Siddiq & Scherer, 2019). Based on the divergent findings about gender between current study findings and previous studies, gender remains a subject of debate regarding how it can impact student academic achievement. The implication is that more research unveils how gender can impact academic success among elementary students.

$H_0$2: There will be no significant predictive relationship between the criterion variable (reading achievement numerical course averages) and the linear combination of predictor variables (parental involvement, grade level, and student gender) of African American elementary school students.

The multiple regression data analysis demonstrated that parental involvement, grade 3, and student gender did not significantly predict student academic achievement. These findings contradict previous studies, which indicated that engaging in different school activities increased

the parents' knowledge of what their children needed to perform better or achieve better scores, contributing to high academic performance (Li et al., 2019). Liu et al. (2020) also found that parents can identify their children's academic needs through participation, and attending to such needs improves student performance. Whereas the current study indicated that parental engagement and student gender did not impact student academic achievement, previous research indicated that parental involvement enhanced student performance (Adams & Blair, 2019). This study's findings differ from prior study outcomes reported by Posey-Maddox and Haley-Lock (2020), who demonstrated that home-based and school-based parental involvement can help address key academic challenges distracting students from high academic performance. As a result, parents who provide students with the academic environment and materials they need for their education contribute to increased academic achievement.

Current research findings revealed that grade 2 levels were the only significant predictor of students' academic attainment with high reading achievement scores compared to grade 5 reading scores. Also, previous studies indicate a positive correlation between grade levels, students' entry-level scores, and their academic performance/entry qualification (Epstein, 2019). Browning and Rigolon (2019) indicated that low grade levels significantly influenced student academic achievement. Rubright et al. (2019) highlighted that high school grades predict students' success in postsecondary education. The current study provides insight into how parental involvement can significantly impact students' academic achievement. These findings were contradicted by Tarraga Garcia et al. (2018), who revealed that family involvement had an inconsequential effect on student's academic outcomes. However, students whose parents were working and had a stable financial income performed better than those without employed

parents. Contrary to the current study findings, Avnet et al. (2019) revealed that home-based parental involvement positively influenced and improved student outcomes.

This study supports Epstein's theory regarding the benefits of active stakeholder engagement and involvement in different school activities. Epstein asserted that schools should be open to participation, and teachers should be willing to share the responsibilities of training students with the community and family members such as parents. The implication is that parents must get involved in their children's education to enhance their academic performance. Previous literature has contributed to the current study significantly by providing comparisons and contradictions of diverse findings, which can help to get an important conclusion regarding the importance of parental involvement. Such insight would enhance academic achievement among students, not only in elementary schools but also in other levels of schools.

Implications

The study findings provide important insight for education stakeholders to embrace parental involvement in their children's academic activities for improved performance for both the students and the overall school performance. African American parents and students can use these findings to understand the importance of parental engagement in children's education, which would help them experience improved academic performance as their academic scores and performance are low compared to their White counterparts. The findings of this study would be necessary to educational stakeholders, teachers, and existing literature. Coley et al. (2019) established achievement gaps among African American students, citing factors such as parental investments in learning resources, poverty, lack of academic resources, and poor quality of education as key factors contributing to the achievement gap. Thus, to educational stakeholders comprising policymakers, communities surrounding schools, and parents, establishing the

relationship between home-based and school-based parent involvement might help narrow this achievement gap and allow African Americans career growth and employment opportunities.

For the policymakers, the study outcomes would encourage establishing academic policies guiding how parent-teacher and community-school relationships can be developed and maintained. In this regard, schools can develop a framework to train teachers to enhance school-based parent involvement (Henry et al., 2020). The findings of this study would also be necessary to parents because students with parents who are generally involved in their education display good academic achievement. Therefore, these findings would provide new insight to parents about how they can engage with their children and help them succeed academically (Naite, 2021). Further, the findings of this study would seek to inform parents about the value of participating in school activities and being part of their children's academic journey (Allen & White-Smith, 2018).

Other than parents, the findings of this study would also be an essential addition to the literature regarding parent involvement and student performance, specifically among African Americans. While research exists on the influence of parental involvement on students' academic performance, studies on African Americans were mediated by socioeconomic and other social factors (Henry et al., 2020). Therefore, the current study findings on parent involvement, both home-based and school-based involvement, would help improve the academic performance of African American students in elementary school. Elementary school leadership can benefit from this study outcome by implementing various academic policies to enhance parental engagement in schools for improved academic performance. Jeynes (2018) reported that school principals who understand the importance of involving parents in their children’s education are likely to

positively influence parental involvement in education, thus contributing to enhanced school and students' academic achievement.

Limitations

One of the limitations of this study was that the population of interest in this study consisted of students in a particular school district in Ohio. However, the data was collected from an elementary school in Lagos, Nigeria, and their respective parents because the Ohio parents did not generally respond to the invitation to participate. This negatively affects the study results' internal and external validity because of different education policies in Nigeria and the United States. In addition, the findings may not be generalized to other populations of students in Ohio, the United States. The setting of the study was an Africa-based elementary school because Ohio parents did not generally respond to the invitation to engage in the study survey. The limitation was that participants declined to participate in the study, compelling the researcher to seek responses from an Africa-based elementary school in Lagos, Nigeria.

The study was limited with estimation sample bias, thus affecting the validity of the sample selected and study outcomes. However, sampling bias affects the reliability and validity of survey data and is an integral part of it. It emerges when the sample is not representative of the population under study. To solve this issue, researchers must employ suitable sampling procedures and ensure the sample is sufficiently varied and significant to be statistically representative. It is vital to carefully examine these elements while conducting surveys and evaluating the findings to ensure the reliability and validity of the survey data. This study was limited by data collection instruments developed by other researchers. Parental involvement was measured using the home-based involvement scale developed by Fantuzzo et al. (2000) and validated by Tarraga Garcia et al. (2018). Given that the instrument for this study was an adapted

version of a survey developed by another researcher, the findings may not be validated and generalized to the entire population.

Recommendations for Future Research

The findings indicated that gender is not a significant predictor of student academic performance. Khesht-Masjedi et al. (2019) also found insignificant gender differences in standardized mathematics test scores. Previous research by Aguillon et al. (2020) discovered no appreciable differences between male and female students' achievement and retention scores in mathematics. However, other researchers, such as Aguillon et al. (2020), opined that gender substantially affects student academic performance, with girls performing better than boys. Based on the contradicting findings, future researchers should consider investigating the impact of gender on student academics. The following recommendations should be considered.

1. It is recommended that further research be conducted using a qualitative study design with parents and teachers as participants to attain comprehensive perceptions about the impact of gender on student academic performance.
2. Although the study setting was in Ohio, United States, data was collected in Lagos, Nigeria, affecting the validity of the study findings. As per this limitation, there is a need for further research to be conducted to validate the current study findings with data collected from elementary schools in Ohio, United States, other than Lagos, Nigeria, due to different educational policies between the two nations.
3. Because participants were limited to African American elementary schools, there was a need for future research to be carried out with teachers and parents from other schools as participants other than elementary schools. This would enhance the generalizability of the study findings to diverse district school levels.

4. Future research should also be considered to investigate the effect of gender, grade levels, and teacher-parent engagement on student academic achievement in elementary schools and other school levels. The research would provide greater insight into how grade levels can impact student academic performance, with parental involvement as a mediating factor. The study could also fill the research gap concerning grade level's effect on student academic performance in district schools among African American students in the United States.

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APPENDICES

Appendix A

Copy of the Home-based Involvement Scale (Tarraga Garcia et al., 2018)

Item	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
I spend time working with my child on number skills				
I spend time working with my child on reading/writing skills				
I talk to my child about how much I love learning new things				
I bring home learning materials for my child (videos, etc.				
I spend time with my child working on creative activities				
I share stories with my child about when I was in school				
I see that my child has a place for books and school materials				
I take my child places in the community to learn special things (e.g. zoo, museum				
I maintain clear rules at my home that my child should obey				
I talk about my child's learning efforts in front of relatives				
I review my child's school work				
I keep a regular morning and bedtime schedule for my child				
I praise my child for school work in front of the teacher				

Appendix B

Letter Seeking Permission to Use Survey/Questionnaire Tool

Name: xxxxxxxxxxx

Date: 11-16-2022

Institution: University of Castilla-La Mancha, Ciudad Real, Spain

Department: Faculty of Education of Ciudad Real, Department of Pedagogy (Science Education)

Address: xxxxxxxxxxx, Spain

City/State/Zip: xxxxxxxxx, Spain

Dear Sir/Madam

I am a doctoral student at XX University working on a dissertation entitled "The impact of home-based and school-based parental involvement on the academic performance of African American elementary school students." The study is quantitative in nature, necessitating that I collect numerical data on key variables of interest. One of the predictor variables in my study is home-based parental involvement in students' academic lives. I am requesting your permission to use the Home-based Involvement scale in my study to measure the school-based parental involvement variable. I would like to use the survey instrument under the following conditions:

- I will only use the survey instrument only for my study and not for any compensated or commercial activities.
- I will include the copyright statement acknowledging the original authors of the survey scale on all copies of the instrument
- I will not make any modifications on the survey scale
- If interested, I will make available the results of the study to you upon program completion

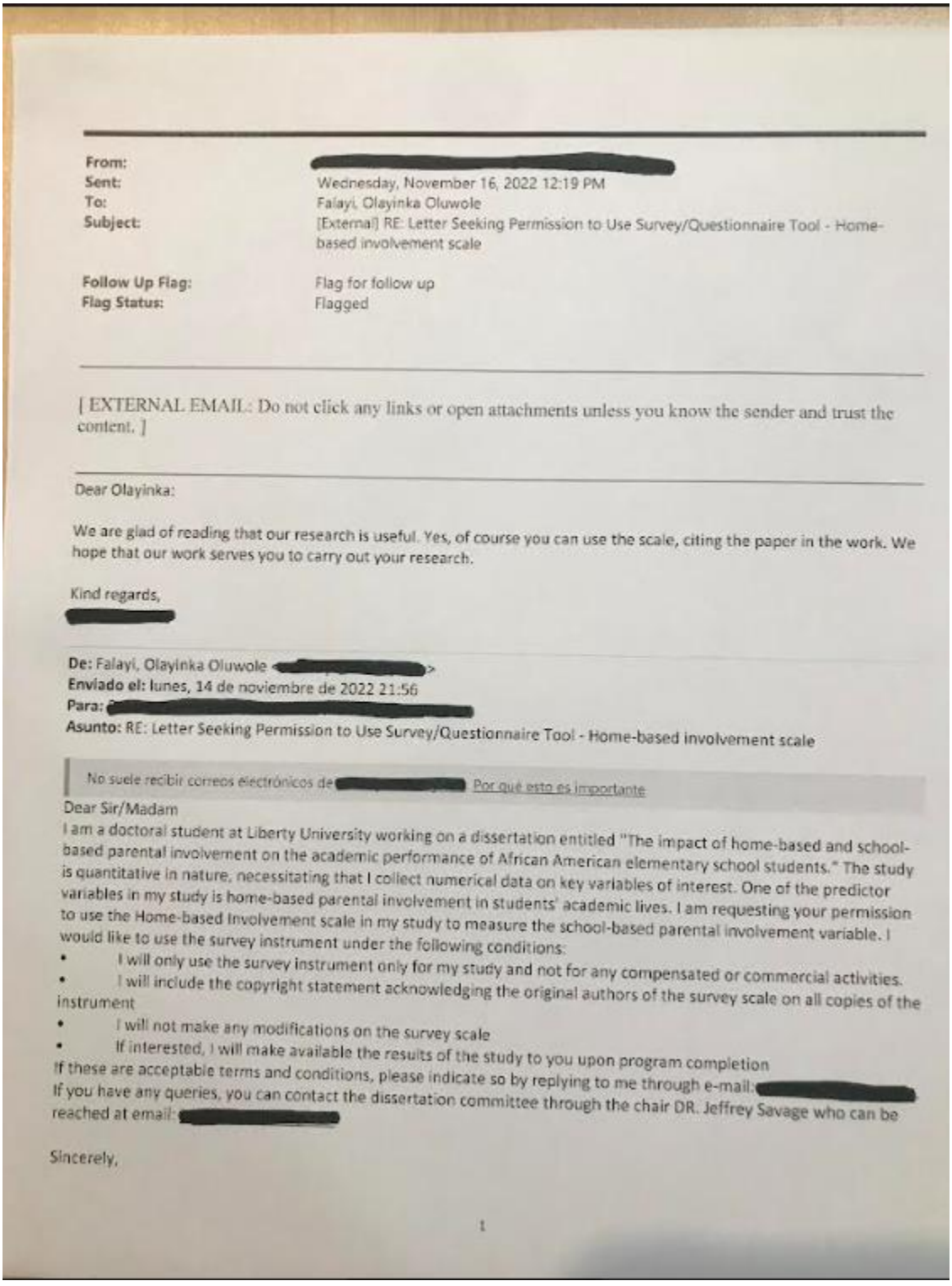
If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: xxxx. If you have any queries, you can contact the dissertation committee through the chair DR.xxx who can be reached at mobile number xxx or email xxxx. You can also contact the Institutional Review Board at mobile xxxx or email xxxx.

Sincerely,

Olayinka Falayi

Appendix C

Approval to Use Survey/Questionnaire Tool



From: [redacted]
Sent: Wednesday, November 16, 2022 12:19 PM
To: Falayi, Olayinka Oluwole
Subject: [External] RE: Letter Seeking Permission to Use Survey/Questionnaire Tool - Home-based involvement scale

Follow Up Flag: Flag for follow up
Flag Status: Flagged

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Dear Olayinka:

We are glad of reading that our research is useful. Yes, of course you can use the scale, citing the paper in the work. We hope that our work serves you to carry out your research.

Kind regards,
[redacted]

De: Falayi, Olayinka Oluwole [redacted]
Enviado el: lunes, 14 de noviembre de 2022 21:56
Para: [redacted]
Asunto: RE: Letter Seeking Permission to Use Survey/Questionnaire Tool - Home-based involvement scale

No suele recibir correos electrónicos de [redacted] Por qué esto es importante

Dear Sir/Madam
I am a doctoral student at Liberty University working on a dissertation entitled "The impact of home-based and school-based parental involvement on the academic performance of African American elementary school students." The study is quantitative in nature, necessitating that I collect numerical data on key variables of interest. One of the predictor variables in my study is home-based parental involvement in students' academic lives. I am requesting your permission to use the Home-based Involvement scale in my study to measure the school-based parental involvement variable. I would like to use the survey instrument under the following conditions:

- I will only use the survey instrument only for my study and not for any compensated or commercial activities.
- I will include the copyright statement acknowledging the original authors of the survey scale on all copies of the instrument
- I will not make any modifications on the survey scale
- If interested, I will make available the results of the study to you upon program completion

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: [redacted]
If you have any queries, you can contact the dissertation committee through the chair DR. Jeffrey Savage who can be reached at email: [redacted]

Sincerely,

1

Appendix D

Request to Participate in Research Study

[Your Name]
[Your Address]
[City, State, ZIP]
[Email Address]
[Phone Number]
[Date]

[School District Name]
[School District Address]
[City, State, ZIP]

Subject: Request to Participate in Research Study

Dear [School District Name],

I hope this letter finds you in good health and high spirits. My name is [Your Name], and I am a [your academic/professional affiliation] interested in conducting a research study that aims to explore [briefly mention the purpose and objectives of your research study].

After careful consideration, I have chosen [School District Name] as a potential partner for my study due to its renowned reputation in providing quality education and commitment to fostering academic growth among students. As a researcher, I believe that your participation will significantly contribute to the advancement of knowledge in the field of [mention the relevant field or subject area].

The primary goal of my research study is to [explain the primary goal of your research study in a concise and clear manner]. By involving [School District Name], I anticipate gaining valuable insights into [specific aspects related to the school district that you wish to explore or analyze].

I would like to extend an invitation to [School District Name] to participate in this study. Participation would involve [briefly outline the expected activities or requirements for participation, such as surveys, interviews, or access to certain data]. Rest assured that all information collected will be treated with the utmost confidentiality and will be used solely for research purposes.

The benefits of participating in this study include:

Contributing to the body of knowledge in the field of [mention the relevant field or subject area].
Gaining insights into [specific aspects related to the school district] that can potentially enhance future educational practices.
Collaborating with a team of researchers dedicated to improving educational outcomes.
Receiving a summary of the study's findings, which may provide valuable information for strategic planning and decision-making.
I kindly request the permission and support of [School District Name] to undertake this study within the district. Your participation will undoubtedly make a significant impact not only on the research but also on the educational community as a whole.

I would be grateful for an opportunity to discuss the details of the study with you or any other relevant members of the district administration. Please feel free to contact me via [email address] or [phone number] at your convenience. I am open to any suggestions or modifications to accommodate the district's requirements or preferences.

Thank you for considering my request, and I sincerely hope for [School District Name]'s participation in this important research endeavor. Your support will immensely contribute to the success of this study and further our collective commitment to advancing education.

I look forward to hearing from you soon.

Sincerely,

[Your Name]

Appendix E

Invitation to Participate in Research Study

[Your Name]
[Your Affiliation]
[Address]
[City, State, ZIP]
[Email Address]
[Phone Number]
[Date]

Dear Parents/Guardians,

Subject: Invitation to Participate in Research Study

I hope this letter finds you and your family in good health and high spirits. My name is xxxxxxxxxx, and I am a Ph.D. student at Liberty University. I am reaching out to you today to invite you and your child to participate in a research study that aims to explore the influence of parental involvement on the academic performance of African American students in elementary school.

At Liberty University, we are committed to improving the educational experience and outcomes for students. Your participation in this study would greatly contribute to our understanding of how parental involvement impacts the educational achievement of elementary school students, which can ultimately inform and enhance educational practices.

Participants must be 18 years of age and older, and parents of African American students in grades one through five. Participation in the study would involve your filling out a questionnaire and providing the latest math and language arts score/grade (included in the questionnaire) for your student (filling out the questionnaire will take 15 minutes). Names and other identifying information will be requested as part of this study, but the information will remain confidential.

A consent document is provided prior to filling out the survey. The consent document contains additional information about my research. If you choose to participate, you will be sent a link where you will be able to select yes, and the survey link will subsequently be sent to you.

Your participation is completely voluntary, and you have the right to withdraw at any time without any consequences. Your decision to participate or not will not affect your child's educational experience or standing within the school.

To participate or to obtain more information about the study, please respond to this letter/email stating your interest and a consent form will be sent to you as a potential participant. I am also available to address any questions or concerns you may have. You can reach me at xxxxxxx@liberty.edu or x-xxx-xxx-xxxx. I am open to accommodate your schedule for any discussions or further explanations of the study.

Your participation in this study would be highly valued and greatly appreciated. By joining us in this research endeavor, you are contributing to the broader understanding of educational practices and helping us make a positive impact on the education system. Together, we can create better learning opportunities for our children.

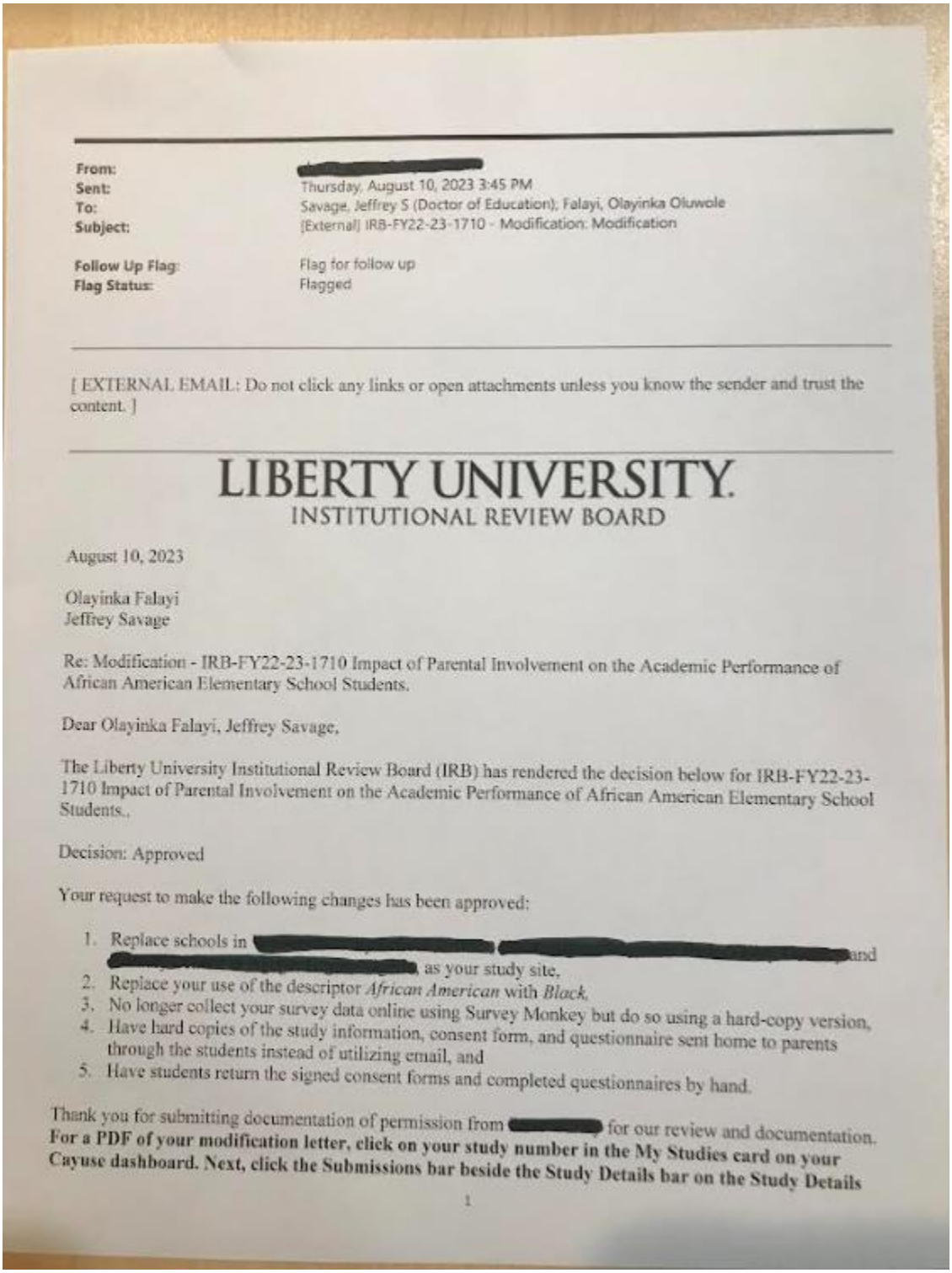
Thank you for considering this invitation, and I look forward to the possibility of your participation.

Sincerely,

[Your Name]

Appendix F

Institutional Review Board Approval 1



From: [redacted]
Sent: Thursday, August 10, 2023 3:45 PM
To: Savage, Jeffrey S (Doctor of Education); Falayi, Olayinka Oluwole
Subject: [External] IRB-FY22-23-1710 - Modification: Modification

Follow Up Flag: Flag for follow up
Flag Status: Flagged

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

August 10, 2023

Olayinka Falayi
Jeffrey Savage

Re: Modification - IRB-FY22-23-1710 Impact of Parental Involvement on the Academic Performance of African American Elementary School Students.

Dear Olayinka Falayi, Jeffrey Savage,

The Liberty University Institutional Review Board (IRB) has rendered the decision below for IRB-FY22-23-1710 Impact of Parental Involvement on the Academic Performance of African American Elementary School Students..

Decision: Approved

Your request to make the following changes has been approved:

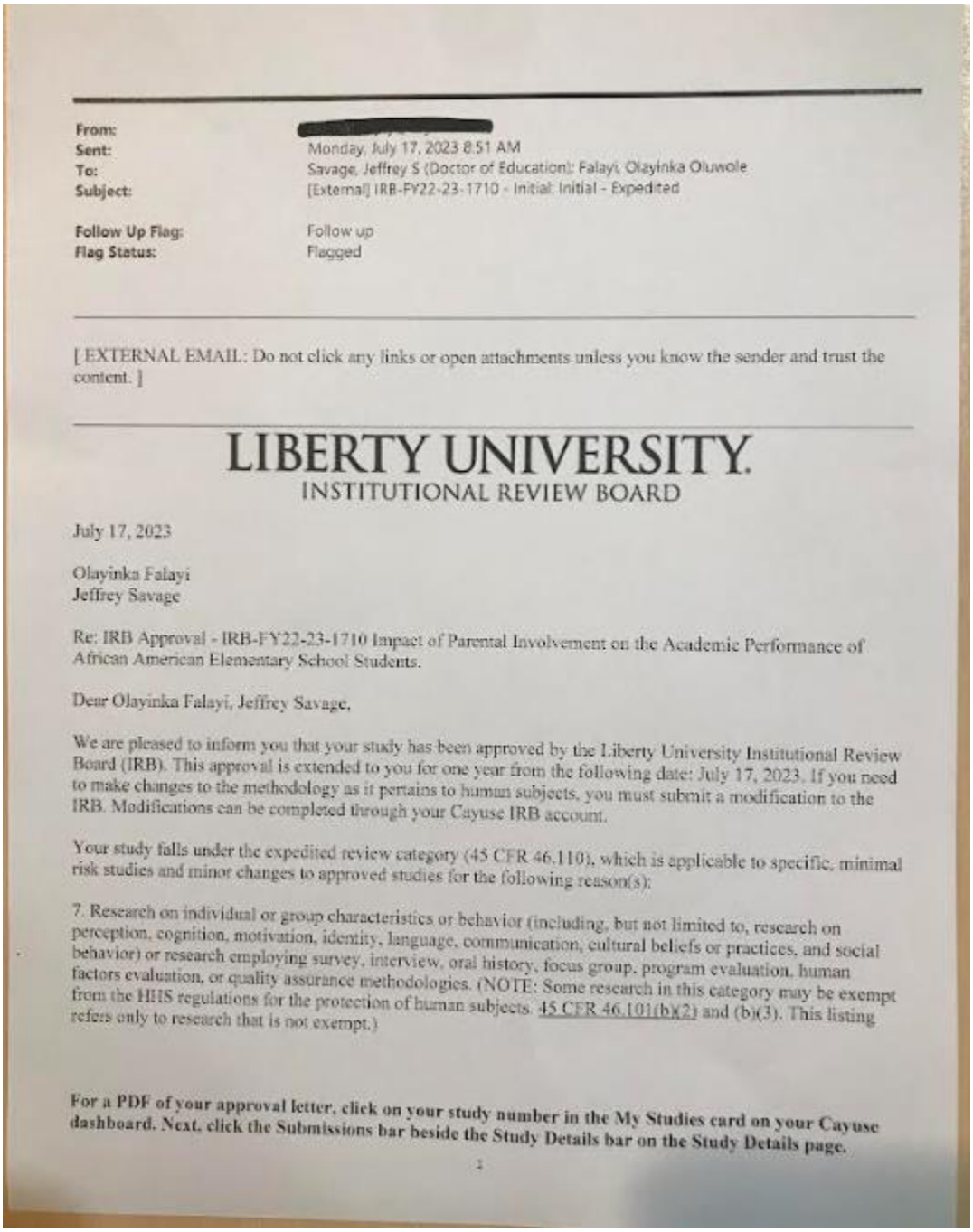
1. Replace schools in [redacted] and [redacted] as your study site,
2. Replace your use of the descriptor *African American* with *Black*,
3. No longer collect your survey data online using Survey Monkey but do so using a hard-copy version,
4. Have hard copies of the study information, consent form, and questionnaire sent home to parents through the students instead of utilizing email, and
5. Have students return the signed consent forms and completed questionnaires by hand.

Thank you for submitting documentation of permission from [redacted] for our review and documentation. **For a PDF of your modification letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study Details**

1

Appendix G

Institutional Review Board Approval 2



From: [redacted]
Sent: Monday, July 17, 2023 8:51 AM
To: Savage, Jeffrey S (Doctor of Education); Falayi, Olayinka Oluwole
Subject: [External] IRB-FY22-23-1710 - Initial: Initial - Expedited

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

July 17, 2023

Olayinka Falayi
Jeffrey Savage

Re: IRB Approval - IRB-FY22-23-1710 Impact of Parental Involvement on the Academic Performance of African American Elementary School Students.

Dear Olayinka Falayi, Jeffrey Savage,

We are pleased to inform you that your study has been approved by the Liberty University Institutional Review Board (IRB). This approval is extended to you for one year from the following date: July 17, 2023. If you need to make changes to the methodology as it pertains to human subjects, you must submit a modification to the IRB. Modifications can be completed through your Cayuse IRB account.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

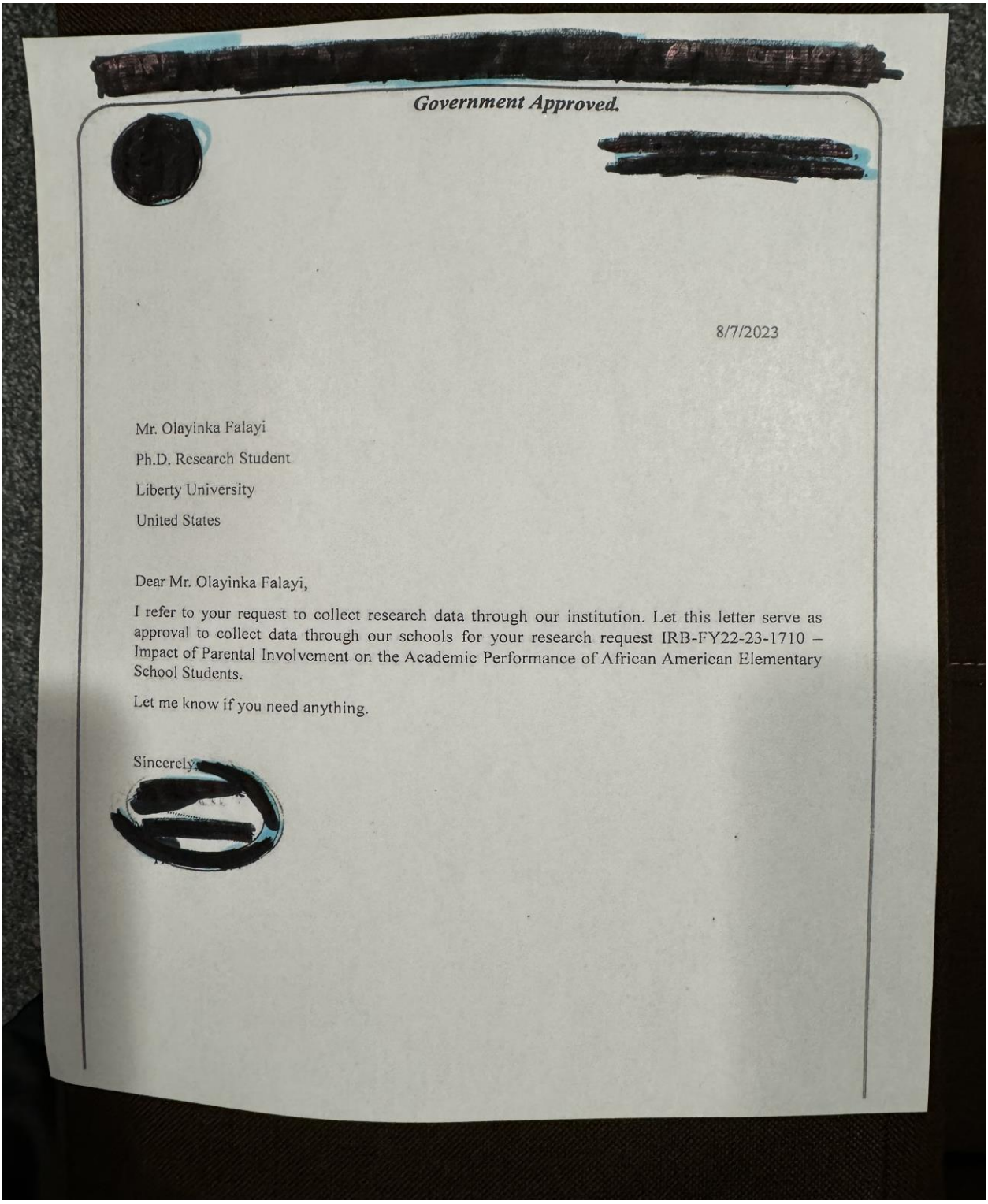
7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

For a PDF of your approval letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study Details page.

1

Appendix H

Site Approval Letter 1



[redacted]

Government Approved.

[redacted]

[redacted]

8/7/2023

Mr. Olayinka Falayi

Ph.D. Research Student

Liberty University

United States

Dear Mr. Olayinka Falayi,

I refer to your request to collect research data through our institution. Let this letter serve as approval to collect data through our schools for your research request IRB-FY22-23-1710 – Impact of Parental Involvement on the Academic Performance of African American Elementary School Students.

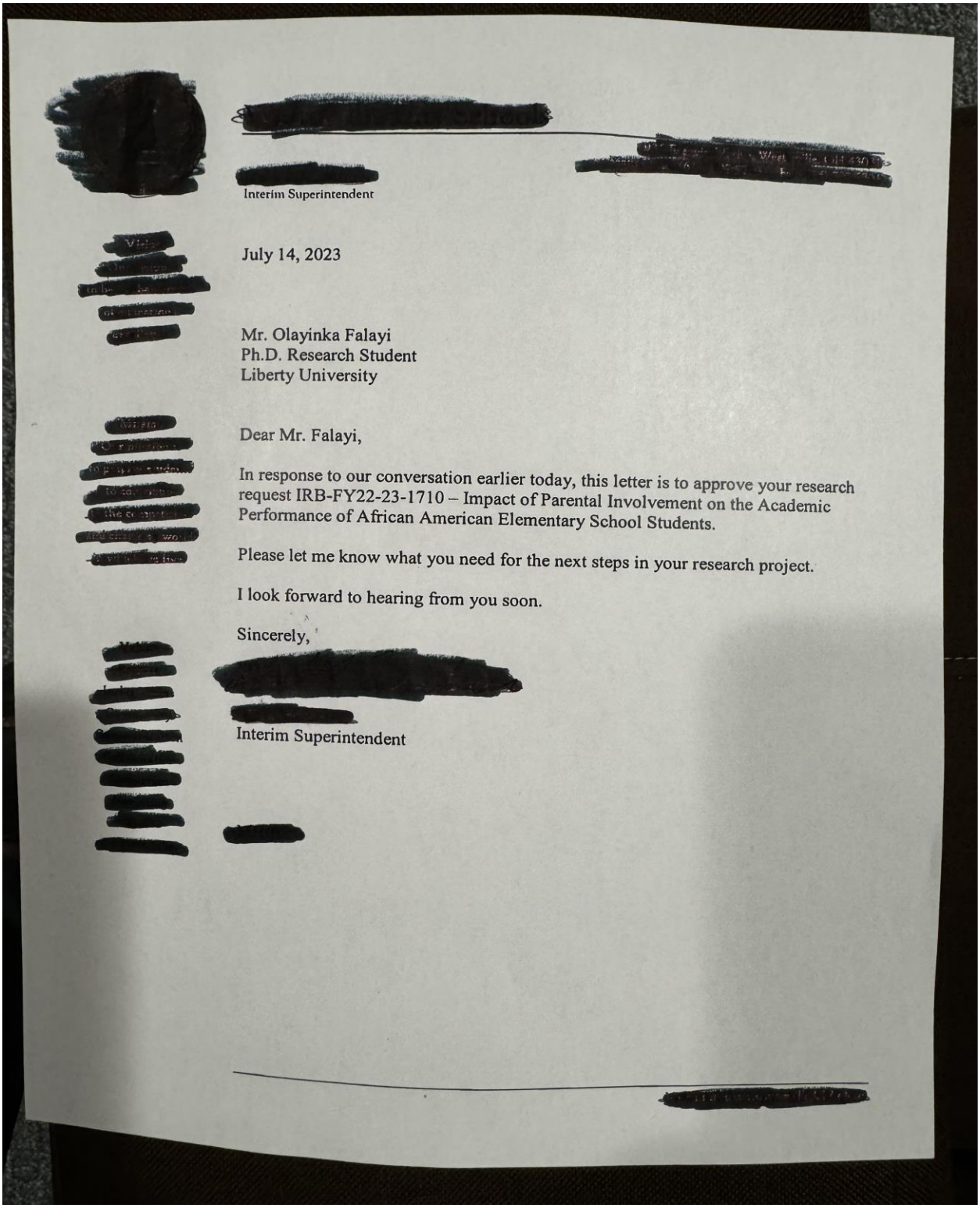
Let me know if you need anything.

Sincerely,

[redacted]

Appendix I

Site Approval Letter 2



[redacted]

Interim Superintendent

[redacted]

July 14, 2023

Mr. Olayinka Falayi
Ph.D. Research Student
Liberty University

[redacted]

Dear Mr. Falayi,

In response to our conversation earlier today, this letter is to approve your research request IRB-FY22-23-1710 – Impact of Parental Involvement on the Academic Performance of African American Elementary School Students.

Please let me know what you need for the next steps in your research project.

I look forward to hearing from you soon.

Sincerely,

[redacted]

Interim Superintendent

[redacted]

[redacted]